

Paper for Consideration by S-101PT5

Status of S-101 FC update

Submitted by:	Republic Of Korea (KHOA)
Executive Summary:	This paper describes updates and revisions of S-101 Feature Catalogue
Related Documents:	S-100 4.0, S-101, S-101PT4-3.3
Related Projects:	KHOA S-100 Test Bed Project

Introduction / Background

KHOA has tasked to create and update the S-101 Feature Catalogue (FC) according to the S-101 DCEG. This paper reports updated version S-101 FC.

Analysis/ DiscussionUpdating S-101 Feature Catalogue

KHOA has been updating S-101 FC according to the S-101 product specifications and DCEG documents. At the 4th meeting of S-101PT in 2019, KHOA reported issues from produced S-101 FC using S-100 FCB. Some features and attributes registered in the DDR (Data Dictionary Register) data of the S-100 Registry have been clarified. Therefore, we would like to report the results of updating S-101 FC and discuss the distribution plan.

Clarification of label (name)

It was pointed out that the features stored in the S-100 Registry do not match with the S-100 standard because the first letter of the word is sometimes in lowercase. After a discussion with IHO Secretariat, KHOA capitalized the first letter of the feature and revised the label (name) as shown below.

Current S-100 GI Registry's DDR provides feature type and information type's name with upper case of the first letter, however, the name of listed value is provided as label with lower case of the first letter. To avoid inconsistency in DDR, IHO modified listed value's label as upper case of the first letter. S-101 FC has been updated as modified list of value's label to provide same information on S-101 FC and S-100 GI Registry.

As-Is	To-Be
<pre> <S100FC:listedValue> <S100FC:label>pile beacon</S100FC:label> <S100FC:definition>a long heavy timber(s) or section(s) ; <S100FC:code>5</S100FC:code> </pre>	<pre> <S100FC:listedValue> <S100FC:label>Pile Beacon</S100FC:label> <S100FC:definition>A long heavy timber(s) or section(s) of steel. <S100FC:code>5</S100FC:code> </pre>
<pre> <S100FC:listedValue> <S100FC:label>cairn</S100FC:label> <S100FC:definition>a mound of stones, usually ci <S100FC:code>6</S100FC:code> </pre>	<pre> <S100FC:listedValue> <S100FC:label>Cairn</S100FC:label> <S100FC:definition>A mound of stones, usually cc <S100FC:code>6</S100FC:code> </pre>
<pre> <S100FC:listedValue> <S100FC:label>conical (nun, ogival)</S100FC:label> <S100FC:definition>the upper part of the body above <S100FC:code>1</S100FC:code> </S100FC:listedValue> </pre>	<pre> <S100FC:listedValue> <S100FC:label>Conical</S100FC:label> <S100FC:definition>The upper part of the body above <S100FC:code>1</S100FC:code> </pre>

Clarification of definition

Including the S-101 product specifications, S-10X product specifications are steadily expanding its coverage and adding content. As a result of this, some missing definitions of newly defined features or items in the S-101 environment have been revised through the "clarification process".

As-Is	To-Be
<pre><S100FC:S100_FC.SimpleAttribute> <S100FC:name>Buoy shape</S100FC:name> <S100FC:definition>The shape a buoy exhibits</S100FC:definition> <S100FC:code>buoyShape</S100FC:code> <S100FC:remarks>The principal shapes are those recommended in the International Assoc <S100FC:alias>BOYSHP</S100FC:alias></pre>	<pre><S100FC:S100_FC.SimpleAttribute> <S100FC:name>Buoy Shape</S100FC:name> <S100FC:definition>The principal shape and/or design of a buoy.</S100FC:definition> <S100FC:code>buoyShape</S100FC:code> <S100FC:remarks>The principal shapes are those recommended in the International Assoc <S100FC:alias>BOYSHP</S100FC:alias></pre>

Addition of definition references

When creating FC, "Definition reference" was added to monitor the version information of each feature and attribute. The registered source (Primary Key) value from the S-100 Registry was also included to check version information of features and attributes.

As-Is	To-Be
<pre><S100FC:S100_FC.SimpleAttribute> <S100FC:name>Beacon shape</S100FC:name> <S100FC:definition>The shape a beacon exhibits</S100FC:definition> <S100FC:code>beaconShape</S100FC:code> <S100FC:alias>BCNSHP</S100FC:alias> <S100FC:valueType>enumeration</S100FC:valueType></pre>	<pre><S100FC:S100_FC.SimpleAttribute> <S100FC:name>Beacon Shape</S100FC:name> <S100FC:definition>Describes the characteristic geometric form of the beacon.</S100FC:definition> <S100FC:code>beaconShape</S100FC:code> <S100FC:alias>BCNSHP</S100FC:alias> <S100FC:definitionReference> <S100FC:sourceIdentifier>2004645</S100FC:sourceIdentifier> <S100FC:definitionSource>IHO:DDR</S100FC:definitionSource> </S100FC:definitionReference></pre>

Addition of Text Placement

To apply Text Placement on S-101 data display, the features in S-101 FC must have relations with Text placement feature. Therefore, DCEG (last PT version) based Text Placement was added on the new version S-101 FC for a better readable text display on S-101 ENC.

As-Is	To-Be
<pre><S100FC:S100_FC.FeatureType isAbstract="false"> <S100FC:name>Coastline</S100FC:name> <S100FC:definition>The line where shore and water meet. Although the terminology of coasts <S100FC:code>Coastline</S100FC:code> <S100FC:alias>CDALNE</S100FC:alias> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:featureUseType>geographic</S100FC:featureUseType> <S100FC:permittedPrimitives>curve</S100FC:permittedPrimitives> </S100FC:S100_FC.FeatureType></pre>	<pre><S100FC:S100_FC.FeatureType isAbstract="false"> <S100FC:name>Coastline</S100FC:name> <S100FC:definition>The line where shore and water meet. Although the terminology of coasts <S100FC:code>Coastline</S100FC:code> <S100FC:alias>CDALNE</S100FC:alias> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:attributeBinding sequential="false">...</S100FC:attributeBinding> <S100FC:featureUseType>geographic</S100FC:featureUseType> <S100FC:featureBinding roleType="association"> <S100FC:multiplicity> <S100Base:lower>1</S100Base:lower> <S100Base:upper>ns:nil="false" infinite="false">1</S100Base:upper> </S100FC:multiplicity> <S100FC:association ref="TextAssociation" /> <S100FC:role ref="identifies" /> <S100FC:featureType ref="TextPlacement" /> </S100FC:featureBinding> <S100FC:permittedPrimitives>curve</S100FC:permittedPrimitives> </S100FC:S100_FC.FeatureType></pre>

Conclusions

S-101 FC has been updated for a better display of S-101 data regarding to the revision of the DDR database of the S-100 Registry after the S-100WG5 and the S-101PT4. Distribution/publication plan of new version S-101 FC can be discussed.

Recommendations

Request review the recognized issues of updated of S-101 FC.

Action Required of S-101PT

The S-101PT5 is invited to:

- a. Note this paper
- b. Discuss the S-101 FC issues reported by this paper
- c. Discuss publication plan of new version S-101 FC