

S-101 Electronic Navigational Chart Project Team

Status of FCB_PCB development

S-101PT5 / KHOA

Presented by KHOA



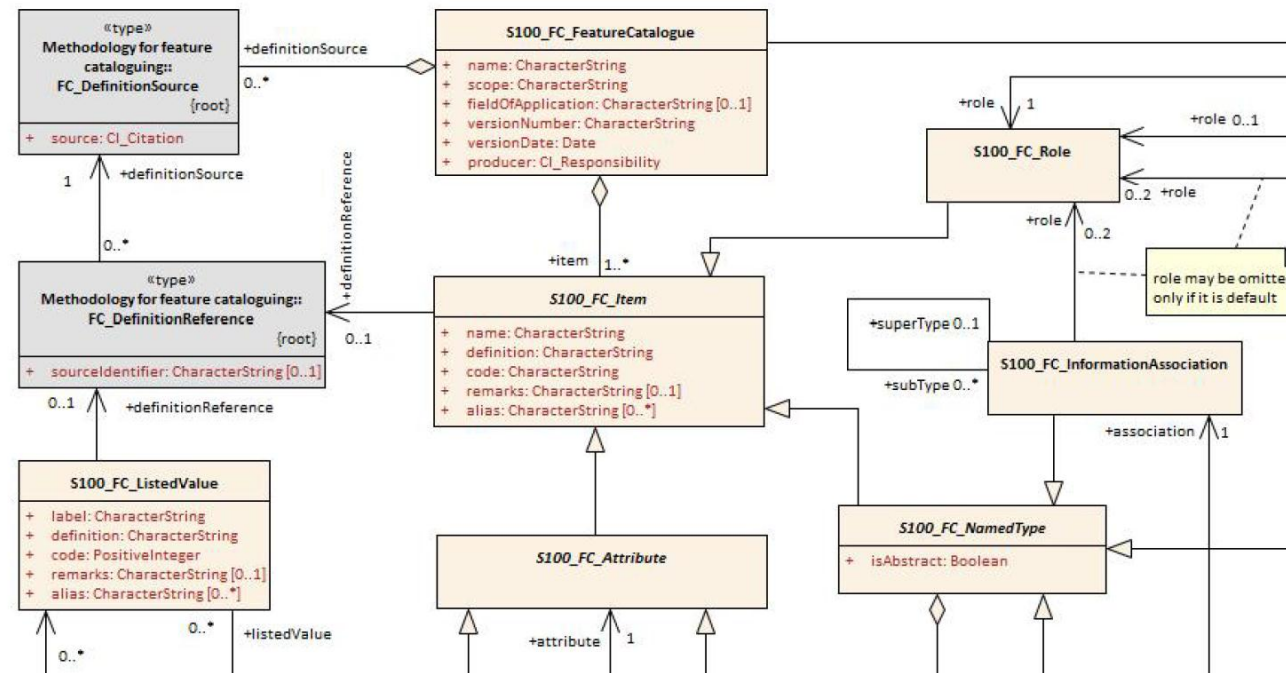
Introduction

- **S-100 FCB and S-100 PCB progress by KHOA**
 - main components of standard development infrastructure.
 - key tools for development of product standard based on S-100.
 - KHOA supports development and operation of S-100 FCB and S-100 PCB in cooperation with the IHO, updating them based on user requirements.
- **Status of S-100 FCB/S-100 PCB update**
 - The S-100 FCB enables version management of FC.
 - Improvement of PCB for a functional problem.



