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CIRCULAR LETTER 42/2013
05 July 2013

CHART SPECIFICATIONS OF THE IHO (S-4)
Approval of new symbol and specifications for 'After disaster' surveys

References: A. IHO Circular Letter 02/2013 dated 7 January - *Chart Specifications of the IHO (S-4)*
- *Description of 'After disaster' surveys*
B. IHO Publication S-4 Part B - *Chart Specifications of the IHO*

Dear Hydrographer,

1. The Directing Committee would like to thank the following 44 Member States who replied to Reference A that proposed the adoption of new symbol and chart specifications for 'after disaster' surveys: Algeria, Argentina, Australia, Bahrain, Belgium, Brazil, Canada, Chile, Colombia, Croatia, Cuba, Denmark, Estonia, Finland, France, Germany, Greece, Guatemala, Iceland, India, Italy, Japan, Malaysia, Mexico, Morocco, Netherlands, New Zealand, Nigeria, Norway, Oman, Peru, Poland, Portugal, Romania, Saudi Arabia, Slovenia, South Africa, Spain, Sweden, Thailand, Ukraine, UK, USA and Venezuela.
2. The Member States' responses and the outcome of their review by the Chair of the Chart Standardization and Paper Chart Working Group (CSPCWG) are provided in the Annex to this letter.
3. Forty-two Member States supported the proposed new symbol and specifications and two opposed it. Based on the review of the comments made by the Chair of CSPCWG, the Directing Committee supports his recommendation to adopt the new symbol and specifications.
4. The responses to the question as to whether the CSPCWG should be further requested to develop more detailed guidance on how mariners should be informed about the limits of areas where pre-disaster surveys are no longer reliable were equally divided. As a result of the responses received a short paragraph will be added to the specifications.
5. The new symbol and amended specifications will be included in the next revision of IHO Publication S-4.

On behalf of the Directing Committee
Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Gilles Bessero', is written over a light blue circular stamp.

Gilles BESSERO
Director

Annex A: Member States' Responses to CL 02/2013 and comments from the CPSCWG Chair.

**MEMBER STATES' RESPONSES TO CL 02/2013 AND COMMENTS
FROM THE CSPCWG CHAIR
Description of 'After disaster' surveys**

ARGENTINA

Question 1; No. 1 (answer = Yes): It is proposed that the last paragraph of the Spanish version of B-417.8 reads as follows (proposed change underlined):

“En los diagramas de las ZOC, las zonas de batimetría de la parte externa por fuera de la zona nuevamente hidrografiada deben ser reclasificadas; generalmente la categoría “D” convendrá, ya que cabe prever ahora importantes anomalías de profundidad y nuevas obstrucciones”.

Comment from IHB: Argentina's suggestion is supported. The relevant part in the Spanish version of B-417.8 has been amended to read “...las zonas de batimetría de la parte externa (por fuera) de la zona nuevamente hidrografiada ...”

AUSTRALIA

Question 1 (answer = Yes): The CL proposes the new symbol is a magenta dotted line. While existing text within Source Diagrams / ZOC Diagrams and existing charted text quality indicators (such as “Inadequately Surveyed” etc.) are all in magenta in accordance with S-4, the colour of the associated text legend/reference in support of this new symbol is not specifically stated. In the absence of this colour specification, the convention for colour in S-4 is that the symbol/text is to be black (B-123). However, this would be inconsistent with similar uses of associated data quality text legends and references. This is assumed to be an oversight, with the intention being that both symbol and supporting text would both be in magenta.

It is therefore proposed that the final sentence before the example in B-417.8 be amended to read:

“As this is not an INT1 symbol, an explanation should always be added to the chart (for example, “Limit of survey after 2011 earthquake’) *in magenta* along the inside of the limit (see B-439.6), or for small areas within or adjacent to it, for example.”

Comment from CSPCWG Chair: Agree and the graphic requires amending so as to agree with the revised final sentence.

Question 2 (answer = No): Australia considers that there is no further work required of the CSPCWG. The essential information will be that shown on the face of the chart in accordance with the new B-417.8 (as shown in this CL), as long as both the limit and legend are used as specified. However, additional guidance is required for encoding within ENC – it is understood that this has already been passed to TSMAD for development. ENC encoding guidance should be progressed and finalised.

Comment from CSPCWG Chair: Agree; see comment to France's response.

CHILE

1. Question 1 (answer = No): Taking in mind a disaster that possibly has changed the sea bottom, it should be appropriate to issue a navigational warning advising the mariner of the possible presence of anomalies.

