

Paper for Consideration by ENCWG

M_QUAL on UNSARE Containing No Depth Information or Bathymetry
(ENCWG3 Action 6A)

Submitted by:	IHO Secretariat
Executive Summary:	Action 6A from ENCWG3 required the IHO Secretariat to produce an ENC Encoding Bulletin related to the requirement to encode M_QUAL objects over UNSARE areas containing no depth data or bathymetry.
Related Documents:	S-57 Edition 3.1, Appendix B.1, Annex A; ENC Encoding Bulletins and FAQs
Related Projects:	S-101

Introduction / Background

1. Action 6A from ENCWG3 required the IHO Secretariat to produce an ENC Encoding Bulletin related to the requirement to encode M_QUAL objects over UNSARE areas containing no depth data or bathymetry. The draft Encoding Bulletin and FAQ is presented to the ENCWG for consideration and endorsement.

Analysis/Discussion

2. Paper ENCWG3-5.5 "Guidance for the use of M_QUAL objects over unsurveyed areas" resulted in the decision being taken by the ENCWG that further guidance was required in S-57 Appendix B.1, Annex A (Use of the Object Catalogue for ENC) that there was no requirement to encode M_QUAL objects over UNSARE containing no depth data or bathymetry. The ENCWG3 Minutes state the following:

5.5 M_QUAL over UNSARE from DQWG

The Chair reported that the DQWG recommends that ENCWG agree to add the following paragraph in the remarks section of section 2.2.3.1 Quality of Bathymetric Data in the Use of the Object Catalogue. *"When an UNSARE area is used and within the entirety of that UNSARE no bathymetric features are encoded, a M_QUAL is not required"*.

He noted that the DQWG also recommended that an Encoding Bulletin be released by the ENCWG on this issue.

The meeting noted the paper and the recommendation to produce an Encoding Bulletin on the use of M_QUAL covering UNSARE where no bathymetric features are encoded. *(See action)*.

Action 6A: Issue an Encoding Bulletin for the use of UNSARE in areas where no bathymetric features are encoded. (JW)

3. A Draft ENC Encoding Bulletin (number 63) and FAQ (number 45) are included in the Annex for consideration and endorsement of the ENCWG. Note that during the compilation of the draft Encoding Bulletin, consideration of the relevant S-58 Check (Check 550) was given; and referenced in order to strengthen the guidance.

4. The S-57 Maintenance Sub-Working Group of the ENCWG has reviewed the draft Encoding Bulletin and FAQ and their input has been included.

Recommendation

5. The ENCWG is requested to endorse the draft ENC Encoding Bulletin and FAQ for publication on the relevant pages of the IHO web site; and initiate the corresponding amendments to S-57 Appendix B.1, Annex A, Use of the Object Catalogue for ENC.

Action Required of ENCWG

6. The ENCWG is invited to.
 - a. **Endorse** the draft Encoding Bulletin number 63 and FAQ number 45 included at Annex A.
 - b. **Initiate** an ENCWG Action to amend S-57 Appendix B.1, Annex A, Use of the Object Catalogue for ENC accordingly.

Attachment: Annex A – Draft ENC Encoding Bulletin and FAQ.

EB63 UOC Clause 2.2.3.1 Quality of bathymetric data

Clause 2.2.3.1 of Edition 4.1.0 (January 2018) of the *Use of the Object Catalogue for ENC* (S-57 Appendix B1, Annex A) provides guidance for the encoding of areas within which uniform assessment exists for the quality of bathymetric data. Clause 5.8.1 of the *Use of the Object Catalogue for ENC* provides guidance for the encoding of unsurveyed areas to cover areas with no bathymetric survey information. Check 550 of Edition 6.1.0 of *ENC Validation Checks* (S-58) checks that unsurveyed areas containing any depth data or bathymetry are also covered by quality of bathymetric data objects. It is noted from this guidance that where an unsurveyed area contains no depth data or bathymetry, there is no requirement for the area to be covered by quality of bathymetric data information. Moreover, it has been identified that the unnecessary encoding of M_QUAL objects over UNSARE results in unnecessary ECDIS display clutter.

Encoders are advised, therefore, that where an encoded UNSARE object does not contain any depth data or bathymetry (DEPCNT, OBSTRN, SOUNDG, UWTRC, WRECKS), it is not required to encode a M_QUAL object that covers the area.

FAQ

Q 45 *If an unsurveyed area (UNSARE) object contains no depth information or bathymetry, is it required to have a M_QUAL area covering this object?*

A 45 No. See ENC Encoding Bulletin number 63.