INTERNATIONAL HYDROGRAPHIC ORGANIZATION



ORGANISATION HYDROGRAPHIQUE INTERNATIONALE

THIS CIRCULAR LETTER REQUIRES YOU TO VOTE

IHO File No. S3/8152

CIRCULAR LETTER 65/2017 22 November 2017

CALL FOR APPROVAL OF AN IHO RESOLUTION ON THE ELIMINATION OF OVERLAPPING ENC DATA IN AREAS OF DEMONSTRABLE RISK TO THE SAFETY OF NAVIGATION

References:

- A. IHO Resolution 1/1997 as amended WEND Principles;
- B. IHO CL 40/2014 dated 26 May Revision of the Guidelines for the Implementation of the WEND Principles;
- C. IHO Publication S-11 Edition 3.0.0 Guidance for the Preparation and Maintenance of International (INT) Chart and ENC Schemes and Catalogue of International Charts and ENCs;
- D. IMO NCSR 4/27/5 dated 21 December 2016¹ Report on monitoring of ECDIS issues by the IHO:
- E. IHO CL 51/2017 dated 01 September *Outcome of the Ninth Meeting of the Inter-Regional Coordination Committee (IRCC9)*;
- F. IHO CL55/2017 dated 31 October Outcome of the First Meeting of the IHO Council.

Dear Hydrographer,

- 1. At its 8th meeting, the Inter-Regional Coordination Committee (IRCC) tasked the Worldwide ENC Database Working Group (WENDWG) to draft an IHO Resolution addressing issues related to overlapping ENC data. A draft IHO Resolution was discussed and agreed at the 6th meeting of the WENDWG (WENDWG-6) taking into account existing references (See References A and B) and the new Edition 3.0.0 of S-11 Part A *Guidance for the Preparation and Maintenance of International (INT) Chart and ENC Schemes* (See Reference C). At their meetings (WENDWG-6 and WENDWG-7), WENDWG Members agreed on the importance to eliminate all overlapping ENC data that may cause a significant risk to safety of navigation.
- 2. This warning on the possible risks of overlapping ENCs on safety of navigation was reinforced in the IHO status report to the IMO Sub-Committee on Navigation Communications and Search and Rescue (NCSR) (See Reference D). This report states:
- a) In paragraph 16: "...The uncoordinated production of ENCs, resulting in overlapping data for the same area, and contravening the relevant IHO Resolutions, remains an issue in less critical areas, notably where the limits of waters of national jurisdiction between neighbouring countries are not established. Further investigations have confirmed the unpredictable behaviour of ECDIS operating with Edition 3.4 of the Presentation Library in situations where overlapping data is used in an ECDIS..."
- b) In paragraph 17: "...A mitigation measure has been implemented in Edition 4.0 of the Presentation Library: where an overlap of two or more cells exists, the ECDIS operating with Edition 4.0 must only display one cell for the overlapping area and provide a permanent and persisting

¹ Also Doc. WENDWG7-05B.

indication "overlap". At the same time, the issue remains a high priority item on the agenda of the IHO Working Group on the World-wide ENC Database (WEND) and the relevant Regional Hydrographic Commissions...".

- 3. The IRCC endorsed the WENDWG proposal for a new IHO Resolution addressing issues related to overlapping ENC data at its 9th meeting (See Reference E, Decision IRCC9/19) and submitted it for endorsement at the first meeting of the Council (C-1). The Council endorsed the proposal at C-1 (See Reference F, Decision C1/25) and tasked the IHO Secretariat to circulate the draft proposed IHO Resolution to IHO Member States, for their consideration and approval (see Reference F –Action C-1/29).
- 4. The draft proposed IHO Resolution is provided in Annex A.
- 5. Member States are requested to take into account the endorsement of the IRCC and the IHO Council and to consider the adoption of the proposed IHO Resolution by providing their reply on the Voting Form in Annex B, at their earliest convenience and **no later than 30 January 2018**.
- 6. Depending on the outcome of this IHO Circular Letter, the WENDWG will then consider at its 8th meeting planned in March 2018 whether amendments need to be considered for aligning the existing references A and B to the new IHO Resolution.

On behalf of the Secretary-General Yours sincerely,

Mustafa IPTES Director

Annexes:

- A. Draft Proposed IHO Resolution
- B. Voting Form

PROPOSED IHO RESOLUTION ON THE ELIMINATION OF OVERLAPPING ENC DATA IN AREAS OF DEMONSTRABLE RISK TO THE SAFETY OF NAVIGATION

[Proposed] **IHO Resolution xx/2017** – Elimination of overlapping ENC data in areas of demonstrable risk to the safety of navigation