Once an emergency survey has been carried out, the existence or the lack of anomalies will be confirmed. If there is a lack of anomalies, the nautical chart will still be reliable but, on the contrary, the new features of the surveyed area should be circulated. And, most probably, afterwards a hydrographic survey (not an emergency one) would be carried out, which would originate a new chart.

The term “After disaster survey” introduces new unanswered questions, that is: “Till when a hydrographic survey is considered “post disaster”? And when such survey will stop being a “post

disaster survey”? We are taking the risk that all the hydrographic surveys will become “post disaster” surveys till a new disaster happens, and this is not sustainable.

As a consequence, we do not see the need to develop and introduce a new symbology to mention that a special area has been surveyed after a disaster. We consider that the practice used to enhance, for example, a channel which has been dredged, can perfectly be used after having carried out a “post disaster” emergency survey. This would imply to close the surveyed area mentioning the date in which the event happened (survey carried out). In this way the mariner gets an unambiguous indication of the reliability of the cartographic representation in such an area.

In any case, if finally the decision of establishing a new symbology should be taken, this should imperatively be part of the INT1.

Comment from CSPCWG Chair: A navigational warning is appropriate but should be a relatively short term measure that cannot remain active for the months and years that may be required to resurvey a large area impacted by a disaster. Also, would not adequately describe the limits of any post-disaster survey. It is true that some areas may not be resurveyed for many years (if ever). It is noted that the US still reference an earthquake that occurred in the early 1960s in some charts of Alaska.

From their recent experience, Japan identified a particular need for this charting device. It was well received and readily understood by their users (in an early version of this proposal). It could have been used for the Indian Ocean tsunami (2004) and the Haiti earthquake (2010).

The CSPCWG agreed that, as this should never appear on charts without an accompanying explanation, and the expectation that it will be rarely used, it does not need to be shown in INT1.

Question 2 (answer = No): We do not agree with the term “post disaster surveys”, that is why we see no sense in enhancing the surveyed areas with another colour in the source diagrams. They should be treated as a normal hydrographic survey.

Comment from CSPCWG Chair: See above.

COLOMBIA

Question 2 (answer = Yes): In, order not to use more additional symbols or lines, we recommend using a warning note in the area and a text block informing that the soundings in this area might have changed because of (case of a natural disaster).

Comment from CSPCWG Chair: Agree; see comment to France’s response.

FINLAND

Question 2 (answer = No): No further guidance is required. Relevant information is available in Source or ZOC diagram, or if none of these diagrams are on the chart, within the limit defining the ‘after disaster survey’ area.

Comment from CSPCWG Chair: Agree.

FRANCE

Question 1: No. 1 (answer = Yes): In B-417.8 and in CL 02/2013, the French translation to designate a line showing the limits of “Post Disaster” surveys should be “ligne pointillée” (dotted line) (see for example S-4, B-411.4 and B-420.1) instead of “ligne tiretée” (dash line).

Comment from IHB: The French version of the text will be amended.

Question 2 (answer = Yes): France proposes to add the following paragraph in B-417.8: If the limit of “post disaster” surveys and the corresponding explanation on the chart are insufficient to distinguish the zones recently surveyed from other zones, especially in the absence of a Source / or ZOC diagram,

a warning note, relating to the zones having had a post disaster survey, could be added. This note could highlight the hazardous nature of navigation outside these zones, such as for example: “the region described on this chart was subject to a disaster on [date]. The zone limited by a magenta dotted line has been subject to a survey since the disaster; the mariner should be aware of possible dangers to surface navigation which are not represented on this chart outside of this zone”.

Comment from CSPCWG Chair: Agree; we will add this guidance and an example of a note.

GERMANY

Question 1; No. 2 (answer = Yes): if the affected area is so small that the line description cannot be placed along the line signature, the added text string “Limit of” should be omitted. No. 3 (answer = Yes): the paragraph should be B-297.2 according to Annex A.

Comment from CSPCWG Chair: No. 2: the text string is not included in a source diagram. If this comment was intended for No.1, then the term ‘Limit of’ can be omitted, but in that case it would be better stated as: ‘Surveyed after...’. We will amend the graphic accordingly.

No. 3: agree.

GUATEMALA

Question 2 (answer = Yes): The guidelines are necessary to support the changes in the specifications and are necessary when disasters as the Tsunami in Japan occur. We have to progress together with the requirements when representing NON RELIABLE areas, to go on reinforcing the safety of navigation.

Comment from CSPCWG Chair: see comment to France’s response.

