Paper for Consideration by the Transfer Standard Maintenance and Applications Development Working Group (TSMAD)

Disconnect for NATSUR/NATQUA between UOC3.1 and S58

Submitted by:	Canada
Executive Summary:	There is a disconnect between the UOC3.1 and the current S58 standard in the encoding of the attribution for seabed areas. The UOC states if NATQUA is "hard" (10) then NATSUR attribution is not required. Yet S58 provides a list of permissible values for NATSUR when NATQUA is "hard"
Related Documents:	UOC3.1, S58
Related Projects:	

Introduction / Background

It is felt that there is a disconnect between the procedure outlined within the UOC for the encoding of seabed areas and the reporting of errors via the S58 checks of the same features.

The UOC3.1 gives specific guidance if the Nature of surface is "hard", than the UOC in section 7.1(d) states the following:

(d) Hard bottom: The attribute NATQUA = *10* (hard) should be encoded, without being associated with NATSUR.

Yet the S57 Test 1780 on seabed areas specifically states that the allowable combinations for nature of surface when the quality is set to Hard are as follows:
1. mud
2. clay
3. silt
4. sand

Analysis/Discussion/Conclusions

The wording in the UOC3.1 Section 7.1 (d) does say "should", therefore it is permissible to enter values for the nature of surface (NATSUR) attribute, however the S58 Test 1780 verification of permissible values should match the recommended option as stated within the UOC.

Possible Options:
1. Update the UOC to list the permissible values (1, 2, 3, 4) if the NATQUA is set to 10 (hard)
2. Update the S58 permissible values check to stop restricting the list of allowable attributes values
3. Update the S58 permissible values check to include "Unknown" and "Undefined"

Recommendations

It is recommended that the Lead for the S58 user group and the lead for the maintenance of the UOC resolve the inconsistency and inform TSMAD on the proper coding.

Justification and Impacts

Clarification is required.

Action Required of TSMAD

TSMAD is invited to endorse this proposal