Paper for Consideration by S-100WG6

Product specification name/id pattern

Submitted by:	Nickolay Sergeev - NAVTOR LLC
Executive Summary:	Clarify product specification name/id pattern
Related Documents:	S-100, S-101 PS, S-102 PS, S-122 PS.
Related Projects:	-

Introduction / Background

NAVTOR did not find clear description of the product specification name/id pattern in the S-100 standard.

But found many different approaches both in the document and in the data.

For examples where we find different approaches:

- 1. S100_ProductSpecification has a name and a version which are strings w/o any particular pattern.
- 2. The data product id in current S-101 PS:
 - 2.1. In '1.5 Data Product Specification Metadata' 'S-101'
 - 2.2. In section 12.1.2.6 general S100_ProductSpecification w/o limitations.
 - 2.3. In B5.1.1 it is fixed to 'INT.IHO.S-101.1.0'.
- 3. The data product id in current S-102 PS:
 - 3.1. In '1.5 Product Specification Metadata' 'IHO:S100:S102:2:0:0'
 - 3.2. In section 12.7.6 general S100_ProductSpecification w/o limitations.
 - 3.3. Didn't find any specific name in '10 Data Product Format' and 'Annex B' (HDF meta).
- 4. In S-100 Part C there is a pattern for HDF meta Table 10c-6 INT.IHO.S-NNN.X.X' and there is also a comment "To be replaced by a common format used in all S-100 based products, after that is finalized".
- 5. In several S-12x PS I found names w/o dashes: S122, S123.
 - 5.1. E.g., in S-122 PS:
 - 5.1.1. In section 4.2 Data product specification metadata 'S-122'
 - 5.1.2. In section 14.2 Dataset Metadata productSpecification value 'S-122 version N.n', comment 'This must be encoded as S122.N.n'
 - 5.1.3. Dataset identification information Table D1-1 "INT.IHO.S-122.1.0"

Analysis/Discussion

Strict rules for the product specification name and id are needed as some applications may have their own product specific algorithms and need a key to match the data. For example, product specific object pickup or specific manual update. And we find it necessary to make the new rules known to the working groups for all PS to be updated in next published revision.

Conclusions

Strict formal rule or pattern is needed for the product specification name and id.

Recommendations

Add suggested strict formal rule for the product specification name and id into the S-100 standard. Information to PS producing groups that new strict rules are to be followed.

Justification and Impacts

This makes possible for the implementors to use product specification name to distinguish the data and apply specific algorithms. For the moment, we see no impacts.

Action Required of IHO S-100 WG-6

The IHO S-100WG is invited to endorse actions adding new strict rules for naming in the S-100 document edition5 and initiate the work to remove inconsistencies between the other mentioned standards.