INDIA

Question 1 (answer = No):

1. B-417.1 to B-417.7 caters all the requirement of depicting the cautionary areas with attached notes besides the source data diagram. It could be more appropriate if the text “(after disaster survey)”, suffixed to the year of survey in the source data diagram as shown below:
 - a 2011 1:25 000 (after disaster survey)
2. Assigning grey tint to the areas covered by the after disaster surveys may lead to confusion as well as cluster of charted information.
3. In general the post tsunami/earthquake surveys are carried out in the areas like approaching harbours, channels and berthing places to clear the harbour for shipping. These surveys will be incorporated in the large scale charts in the subsequent new edition charts. The seafloor changes at the greater depths hardly matter for safe navigation.

Comment from CSPCWG Chair:

1. See comment to Chile’s response. CSPCWG considered all existing options, but accepted Japan’s experience and proposal. Adding a comment in the source diagram is an option, but does not provide an accurate limit for the user on the face of the chart.
2. Tint should not add clutter or confusion provided the colour is chosen to avoid conflict with another use of that colour, i.e. if a nation already uses grey tint to mean something else, then it is best avoided.
3. If the disaster was extensive, resurveying may be a long term project. See also comment to Chile’s response.

ITALY

Question 1 (answer = Yes): Some doubts about point 5 of this CL: *it was agreed that it should not be included in INT1, since to do so might encourage a wider use of the line style by chart compilers ...*

S-4, at B-151 explains:

INT 1 provides the chart user with a key to symbols and abbreviations and the meaning and translation of terms used on paper charts compiled in accordance with the Chart Specifications of the IHO. Although INT 1 may be used by cartographers as a quick reference, these Specifications must be used for detailed guidance.

Then the questions are:

If the main document used by the mariner to understand a paper chart is the INT1, why was it decided not to include the symbol in INT1? Cartographers may use the INT1 as a quick reference, but they must use S-4 for detailed guidance. So why are we afraid of a wider use of the new line style?

Comment from CSPCWG Chair: Experience indicates that we are right to be afraid of compilers' inappropriate use of INT1! Also, after lengthy discussion by CSPCWG, it was agreed that, as this symbol should never appear on charts without an accompanying explanation and the expectation is that it will be rarely used, it does not need to be shown in INT1.

JAPAN

Question 2 (answer = No): This matter was thoroughly discussed within CSPCWG, therefore no additional guidance is required. It is sufficient to show a survey area with a magenta dotted line and add a legend on a chart, whether the survey is after disaster or not, as is discussed in this Circular Letter.

Comment from CSPCWG Chair: Agree; however, see also comment to France's response to satisfy particular concerns.

MEXICO

Question 1; No. 3 (answer = No): In the third row it must be written B-297.2 instead of B-497.2; likewise the colour must be standardized and not leaving it as a point to be considered, so that it is uniform in all the Member States.

Comment from CSPCWG Chair: Agree.

Question 2 (answer = Yes): Yes, it is convenient to adopt the symbol as this type of situation had not been taken into consideration.

Comment from CSPCWG Chair: If used, the symbol will be explained on the face of the chart.

POLAND

Question 1 (answer = Yes): The explanation should be in the magenta as the dotted limit line is.

Comment from CSPCWG Chair: Agree.

SPAIN

Question 1 (answer = Yes): The proposed symbol should be included in the INT1 Section: "I. Depths".

Comment from CSPCWG Chair: See comment to Italy's response.

THAILAND

Question 1 (answer = Yes): The colour to tint in B-417.8 and B-297.2 should be specified to be only grey.

Comment from CSPCWG Chair: This could be a problem if the nation already uses grey for another meaning, so 'should' is used rather than 'must', to allow for the use of a different colour. Of course, this extra option only applies to nations which use multicolour printing.

UNITED KINGDOM

Question 2 (answer = No): On the face of the chart, the limit defining the 'after disaster survey' will also define the area where there has not been an after disaster survey; this will remain true whether there is a Source or Zone of Confidence (ZOC) Diagram or not.

- If there is a Source Diagram, the dates of the surveys will make clear which were before and after the disaster.
- If there is no ZOC Diagram, no further action is required. In fact, in these circumstances, both the ZOC and Source Diagram are superfluous, as the necessary information is in situ on the chart.
- Accordingly, no further guidance is required. All these circumstances were fully discussed within Chart Standardization and Paper Chart Working Group (CSPCWG) and with Japan in the development of this Specification in the period 2011-12.

Comment from CSPCWG Chair: Agree.

VENEZUELA

Question 1 (answer = Yes): This Directorate considers that it is convenient to use this new symbology to give more information to the mariner in the areas subject to post disaster hydrographic works.

Comment from CSPCWG Chair: Agree.

Question 2 (answer = Yes): This Directorate considers that the CSPCWG will be able to adopt in the future new guidelines to represent these zones in a clearer and more concise way.

Comment from CSPCWG Chair: See comment to France's response.