

Paper for Consideration by ENCWG VTC 03

IC-ENC Discussion Items

Submitted by:	IC-ENC
Executive Summary:	This paper presents three items identified by IC-ENC for discussion and potential clarification by the ENCWG.
Related Documents:	S-57 Appendix B.1, Annex A - Use of the Object Catalogue for ENC - UOC (Ed. 4.2.0 April 2020)
Related Projects:	S-101

Introduction / Background

1. This paper presents three items for discussion by the ENCWG, where IC-ENC has found cases, where IHO standards maintained by the ENCWG could potentially be improved to enhance the quality and usability of ENC data.

Item 1 – VALSOU to two Decimal Places (see associated presentation for more detail)

2. IC-ENC has received ENC data where the attribute VALSOU is populated to two decimal places. IC-ENC subsequently amended its policy to permit this encoding. This reflected that S-57 Appendix A, Chapter 2 - Attribute Catalogue could be interpreted in different ways. IC-ENC seeks clarification from the ENCWG on whether two decimal places should be permitted and requests that guidance be included in the Use of the Object Catalogue for ENC or via S-57 Frequently Asked Questions (FAQs) to ensure all producers are aware of this. An Encoding bulletin is another option until guidance is incorporated in the UOC.

<u>Indication:</u>	
Unit:	defined in the DUNI subfield of the DSPM record or in the DUNITS attribute of the M_UNIT meta object class, e.g. metre (m)
Resolution:	0.1 m or 0.1 fm or 0.1 ft
<u>Format:</u>	
sxxxxx.xx	
s:	sign, negative values only.
<u>Examples:</u>	
18.2	for a sounding of 18.2 metres.
-2.4	for a drying height of 2.4 metres.

Figure 1 – Attribute Catalogue entry for VALSOU showing conflicting resolution in the format statement.

3. This item also presents a question for S-101, currently S-101 permits two decimal places for Sounding values. However, decimal places for Value of Sounding remain constrained to one decimal place. It is suggested that S-101PT action should follow ENCWG discussion.

Item 2 – RCID Reuse

IC-ENC has recently received ENC data which reused RCID values. Although S-58 check 3 is clear that RCIDs must be unique within the file, this scenario involved the reuse of an RCID within an ENC update. IC-ENC requested that a new edition be produced to ensure the update loaded in the affected ECDIS. IC-ENC also informed the production software provided but they noted that this is not prohibited.

In this case the ENC update did not load into one specific ECDIS system and feedback was provided to the relevant manufacturer. Based on S-57 Part 3 2.2, IC-ENC would expect ECDIS systems to load this update. From an ENCWG point of view, although it is difficult to cover all scenarios, perhaps test datasets for S-58 could cover this scenario by including a case with an update which should not report this Critical error. Consideration could also be given to including a check in S-64 in the future.

Item 3 – MAGVAR Encoding at Small Scales

The Use of the Object Catalogue for ENC provides at 3.1.1 guidance for the encoding of Magnetic Variation information and recommends that this information is encoded using areas. IC-ENC has received data where the use of areas on small scale cells resulted in a range being populated in INFORM and an empty value for VALMAG. S-4 B-272 gives guidance on the use of isogonal lines on charts of scale smaller than 1:750 000 therefore it is suggested that the UOC should provide guidance to cover smaller scale charts to avoid the use of INFORM. Potentially an FAQ or Encoding Bulletin could be issued on this in the interim.

Recommendation

4. IC-ENC invites the ENCWG to consider these items to ensure that guidance for ENC production is clear.

Action Required of ENC WG

The ENCWG is invited to:

- a. Consider clarifying via an FAQ or Encoding Bulletin and then within the UOC whether VALSOU may be populated to two decimal places in S-57 ENC.
- b. Consider the expansion of S-58 test datasets to cover both positive and negative cases for check 3 to ensure that this case is adequately covered.
- c. Consider expanding guidance at 3.1.1 of the UOC to cover the encoding of MAGVAR on small scale ENC cells.