

Report on the Review of S-1xx Feature Catalogues

Submitted by DQWG

SUMMARY

Executive Summary: DQWG has carried out the Cross check of feature catalogues of S-101, S-102 and S-129, and provided relevant recommendations.

Action to be taken: See section 4&5

Related documents: Action DQWG17/09

1. Introduction

According to action DQWG 17/09, the Working Group has implemented the Cross check of feature catalogues of S-101 Ed 1.1.0, S-102 Ed 2.0.0 and S-129 1.0.0.

2 Discussion

- a. The aims of the Cross check of S-1xx Feature Catalogues are to:
 - Confirm that the Feature Catalogue contents are consistent with the corresponding DCEG document.
 - Identify any areas where the S-101 Feature Catalogue is not consistent with other S-1xx product specifications
 - Confirm that the items present in the feature catalogue are consistent with the GI registry contents.
 - Confirm that the Feature Catalogue structure and content conforms to the S-100 standard.
- b. Only the published S-1xxs in Route Monitoring Mode were reviewed.
- c. Tool developed by NOAA to convert XML to XLSX format enables inconsistencies within the S-101 Feature Catalogue, as well as inconsistencies with other S-1xx Feature Catalogues to be identified.

3. Results of the Cross check of feature catalogues

3.1 The Cross check of S-101 FC and its DCEG

Inconsistencies are shown in Table 1 below.

Table 1 - Cross-check Results of S-101 FC and its DCEG

No.	Classification	Feature Catalogue Clause No.	DCEG Clause No.	Inconsistencies type	Contents in Feature Catalogue	Contents in DCEG
1	S	3.78-3.81 , 3.93\3.161\3.163\3.190	27.76-27.79,27.90\27.144\27.146\27.164	Inconsistent value types	The value type is S100_TruncatedDate.	The attribute type is Truncated Date.
2	S	Example3.6	Example27.6	Inconsistent attribute types	All attributes of the text are text.	All attributes of the text are free text.
3	R	5.11		omission	Information provided for	N
4	A	6.1		omission	Role reference include 5.11 informationProvidedFor.	N
5	I	7		Inconsistent attribute types	All type of simple attributes are S.	Type of Simple attribute are IN, TE, TD, TI, BO, RE and EN.
6	F	8		Inconsistent attribute types	All type of simple attributes are S.	Type of Simple attribute are IN, TE, TD, TI, BO, RE and EN.
7	F	8.84	13.5	omission	Include assoiation 6.4 StructureEquipment	N
8	F	8.161	20.6	omission	Include assoiation 6.7 AidsToNavigationAssociation	N
9	F	8.186	25.16	Inconsistent name	Assoiation name is 8.149MarinePollutionRegulationsArea.	Assoiation name is MarinePollutionRegulations Limit.

10	S	3.195(1.0.2)	27.170	Inconsistent	Text Justification has been removed from FC Ed 1.1.0.	In “Summary of Substantive Changes in Edition 1.1.0” of DCEG, it is stated that “Text Justification” has removed, but it still exists in 27.170 actually.
11	S	3.220		omission	FC Ed 1.1.0 adds a new content “Category of Cargo”.	There is no corresponding content in the DCEG Ed 1.1.0.
12	F	8.177	21.5	omission	FC Ed 1.1.0 adds a new association RangeSystemAggregation.	There is no corresponding content in the DCEG Ed 1.1.0.

N=Not included, S = simple attribute, C = complex attribute, R = role, A = association, I = information type, F = feature type.

3.2 The Cross check of S-1xx FCs and its DCEG

No inconsistency is found in S-102, while inconsistencies within S-129 are shown in Table 2 below.

