

**Paper for Consideration by ENCWG**  
**Addition of two validation checks in S-58**

**Submitted by:** IIM (Italy)

**Executive Summary:** Proposal for adding two new checks in S-58

**Related Documents:** S-58, S-57 App. B.1, Ann. A “UOC”

**Related Project:**

**Introduction/Background**

The use of ENC validation software helps Hydrographic Offices to produce ENCs in compliance with S-57 Appendix B1 “ENC Product Specification” and Annex A “UOC”, so the implementation of validation checks improves the quality of ENC data.

**Analysis/Discussion**

In areas where there are a lot of small LNDARE objects of geometric primitive area, specific checks could quickly identify these small LNDARE objects in order to avoid overlapping with the M\_SREL and M\_QUAL (with CATZOC different to U) objects.

**Conclusions**

We suggest the following amendments in S-58

Number	Check description	Check message	Check solution	Conformity to:	Cat
After n. 549	For each M_QUAL object with CATZOC NOT EQUAL to “U” which overlaps a LNDARE object of geometric primitive area	LNDARE object of geometric primitive area within a M_QUAL object with CATZOC NOT EQUAL to “U”	Remove M_QUAL object from LNDARE object or amend CATZOC to U	UOC 2.2.3.1	W/E
After n. 550	For each M_SREL object which OVERLAPS a LNDARE object of geometric primitive area	LNDARE object of geometric primitive area within a M_SREL object	Remove M_SREL object from LNDARE object of geometric primitive area	UOC 2.2.3	W/E

**Recommendations**

Amendments in the S-58

**Justification and impacts**

The implementation of these two specific checks will help to identify potential errors/warnings introduced by encoders.

**Action required of ENCWG**

The ENCWG is invited to agree to this proposal