

Paper for Consideration by HCA HPWG

Review of Region M Small-Scale ENC Scheme

Submitted by:	Land Information New Zealand (LINZ), New Zealand Hydrographic Authority (NZHA)
Executive Summary:	Proposal for HCA HPWG to coordinate a process to harmonise the ENC scheme in Antarctica, commencing with a workshop at HCA13 and continued via correspondence with HPWG members
Related Documents:	IHO CLs 47/2004, 32/2007, 64/2007 and 108/2007 HCA7 Minutes BSHC12 BSEHWG (BSHC12-30) CHRIS/19 (CHRIS19-06.1C)
Related Projects:	

Introduction / Background

In May 2013 the Norwegian Hydrographic Service (NHS) raised an enquiry with the HCA Secretariat regarding their production of the ENC for INT 909 in the Overview Usage Band at a compilation scale of 1:500,000. It was noted that the ENCs based on the INT 900 series e.g. INT 900, 908 and 909, should be published as Overview ENCs in accordance with the small-scale ENC scheme agreed at HCA in 2007. However, the ENC for INT 900, published by New Zealand (NZ), has been produced in the General Usage Band with a compilation scale 1:500,000, contrary to the small-scale ENC scheme.

Analysis/Discussion

The NZ ENC schema was developed following IHO CL 108/2007 (see below for full explanation) in collaboration with other SWPHC members for Region L to achieve harmonisation in the SWP region. Scale limits for each navigation purpose were defined in a way to ensure the mariner gets the best available data for the type of navigation intended. As the NZ area of charting coverage extends into Antarctica, the same schema was used to ensure consistency across the NZ ENC products. This approach to defining the scale ranges for the six navigational purposes is appropriate for the New Zealand situation and Ross Sea region of Antarctica. LINZ first presented the NZ ENC Schema at HCA9 and again at subsequent meetings.

LINZ also notes the collaborative approach taken by the BSHC, defined in the presentation "Harmonisation of Baltic Sea ENCs" made by the Finnish Maritime Administration at BSHC12 in June 2007, which proposes compilation scales for Baltic Sea ENCs, different to those in CL 47/2004.

The responsibility for coordinating the INT chart and ENC scheming and production has now been transferred to the HCA HPWG and Action HCA12/4 tasks the HPWG "to develop a large scale ENC scheme (navigational purposes 4 and 5) and review the existing smaller scale schemes".

Full explanation

NZs understanding of Table 2 *Possible assignment of navigational purposes to scale ranges* as presented in CL 47/2004 and 32/2007 is that it was produced for a particular purpose at that time. CL 32/2007 suggested the Recommendations for Consistent ENC Data Encoding be adopted as a new IHO Technical Resolution and issued a voting paper to Member States for their approval.

Shortly afterwards, CL 64/2007 outlined several Member States made substantive comments within their negative response or qualified approvals. Specifically, there were concerns over the assignment of compilation scale based on radar ranges, variation between M-4 defined usage bands and those noted in the recommendations, and the SCAMIN assignment procedures. As a result, the IHB announced the suspension of voting pending further consideration by CHRIS at its 19th meeting in 2007.

The relationship between ENC Navigational Purpose and ENC cell Compilation Scale was discussed at length during the review and preparation of S-65 Edition 2.0.0. The discussion was based mainly on the work and recommendations of the Baltic Sea ENC Harmonisation Working Group (BSEHWG - a sub-Working Group of the BSHC), as well as the guidance in clause 2.1 of the ENC Product Specification. There is no mention of a relationship between Navigational Purpose and Compilation Scale.

The main issue in terms of the ENC Product Specification is the clarification/correction approved in the S-57 Maintenance Document (S-57 MD8). There have been 3 criteria included to assist in the determination of Navigational Purpose, and none of these relate to Compilation Scale. Indeed, the BSEHWG determined their Navigational Purposes based mainly on the second criterion, this being the nature of the area to be covered (the area is not large, and therefore their portfolio has their Navigation Purpose 1 ENC cells at a relatively large Compilation Scale).

TSMAD submitted a paper for consideration by CHRIS/19 outlining a proposal for the CHRIS to adopt a new version of the Recommendations for Consistent ENC Data Encoding reflecting the discussions during the preparation of S-65 Edition 2.0.0. As a result, CHRIS/19 endorsed the revised version of Recommendations for Consistent ENC Encoding and omitted Table 2 *Possible assignment of navigational purposes to scale ranges*. The table formerly in S-65 has been replaced by a statement that "S-57 Edition 3.1 does not define minimum and maximum Compilation Scales for each Navigational Purpose". Additionally, there was discussion as to whether the table should be included as an "example of a possible relationship between Navigational Purpose and Compilation Scale" in Edition 3.0.0 of the UOC when it was "unfrozen" in 2010, but based on all previous discussions this was also left out in favour of the same statement as above being inserted at clause 2.2.6.

Conclusions

NZ proposes that the HPWG coordinate a process to harmonise the ENC scheme in Antarctica, similar to that undertaken by BSHC. NZ suggests this commences with a workshop at HCA13 and is continued via correspondence with HPWG members.

Action Required of HCA HPWG

The HCA HPWG is invited to:

- a. endorse the proposal to coordinate a process to harmonise the ENC scheme in Antarctica, similar to that undertaken by BSHC
- b. agree to commence review with a workshop at HCA13 to be continued via correspondence with HPWG members