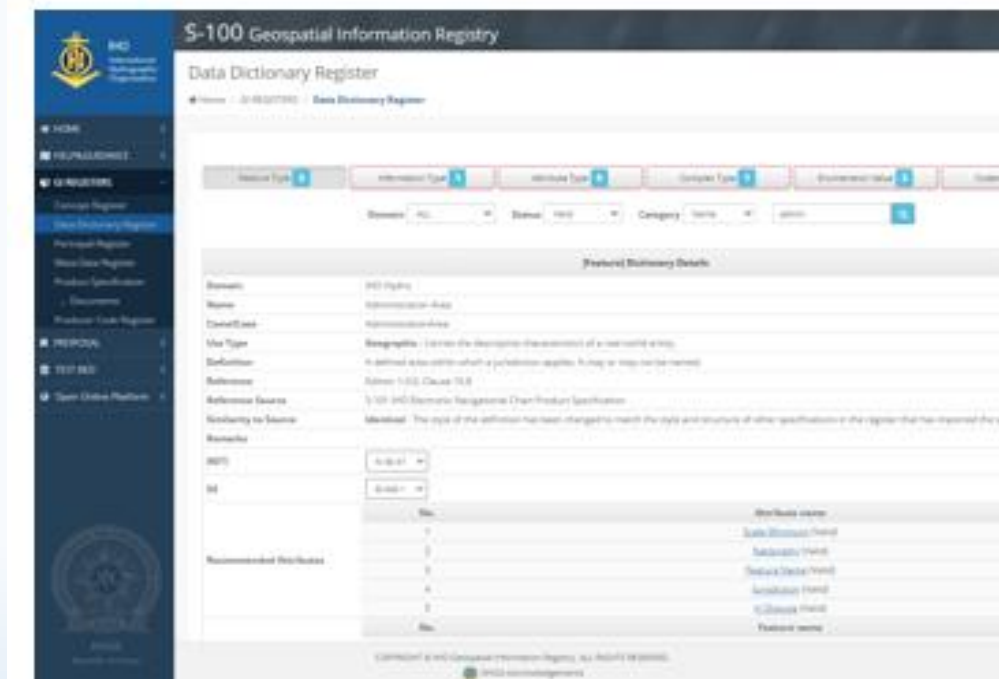
S-100 FCB improvements information

- According to the discussion on version management of feature data within FC at the last S-100WG meeting(S-100WG5-04.6A).
- Using FC_DefinitionReference for "version management of feature data" in the Feature Catalogue data model as specified in "Fig".



FCB local DB creation improvement

- Using the FC_DefinitionReference enables version management.
- The unique key value(sourceidentifier) will be brought in to your local DB from the Registry information(DDR).



```
<S100CI:address>
  <S100CI:administrativeArea>4b quai Antonie 1er</S100CI:administrativeArea>
  <S100CI:country>Monaco</S100CI:country>
  <S100CI:electronicMailAddress>info@iho.int</S100CI:electronicMailAddress>
</S100CI:address>
<S100CI:onlineResource>
  <S100CI:linkage>www.iho.int</S100CI:linkage>
</S100CI:onlineResource>
</S100CI:contactInfo>
</S100CI:CI_Organisation>
</S100CI:party>
</S100FC:producer>
<S100FC:classification>unclassified</S100FC:classification>
<S100FC:S100_FC_DefinitionSources>
  <S100FC:FC_DefinitionSource id="IHOREG">
    <S100FC:source>
      <S100CI:title>IHO GI Registry</S100CI:title>
    </S100FC:source>
  </S100FC:FC_DefinitionSource>
</S100FC:S100_FC_DefinitionSources>
<S100FC:S100_FC_SimpleAttributes>
  <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:line>PCUCMD</S100FC:line>
  </S100FC:S100_FC_SimpleAttribute>
  <S100FC:definitionReference>
    <S100FC:sourceIdentifier>2</S100FC:sourceIdentifier>
    <S100FC:definitionSource ref="IHOREG" />
  </S100FC:definitionReference>
  <S100FC:valueType>enumeration</S100FC:valueType>
  <S100FC:listedValues>
    <S100FC:listedValue>
```



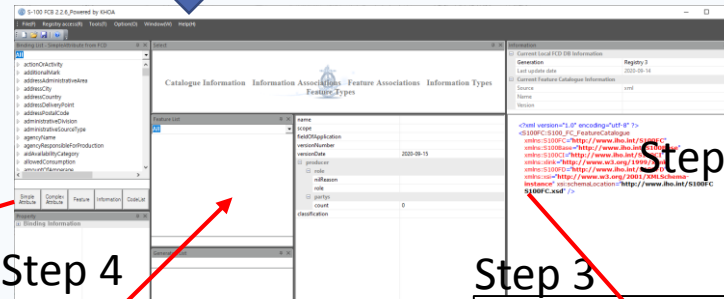
Version check process

- Step 1: Create Local DB
- Step 2: Create FC
- Step 3: Update Local DB
- Step 4: Calling up FC
- Step 5: Check Version
- Step 6: Update FC

