

2nd ENCWG MEETING
Genoa, Italy – 20-22 March 2017

Paper for Consideration by the ENC Maintenance Working Group (ENCWG)
Approval to Prepare a New Version of S-57 Appendix B.1, Annex A –
Use of the Object Catalogue for ENC

Submitted by:	IHO Secretariat (TSSO).
Executive Summary:	The current published version of the UOC is dated June 2014. There have been a number of revisions made to the UOC and it is considered that a new version 4.1.0 should be published.
Related Documents:	1. IHO Publication S-57 – <i>IHO Transfer Standard for Digital Hydrographic Data</i> ; 2. ENC Encoding Bulletins and FAQs.
Related Projects:	ENC Production and Maintenance.

Introduction / Background

Since the publication of Edition 4.0.0 of S-57 Appendix B.1, Annex A – *Use of the Object Catalogue for ENC* (UOC) in June 2014, there have been a number of clarifications and revisions made to the document resulting from feedback from ENC and ECDISD users; papers to TSMAD/ENCWG meetings; and enquiries from HOs and industry. While many of these changes have been promulgated by ENC Encoding Bulletins and FAQs, there are some changes that have not. It is therefore considered that a new revision (Edition 4.1.0) should be published to incorporate all cumulative changes since Edition 4.0.0.

Analysis / Discussion

Since the publication of Edition 4.0.0 of the UOC, the following amendments approved by the TSMAD/ENCWG have been promulgated by ENC Encoding Bulletin or FAQ:

- Correction to quoted formatting for encoding attribute SIGSEQ for emergency wreck marking buoy lights (UOC clause 12.4.1.1 – ENC EB No. 55);
- Clarification for the encoding of seasonal attributes (PEREND/PERSTA) to account for leap years (UOC clause 2.1.5.1 – ENC EB No. 56);
- Clarification of guidance on encoding of “holes” in ENC coverage where larger scale (Navigational Purpose) ENCs exist (UOC clause 2.8.1 – ENC EB No. 57);
- Clarification of guidance on identifying areas as “areas to be avoided” (UOC clause 10.2.7 – ENC EB No. 58);
- Clarification of guidance on encoding a navigational aid structure object for lights on land having a nominal range greater than or equal to 10 NM (UOC clause 12.1.2 – ENC EB No. 59);
- Additional clarification on provision of seamless ENC coverage specific to overlapping ENC data of different Navigational Purpose and the same compilation scale (UOC clause 2.1.8 – ENC EB No. 60);
- Clarification of guidance on encoding built up areas specific to areas extending over navigable water (UOC clause 4.8.14 – ENC EB No. 61 and FAQ No. 44).

These amendments have now been included in a new draft revision of the UOC (Edition 4.1.0). Also, additional clarification has been included, based on questions from Hydrographic Offices through the FAQ mechanism; papers presented to TSMAD/ENCWG meetings; and general feedback from UOC users and the IHO Secretariat. The changes include (but are not limited to):

- Correction throughout to align with the change of the IHO convention/structure and other standardized IHO Standards practices;
- Corrections to some entries in the sample SCAMIN policy table (UOC clause 2.2.7.1);
- Strengthened wording for the requirement to keep ENCs up to date for changes of a temporary or preliminary nature (equivalent to paper chart (T) and (P) Notices to Mariners) (UOC clauses 2.6.2.2 and 2.6.2.3);
- Clarification on encoding intermittent lakes in ENC (enquiry from Saudi Arabia) (UOC clause 4.7.8);
- Clarification on encoding wrecks showing part of the hull or superstructure or the mast only is visible at

high water (UOC clause 6.2.1);

- Inclusion of a table showing the most common NATQUA/NATSUR encoding combinations (UOC clause 7.1);
- Clarification providing guidance on encoding “sub-surface pipelines (refer S-4 Edition 4.7.0 clause B-444.9) (UOC clause 11.6.1;
- Clarification providing guidance on encoding offshore development areas (UOC clause 11.7.4);
- Correction to guidance for indicating that a feature is radar conspicuous because it is fitted with a radar reflector but the attribute CONRAD is not a valid attribute (UOC clause 12.12).

The following documents have therefore been submitted for information/discussion to the ENCWG2 meeting:

- “Red line” UOC draft Edition 4.1.0;
- “Clean” UOC draft Edition 4.1.0.

Because there have been changes that are considered to be corrections made within this draft, it is suggested that this version should be classified as a Revision, and as such published as Edition 4.1.0.

Conclusions

The UOC was last published in 2014. A new revision of the document is required to include all the changes that have been approved by the TSMAD/ENCWG since then. It is therefore proposed that a new revision (4.1.0) of the UOC be approved by the ENCWG for submission to HSSC9 (November 2017) for endorsement, in accordance with IHO Resolution 9/2007 (as amended).

Recommendations

1. ENCWG to approve the revised draft of the UOC for submission to HSSC9 (November 2017) for endorsement.
2. ENCWG to agree that the changes in this draft of the UOC constitute a revision, therefore the draft is to be numbered Edition 4.1.0.

Justification and Impacts

The draft UOC version 4.1.0 is considered to be an improvement through consolidation of all recently approved changes to ENC encoding guidance in a single document.

Action required of ENCWG

The S-100WG is invited to:

- a. **Note** this paper.
- b. **Approve** the draft UOC revision 4.1.0.