Elimination of overlapping ENC data in areas of demonstrable risk to the safety of navigation	xx/2017	IHO CL xx/2017 (as endorsed at IRCC9 and C-1)	
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- 1. It has been reported that overlapping ENC data, when used in ECDIS equipment, may lead to unpredictable behaviour in at least the following cases:
- overlapping data occurring in the same usage band (Navigational Purpose);
- overlapping data occurring in ENC cells in different usage bands (Navigational Purposes) but using the same compilation scale.
- 2. Hydrographic Offices, ENC Producers, and Regional Hydrographic Commissions should take appropriate measures to eliminate all overlapping ENC data, particularly in areas of demonstrable risk to the safety of navigation.
- 3. While RENCs and End-User Service Providers may develop certain distribution policies to help prevent such overlapping data from passing through the ENC distribution chain, the safety of mariners at sea should not rely on these mechanisms alone, as if they were the primary solution.
- 4. In addition to the existing procedures related to overlapping ENC data described in:
 - IHO Resolution 1/1997 as amended (WEND Principles) and its Annex (Guidance for the Establishment of ENC Production Boundaries);
 - The *Guidelines for the Implementation of the WEND Principles*, as endorsed by the 11th WEND Committee Meeting in 2008 and amended in 2014;
 - S-11 Ed. 3.0.0² Guidance for the Preparation and Maintenance of International (INT) Chart and ENC Schemes and Catalogues of INT Charts and ENCs; and
 - S-57 *IHO Transfer Standard for Digital Hydrographic Data* -, Appendix B.1, Annex A *Use of the Object Catalogue for ENC* (Ed. 4.0³.0, June 2014) clause 2.1.8;

Hydrographic Offices, ENC Producers, and Regional Hydrographic Commissions should seek to:

- Identify overlapping ENC data in all areas of significance to navigational safety within their areas of production or control;
- Prevent the increase of any such cases; and
- Resolve all of those cases where a demonstrable risk to the safety of navigation exists, through discussion and negotiation between the relevant ENC producers, as soon as possible, and at least within one year of any such overlapping ENC data being reported or identified.
- 5. Notwithstanding the responsibilities of the ENC Producer Member States involved, to take early action to notify the mariner of possible risks to the safety of navigation, in any case where the elimination of overlapping ENC data cannot be resolved and its continued existence presents a demonstrable risk to

 $^{^2}$ To be replaced by Ed. 3.1.0 if adopted by IHO Member States (IHO CL 59/2017 refers).

³ To be replaced by Ed. 4.1.0 if adopted by IHO Member States (IHO CL 61/2017 refers).

the safety of navigation, the procedures described in section 1.7 of the *Guidelines for the Implementation of the WEND Principles* should be applied. The timescale to resolve should be within one year of the matter coming to the attention of the ENC Producer Member States involved. Section 1.7 states:

- "1.7. The S-57 Standard allows minimal overlap of ENC data within usage bands. ECDIS systems will operate unpredictably in areas where significant overlapping ENC coverage is present, raising a potential navigational risk to end-users. Where overlapping coverage exists the Producer Member States should recognize their responsibility and take the necessary steps to resolve the situation. To ensure that overlapping ENC data coverage is resolved to the satisfaction of the Regional Hydrographic Commission (RHC), the following procedures should be undertaken in sequence until there is satisfactory resolution:
 - 1.7.1 The RHC will identify and assess ENC coverage within their area of responsibility and highlight those areas where there are navigationally significant differences between the overlapping ENCs. The assessment of what may be navigationally significant should be guided by the best practices in this regard, acknowledged and approved by the IRCC. The RHC may seek the assistance of a Regional ENC Coordination Centre (RENC) to assist in development of this assessment and should take a proactive approach with the ENC Producer Member States, to resolve overlap issues within the region.
 - 1.7.2 The RHC will keep the IRCC Chair and the IHO Secretariat informed, through the annual reporting process, about overlaps in ENC coverage, their associated risks and related action(s) taken by the coastal States and/or the Producer Member State. Appropriate action by the IHO Secretariat should be initiated to inform the International Maritime Organization of the situation with details of the desired actions to be taken by the Government(s) of the involved coastal State(s) and the risks associated with inaction.
 - 1.7.3 Where urgent action is required to alert mariners to navigationally significant overlap issues then the RHC, through the concerned Producer Member States, should initiate promulgation of appropriate warnings directly with the regional NAVAREA coordinator and other local navigational warning protocols, while keeping the IRCC Chair and IHO Secretariat informed."

PROPOSED IHO RESOLUTION ON THE ELIMINATION OF OVERLAPPING ENC DATA IN AREAS OF DEMONSTRABLE RISK TO THE SAFETY OF NAVIGATION

Voting Form

(to be returned to the IHO Secretariat by 30 January 2018) E-mail: cl-lc@iho.int - Fax: +377 93 10 81 40

Note: The boxes will e	expand as you type your answers.
Member State:	
Contact:	
E-mail:	
box)? YES	option of the new IHO Resolution as provided in Annex A (<i>tick the appropriate</i> NO lease explain your reasons in the comment section below.
Comments:	
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Signature :	
Date:	