Table 2 – Cross-check Results of S-129 FC and its DCEG

No.	Classification	Feature Catalogue Clause No.	DCEG Clause No.	Inconsistencies type	Contents in Feature Catalogue	Contents in DCEG
1	S	3.6	C.3.5	Spelling	The name of 3.6 is “Maximim Draught”.	The name of C3.5 is “Maximum Draught”
2	S		C.3.6	omission	N	Distance Above UKC Limit
3	S	3.20	C.4.2	Name inconsistency	UnderKeelClearance Calculation Type	UnderKeelClearance Calculation Request

4	F	8.1	C.7.1	Association inconsistency	Attribute or Role Type of 8.1 is validTimeStart and validTimeEnd. They are simple attributes.	Attribute or Role Type of C.7.1 is fixedTimeRange. It is a complex attribute
5	F	8.1	C.7.1	Name inconsistency	UnderKeelClearanceCalculationType.	UnderKeelClearanceCalculationRequested.
6	F	8.3	C.7.3	Name inconsistency	Under Keel Clearance Almost Navigable Area	UnderKeelClearanceAlmostNonNavigableArea
7	F	8.3	C.7.3	omission	N	distanceAboveUKCLimit_m
8	F	8.4	C.7.4	omission	N	distanceAboveUKCLimit_m. fixedTimeRange.
9	F	8.4	C.7.4	omission	ETA. TimeWindowOpen. TimeWindowClose.	N
10	S	3.7		omission	Valid Time Start	N
11		3.8		omission	Valid Time End	N
12		3.10		omission	Name	N
13		3.11		omission	ETA	N
14		3.12		omission	Time Window Open	N
15		3.13		omission	Time Window Close	N
16		3.14		omission	Time Window Pass	N
17		3.17		omission	Time Start	N

18		3.18		omission	Time End	N
19	S	3.3	7.2.1.1	Name inconsistency	The SimpleAttribute is Vessel ID.	The SimpleAttribute is shipID.

N=Not included, S = simple attribute, F = feature type.

3.3 The Cross check of S-1xx and S-101 FCs

Inconsistencies between S-101 and other S-1xx Feature Catalogues are shown in Table 3 below.

Table 3 - Cross-check Results of S-1xx and S-101 FCs

No.	Publications	S-1xx Clause No.	S-101 Clause No.	Contents in S-1xx Feature Catalogue	Contents in S-101 Feature Catalogue
1	S-102	3.1	3.210	Depth	Value of Sounding
2	S-102	3.2	4.41	uncertainty	vertical uncertainty
3	S-129	3.6	3.133 (27.121)	maximumDraught	Maximum Permitted Draught
4	S-129	3.17	3.81	Time Start	Date Start
5	S-129	3.18	3.79	Time End	Date End
6	S-129	4.1	4.4	Fixed Time Range	Fixed Date Range
7	S-129	3.1,3.9		3.1 and 3.9 are repeated in S-129 FC.	

3.4 The Cross Check of S-1xx FCs and GI registry

The results are shown in Table 4 below.

Table 4 - Cross-check Results of S-1xx FCs and GI Registry

No.	Publications	Feature Catalogue Clause No.	Contents in S-1xx Feature Catalogue	Status
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1	S-129	3.11	ETA	Unregistered
2	S-129	3.12	Time Window Open	Unregistered
3	S-129	3.13	Time Window Close	Unregistered
4	S-129	3.14	Time Window Pass	Unregistered
5	S-129	3.19	UnderKeelClearance Purpose Type	Unregistered
6	S-129	3.20	UnderKeelClearance Calculation Type	Unregistered
7	S-129	3.6	Maximim Draught (Table 2 Spelling problem)	Unregistered
8	S-129	3.7	Valid Time Start	Unregistered
9	S-129	3.8	Valid Time End	Unregistered
10	S-129	8.3	Under Keel Clearance Almost Navigable Area	Unregistered

3.5 The Cross Check of S-1xx FCs and S-100

S-100 5.0.0 includes enumerations in simple attributes. S-101, S-102, S-104, and S-111 all follow this, while S-129 juxtaposes enumerations with simple attributes, as shown in Figure 1.

Annex C. Feature Catalogue

C.1 Catalogue header information

C.2 Definition Sources

C.3 Simple Attributes

C.4 Enumerations

C.5 Complex Attributes

C.6 Roles

C.7 Feature Types

Figure 1 S-129 Feature Catalogue

4. Action

The S-100WG is requested to:

- a. **Note** the information provided.