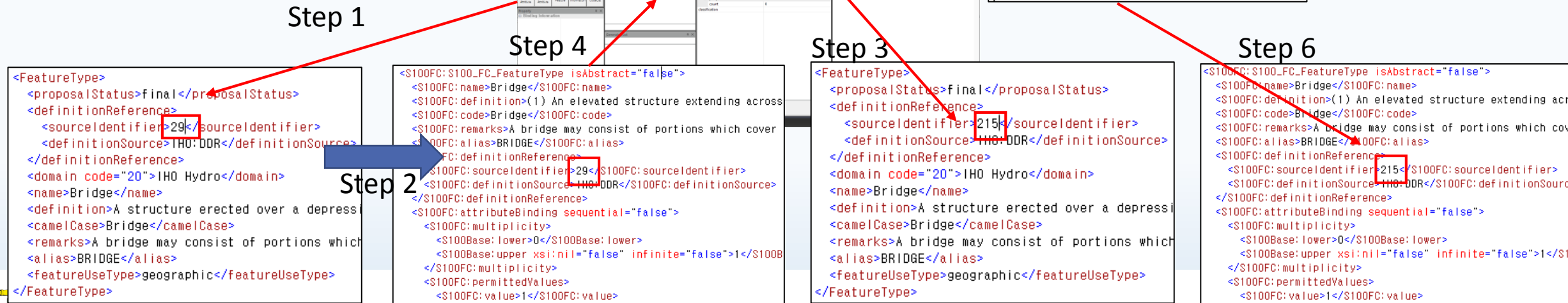
Version 1		Management Details	
Proposal Type	Addition	Submitting Org	IHO Secretariat
Successor	Bridge	Date Proposed	2020-04-23
Predecessor	--	Date Accepted	2020-04-23
Proposed Change	New feature transferred from Feature Concept Dictionary Register.		
Justification	Initial population of Data Dictionary Register.		

Version 2		Management Details	
Proposal Type	Supersession	Submitting Org	IHO Secretariat
Successor	--	Date Proposed	2020-04-28
Predecessor	Bridge	Date Accepted	2020-04-28
Proposed Change	Add distinctions.		
Justification	Initial population of Data Dictionary Register.		

Registry		DDR's key	Definition
29	Bridge	DDR's key	(1) An elevated structure extending across or ov...
215	Bridge		(1) An elevated structure extending across or ov...



<< Feature Type >>
1. Bridge has different key value.



S-100 PCB improvements information

- Bug fixed (functional issues on creating local DB)
- Help function is now available.

The screenshot shows the S-100 PCB v0.0.7559.20778 interface. The 'Help' menu is highlighted in the top menu bar. A red arrow points from the 'Help' menu to the 'User Manual' cover on the right. The interface also displays a 'Feature List' table, a 'Rule File List' table, and a 'Content' panel with details for 'LocalMagneticAnomaly[@primitive='Surface']' and 'lineInstruction'.

Feature Name	N	P	L	A
QualityOfNonBathymetricData	0	0	0	0
DataCoverage	1	0	0	0
NavigationalSystemOfMarks	0	0	1	0
LocalDirectionOfBuoyage	0	2	2	0
QualityOfBathymetricData	0	0	0	0
SoundingDatum	1	0	0	0
VerticalDatumOfData	1	0	0	0
QualityOfSurvey	0	0	0	0
UpdateInformation	0	0	0	0
MagneticVariation	0	3	1	0
LocalMagneticAnomaly	0	4	3	0
Coastline	0	0	4	X
LandArea	0	1	1	1
IslandGroup	0	X	X	X
LandElevation	0	1	1	X
River	0	0	2	1
Rapids	1	0	1	1
Waterfall	1	0	2	X
Lake	0	0	1	1
LandRegion	0	1	0	1
Vegetation	0	2	3	2
IceArea	0	0	1	2
SlopingGround	1	1	2	2

File Name	Feature Name	N
LocalMagneticAnomaly_COMMON	LocalMagneticAnomaly	0
LocalMagneticAnomaly_PLAIN_BOI	LocalMagneticAnomaly	0
LocalMagneticAnomaly_SYMBOLIZ	LocalMagneticAnomaly	0

