

Paper for Consideration by S-101 PT12

Multiple Languages in S-101

Submitted by:	S-101PT Chair
Executive Summary:	This paper proposes changes to S-98 so that this standard reflects the amended data model for language information in S-101 edition 1.2.0. It also proposes that other S-10x product specifications review the modelling of attributes that support information in multiple languages.
Related Documents:	S-98
Related Projects:	S-100

S-101 has modified the ENC data model to allow information in more than one language to be encoded. It also allows the language to be specified and seeks to give producers control over what information is displayed.

Current Situation

In S-57 there are three specific national language fields NOBJNM, NINFOM and NTXTDS.

The optional mariner selector National Language is used to select the display of values present in OBJNAM (when National Language is false) and NOBJNM. Values of NINFOM and NTXTDS are not presented in the chart display.

S-52 Preslib 10.6.1.2 refers see Annex A for the corresponding S-64 test (3.3.12).

Situation in S-101 1.2.0

In S-101 the data model has been extended and improved to allow for the capture of multiple names in multiple languages and to give producers control over the display of names. This is intended to improve ENCs for end users by offering support for more than two languages (where one is English) and to reduce clutter in ECDIS displays by allowing producers to control the display of text.

S-101 DCEG 1.2.0 includes guidance on this at clause 2.5.8, an example of this modelling is shown below.

elevation	(ELEVAT)		RE	0,1
feature name		See clause 2.5.8	C	0,*
language		ISO 639-2/T	(S) TE	0,1
name	(OBJNAM) (NOBJNM)		(S) TE	1,1
name usage		1: default name display 2: alternate name display 3: no chart display	(S) EN	0,1 †

Impact on S-98

S-98 Annex C provides information to ensure that S-100 based navigation systems treat language consistently. The following sections are most relevant.

C-10.5.1

Feature names Attribute “feature name” (featureName) is a complex attribute consisting of the mandatory sub-attribute “name” (the actual name of the feature) and sub-attributes “language” and “display name”. The subattribute “display name” is a boolean indicating which one of multiple instances (in the same feature) of the complex attribute featureName should be displayed. Only one instance of featureName attribute of a feature can have displayName=TRUE. Selecting which instance of the featureName attribute should take into account the value of displayName.

C-12.10.2 Display in languages other than English To support dataset portrayal using languages other than English, the ECDIS should expose to the mariner any national language context parameter provided in a products Portrayal Catalogue. For other details of national language support the Data Classification and Encoding Guide (DCEG) of the relevant product should be consulted.

Other parts of S-98 Annex C which will require changes include;

C-9.8, C11.5

Observations

Table C17 contains attributes which are not displayed seems confusing that they have viewing groups.


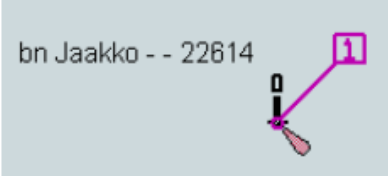
These recommendations are for the S-98 sub-group but are submitted to the S-101PT for awareness and discussion

Recommendations

- A. S-98 Annex C-10.5.1 should be updated to reflect the revised modelling in S-101 1.2.0 proposed wording is at Annex B of this paper.
- B. As a consequence, all PTs developing S-10x Product Specifications should be advised of this revised modelling so that product specifications are consistent.
- C. S-98 Annex C-12.10.2 should be updated to describe a context parameter that consists of an ordered list of languages configured by the user this is in addition to the existing national language context parameter that should be retained. This second context parameter only affects the display of S-101 ENCs.
- D. Make consequential edits to other sections of S-98 Annex C e.g. C-9.8, C11.5

Annex A – Extract from S-64 3.0.(3)

3.3.12 National Language

Test Reference	3.3.12	IHO Reference	S-52 10.6.1.2
Test description			
<i>Selecting the display of text in National language.</i>			
Setup			
Load the following cell 3.3 Settings\ENC_ROOT\GB4X0001.000 with the following settings: Select Display Category Other Select Symbolized Boundaries Select Paper chart symbols Select all Text groups Select Highlight Info			
Action			
Centre the display on position 32°34.700'S 61° 22.300'E and then zoom in to a scale of 1:10 000. 1. Observe the display 2. Select National language			
Results			
1. Confirm that the objects display as in the image below:			
			
2. After selecting National language confirm that the objects display as in the image below:			
			
Note: This object has name in national language (NOBJNM) and information in national language (NINFOM)			

Annex B Proposed Changes to S-98 Annex C

C-10.5.1

Feature names Attribute “feature name” (featureName) is a complex attribute consisting of the mandatory sub-attribute “name” (the actual name of the feature) and sub-attributes “language” and “name usage”. The subattribute “name usage” is an enumeration indicating which indicates if a name should not be displayed (3), displayed when national language is not selected (1), or displayed when national language is selected (2) .

C-12.10.2 Display in languages other than English

To support dataset portrayal using languages other than English, the ECDIS should expose to the mariner Two context parameters;

National Language (applies for S-57 ENC only)

This Boolean value must be used to show the national attribute values present in S-57 ENC data. **Preferred Language (does not apply to S-57 ENC)**

This context parameter contains an ordered list of language values. Feature name values must be display based on the user defined language preference values, the first value in the list should display as higher priority. If no feature names correspond to the language preferences, then the feature name with name usage= 1 must be displayed.

In the example below when the user has set a language preferences as follows;

Sms

Smn

Then the name Lâu'ηηsuðllu is displayed.

IslandGroup

```
featureName
language: fin
name: Turvesaaret
nameUsage: 1
featureName
language: smn
name: Lavηesuolluuh
nameUsage: 2
featureName
language: sms
name: Lâu'ηηsuðllu
nameUsage: 2
```