

Paper for Consideration by SNPWG

New S-101 Features and Attributes

Submitted by:	TSMAD – S-101 work item leader
Executive Summary:	This paper is intended to inform SNPWG on the development of new S-101 features and attributes and harmonize some features and attributes that may be of use for both Nautical Publications and ENCs
Related Documents:	S101 Data Classification and Encoding Guide
Related Projects:	Any related projects that may impact upon considerations

Introduction / Background

In 2011 TSMAD established a sub working group to focus on improving the modelling of existing S-57 features and attributes and handle new proposals for the modelling of real-world features that did not previously exist in S-57. The result of this work will be the S-101 Data Classification and Encoding Guide and the S-101 Feature Catalogue. Once the full TSMAD has approved this work and S-101 has undergone testing all of the new items will be registered in the S-100 Feature Concept Dictionary for use by other product specifications.

During the course of this work, it has become apparent that there is some overlap in the modelling that SNPWG has done and this paper is intended to attempt to harmonize the work done by SNPWG with the work done by TSMAD. It should be noted that there may be cases where items cannot be easily harmonized as the intended use by TSMAD and SNPWG are different. For example, TSMAD is concerned mainly with creating a product specification for the ENC – which is the base navigation layer as a vector product; whereas SNPWG is creating products that are intended to replace large volumes of text – such as sailing directions.

Analysis/Discussion

Currently, the DCEG subwg has noted that there are three proposals that may require harmonization with SNPWG.

1. Light List Number – Based on a user's need to reference to publications, the DCEG subwg felt that there was a need to note the light list reference number on the aid to navigation. At first TSMAD was proposing a simple text attribute, however, during further investigation it was noted that SNPWG had also modelled light list numbers. In reviewing the SNPWG work, TSMAD tentatively adapted the SNPWG modelling, but did make some changes. At a high level, TSMAD agreed that the light list number should be a complex, but felt that further delineating the decimal into a separate attribute made it too complex. In addition, several members pointed out that in addition to the International Number, many lights had a National number and this should be accounted for in the model. The full TSMAD proposal is in Annex A to this paper.
2. Communication Channel – TSMAD had initially created a complex attribute for communication channel and it has been further extended to incorporate additional simple attributes that have been proposed by SNPWG. Although, a comparable complex attribute was not found in the SNPWG FCD, the DCEG would like to have SNPWG verify this and to see if there needs to be any further harmonization. The full TSMAD proposal is in Annex B to this paper
3. Regulations – In this case, TSMAD did attempt to harmonize with the SNPWG FCD, but found that S-101 needed only a simple attribute to cite the regulation number – eg CFR33 995.6. Whereas the SNPWG modelling is geared towards a product specification that is intended to model the entire regulation. For S-101, TSMAD is proposing to use a simple attribute called Regulation Description and not use the SNPWG modelling. A sample of this attribute is in the TSMAD COLREGS proposal in Annex C to this paper.

In addition, to harmonizing similar features with the SNPWG model, TSMAD would also like to inform SNPWG on proposed changes to several features and attributes that may be common across product specifications. While

these have not been officially approved by the full TSMAD, they have been tentatively agreed to by the DCEG subwg and TSMAD has been kept apprised of the developments. These changes are as follows:

1. The elimination of RECIND/RECDAT and SORIND/SORDAT for the ENC product specification. These features will still be available and can be used by Hydrographic offices for internal purposes or by other product specifications. It has only been eliminated in the ENC as it was noted that these are useful for Hydrographic Offices Production Systems they are not particularly useful for mariners.
2. INFORM (Information) – has been remodelled as a complex to account for multiple languages, but the intended use is still the same - to convey a short description.
3. TXTDSC (Textual description) – has been remodeled as a complex to account for multiple languages – the intended use is still the same – larger bits of information
4. OBJNAM (Feature Name) – has been remodeled as a complex to account for multiple languages and has an added Boolean to indicate which name should be displayed. This is to account for things like lights that have a short name such as the light number that should be displayed rather than the entire name which would cause screen clutter. So for example:

Full Name: TSMAD Lighted Beacon “3”
Display Name: “3”

5. Dates – there are now three complexes: Periodic Date Range, Fixed Date Range and Survey Date Range. It has also been pointed out that the temporal model for S-100 needed to be improved.

Recommendations

The DCEG subworking group would like SNPWG to review the TSMAD modelling for Light List Information and Communication Channel. In addition, if SNPWG has a simple attribute that is similar to Regulation Citation, TSMAD would like to utilize that for COLREGS and RESARE.

In addition, SNPWG should note the changes that have been made to some existing S-57 features.

Action Required of SNPWG

The SNPWG is invited to:

- a. note this paper
- b. review the TSMAD Light List Number Proposal and provide recommendations
- c. review the TSMAD COMCHA proposal and provide recommendations