Content

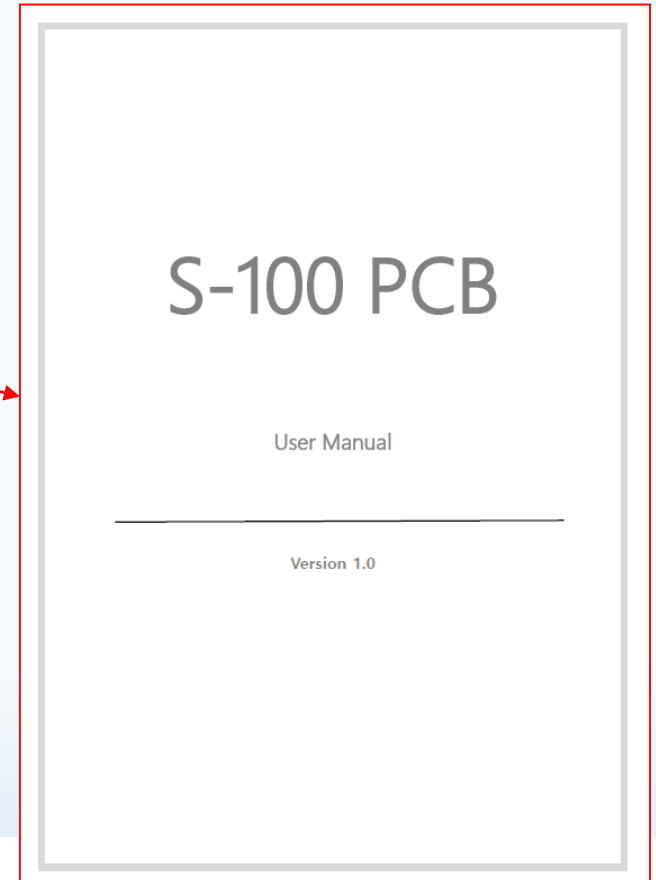
LocalMagneticAnomaly[@primitive='Surface']
Modify Delete

pointInstruction
Modify Delete

DisplayPlane : UNDERRADAR
DrawingPriority : 12
ViewingGroup : 31080
Symbol : LOCMAG51
placementMode : VisibleParts

lineInstruction
Modify Delete

DisplayPlane : UNDERRADAR
DrawingPriority : 12
ViewingGroup : 31080
call-template : simpleLineStyle
style : dash
width : 0.32
colour : CHGRD



FCB/PCB Update

S-100 Standard Toolkit

Add new software "Symbol Builder"

Version Track

Release

Feature Catalogue Builder Update

Portrayal Catalogue Builder Update

Release

DCEG Composer Installed

Development

Interoperability Catalogue Builder New

Development

Exchange Set Creator New

Development

Catalogue to Document New

Release

Symbol editor New

Development

Line Style editor New

START

Feature Catalogue Builder Update

Portrayal Catalogue Builder Update

- Add pop-up phrase (It couldn't get the <data type> because there was no data in the Data Dictionary Register.)

Version 2.2.1.0
- Improved to update local FCD DB in registry 3 or registry 2.

Version 2.2.0.0
- Registry version 3.1 DDR applied

Version 2.1.0.0

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Version Track	FCB Update information	Installed version : 2.2.5.0
Version 2.2.6.0 - Add local DB selection function		2020-07-03 11:18:34
Version 2.2.5.0 - Fixed domain selection error in the binding list.		2020-06-25 03:30:16
Version 2.2.4.0 - Fixed save bug		2020-06-19 01:04:58
Version 2.2.3.0 - Modifying a login bug and add DB key value to feature catalogue.		2020-06-08 09:15:53
Version 2.2.2.0 - Add pop-up phrase (It couldn't get the <data type> because there was no data in the Data Dictionary Register.)		2020-05-09 12:18:12
Version 2.2.1.0 - Improved to update local FCD DB in registry 3 or registry 2.		2020-05-08 02:56:32
Version 2.2.0.0 - Registry version 3.1 DDR applied		2020-05-07 11:28:39
Version 2.1.0.0		2019-11-19 03:35:56

Version Track	PCB Update information	Installed version : 0.0.7496.28810
Version 0.0.7496.28811 - Local DB creation bug was fixed.		2020-07-10 04:26:21
Version 0.0.7495.21778 - Help function fixed.		2020-07-10 03:01:58
Version 0.0.7403.38333 - Local DB update function improvement		2020-04-08 08:17:54
Version 0.0.7262.33521		2019-11-19 06:42:12



Conclusion

- **S-100 FCB improvements :**
 - Using Definition Reference for version tracking of your FC
 - Version management is available by utilizing updated S-100 FCB
- **S-100 PCB improvements :**
 - Functional issues are fixed
 - help function available.

