Paper for Consideration by ENCWG6

Draft Revision 4.3.0 of S-57 Appendix B.1, Annex A – *Use of the Object Catalogue for ENC*

Submitted by:	IHO Secretariat
Executive Summary:	This paper summarizes the draft changes to the UOC for approval of the ENCWG and endorsement to proceed to publication of UOC Edition 4.3.0.
Related Documents:	ENCWG6-09b; UOC Draft Ed 4.3.0 Readline/Clean.
Related Projects:	S-58 Edition 7.0.0 development.

Introduction / Background

1.   Edition 4.2.0 of S-57 Appendix B.1, Annex A – *Use of the Object Catalogue for ENC* was published in April 2020. Since the publication of Edition 4.2.0, some revisions to the UOC have been proposed, principally in support of discussions regarding the development of the draft Edition 7.0.0 of S-58 – *ENC Validation Checks*.

2.   This Paper provides a brief summary of the changes applied in the draft Revision 4.3.0 of the UOC, for consideration of the ENCWG.

Discussion

3.   The following paragraphs relate to the Revisions applied in the UOC draft Revision 4.3.0. A few additional editorial changes that are not referenced in this Paper have also been applied in addition to these Revisions, however these editorial changes can be viewed in the associated Redline of the draft document.

4.   Clause 2.1.5: The clause has been revised so as to remove any ambiguity that may exist in the population of date type attributes. This is described more fully in Paper ENCWG6-09b. The reference to CPDATE, which is not an allowable attribute for ENC, has also been removed.

5.   Clause 2.3: The Remarks first bullet has been revised to add the files referenced by the attribute PICREP as allowed to include the _ (underscore) character in the file name. This is considered to be an oversight as picture files are referenced in the first sentence of the bullet.

6.   Clause 5.4.2: Figure 5 – *Geometry of depth areas* has been revised for the recommended encoding of depth areas associated with the inclusion of "hanging" depth contours. This has been a long outstanding action for the UOC that has been applied as a result of an equivalent change having been approved for Edition 1.0.1 of S-101 Annex A – *Data Classification and Encoding Guide* (see DCEG Edition 1.0.1 clause 11.7.2).

7.   Clause 5.4.3: The guidance in regard to the population of the attributes DRVAL1 and DRVAL2 for "isolated" shoals and deeps has been revised so as to allow the shoalest depth within the area to be populated (for isolated shoals) and the deepest depth to be populated (for isolated deeps) as an alternative to the value of the next shoaler or deeper standard contour value. This encoding is intended to provide a more realistic representation of depth bathymetry in the ECDIS, particularly in relation to the application of the safety depth contour. This proposed change is also related to proposed changes to S-58 for Edition 7.0.0 (Checks 44a - 44d). Figure 6 – *Depth areas* has also been amended in accordance with the change made to Figure 5 in clause 5.4.2.

8.   Clause 6.2.2: The attributes list has been revised so as to reflect the intent of S-57 Maintenance Document (MD8) – 2.Co.8. This is to indicate that one of the attributes HEIGHT or VALSOU must (that is, "conditional mandatory") be populated for the object class **OBSTRN**, based on the value populated for the mandatory attribute WATLEV. This change was requested so as to avoid the confusion that currently exists in regard to the interpretation of the entry for **OBSTRN** in table 3.2 of S-57 Appendix B.1 – *ENC Product Specification*.

9.   It must be noted that none of the Revisions summarised in paragraphs 4 to 8 above have any retrospective impact on ENC datasets already published.

Conclusions

10.   A number of changes have been proposed from Edition 4.2.0 of the UOC since it was published in April 2020. Some of these changes correspond to changes proposed for Edition 7.0.0 of S-58 and will be required to be included in the published UOC in order for these changes to be included in the published S-58.

Recommendations

11.   It is recommended that the ENCWG approve the changes applied in the draft Revision 4.3.0 of S-57 Appendix B.1, Annex A – *Use of the Object Catalogue for ENC* as summarised in paragraphs 4 to 8 above; and subsequently endorse this Revision to be submitted for publication in accordance with the processes outlined in IHO Resolution 2/2007 (as amended).

Action Requested of the ENCWG

12.   The ENCWG is invited to:

1)   **Discuss** and **approve** the changes applied in Revision 4.3.0 of S-57 Appendix B.1, Annex A – *Use of the Object Catalogue for ENC*; or recommend further action as required.

2)   **Endorse** the submission of S-57 Appendix B.1, Annex A – *Use of the Object Catalogue for ENC* for publication.