Paper for Consideration by ENCWG4

Submitted by:	Australia (AHO)
Executive Summary:	Mariners using ECDIS as the primary means of navigation should be alerted when, despite the existence of ENC coverage, larger scale detail is only available in paper charts.
Related Documents:	NCWG4-10.4A
Related Projects:	S-101PT

Identification of areas with larger scale Paper Chart coverage

Introduction / Background

Many areas of the world are not yet fully covered by ENCs at all scale levels. Some regions have coverage at the INT level (Navigational Purposes 1 and 2) but not at the larger scale levels (3, 4, and 5). In many cases, this is a consequence of having different countries responsible for the production of ENCs at different scale levels.

This situation existed in the area where container vessel "Kea Trader' grounded in the vicinity of New Caledonia. The largest scale chart at the moment of the grounding was a French paper chart (7049 @ 1:500000) but the largest scale ENC available in the area was a GB cell (GB204637 @ 1:700 000 converted from a 1:1 500 000 paper chart).

It is concerning that 'Kea Trader' was sailing without paper charts on board (Full-ECDIS) and that the best ENC available for the area was not the largest scale product at her disposal (FR paper chart 7049 was). This rises the questions of weather:

a) the navigation officer and/or the chart service provider were aware of this and if,

b) from a legal point of view, was 'Kea Trader' at fault by not using the largest scale product available.

Analysis/Discussion

The AHO is of the idea that ENCs should include a way of alerting users when it does not contain the largest level of detail available.

This may be achieved by encoding a CTNARE area feature covering the region where larger scale paper chart products exist (even if they are from another country). Before full ENC coverage was available in Australia, the AHO used to encode a CTNARE area covering those larger scale paper charts not yet available as ENCs. The AHO encoded the CTNAREs with the following attributes:

TXTDSC:

CAUTION AREA - NAVIGATION INFORMATION For more detailed navigation information in this area, refer to larger scale paper charts.

INFORM: See Ausxxx

The AHO is of the opinion that guidance should be added to S57 Appendix B.1, Annex A (UOC) - Section 5.8.3.1 – Areas of omitted bathymetry. The proposed wording could be:

Where an area on an ENC is covered by a larger scale paper chart that has not been converted to an ENC, this area must be encoded using a **CTNARE** object (see clause 6.6). This object must contain a text file reference populated using the attribute TXTDSC drawing attention to the larger scale paper chart/s. For example:

LARGER SCALE PRODUCT AVAILABLE For more detailed navigation information in this area, refer to larger scale paper chart CCCxyz (*e.g. Aus182*).

Another option would be to have a generic chart note (with no reference to chart numbers)

LARGER SCALE PRODUCT AVAILABLE For more detailed navigation information in this area, refer to larger scale paper chart/s.

The relevant chart/s could then be listed using the attribute INFORM (e.g. See Aus182).

Conclusions

The encoding of areas in ENCs where larger scale data exists in an official paper chart (even if from a different country) is seen as a proactive way to raise awareness and contribute to safety of navigation.

Recommendations

Add encoding guidance in S57 Appendix B.1, Annex A (UOC).

Justification and Impacts

- Full ENC coverage is not yet available.
- In certain areas paper charts still provide the largest (and in many occasions more up to date) information than the existing ENC products available.
- ENC producers should encode their ENCs in a way that enables ECDIS to alert mariners of the
 existence of larger scale detail not contained in the largest scale ENC available for the transit area.
 This indication should be triggered by the ECDIS 'Route check' function at the planning stage of the
 trip.

Action Required of ENCWG

The ENCWG is invited to discuss the topic and agree on the merits to provide additional guidance in the UOC.

