

S-101 ENC Project Team

S-101 Feature Catalogue

Presented by KHOA



Overview

- **An S-100 based feature catalogue**
 - presents the abstraction of reality represented in one or more sets of geographic data as a defined classification of phenomena
 - The basic level of classification in the feature catalogue is the feature type
 - A feature catalogue shall be available in electronic form (for example XML)
 - for any set of geographic data that contains features.



Overview

- How to create the S-101 FC

S-101 DCEG

S-100 FCB

S-101 FC

8.16 Floating dock

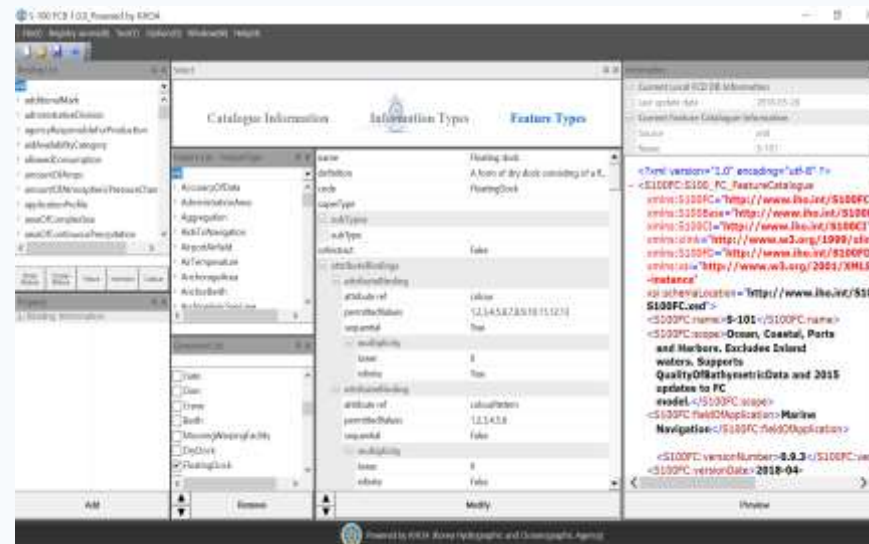
ISO Definition: FLOATING DOCK. A form of dry dock consisting of a flat sections which can be partly submerged by controlled flooding to receive a vessel the water so that the vessel's bottom can be exposed. (IHO Dictionary – S-32)

S-101 GeoFeature: Floating dock (FLODOC)

Primitives: Point, Curve, Surface

Real World **Paper Chart Symbol** **ENCODING**

S-101 Attribute	S-57 Acronym	Allowable Encoding Value	Type	Multiplicity
Colour	(COLOUR)	1 : white 2 : black 3 : red 4 : green 5 : blue 6 : yellow 7 : grey 8 : brown 9 : amber 10 : violet 11 : orange 12 : magenta 13 : pink	EN	1..* (ordered)
Colour pattern	(COLPAT)	1 : horizontal stripes 2 : vertical stripes 3 : diagonal stripes 4 : squared 5 : stripes (direction unknown) 6 : border stripe	EN	0..1
Condition	(CONDITN)	1 : under construction 2 : ruined 3 : planned construction	EN	0..1
Depth range minimum value	(DRVAL1)		RE	0..1
Feature name			C	0..*
Display name			(S) BO	0..1
Language		ISO 639-3	(S) TE	0..1
Name	(NAME)		(S) TE	1..1
Fixed date range			C	0..1
Date end	(DATEND)	ISO 8601:2004	(S) TD	0..1
Date start	(DATSTA)	ISO 8601:2004	(S) TD	0..1
Horizontal clearance length			RE	0..1
Horizontal clearance width			RE	0..1



```
<?xml version="1.0" encoding="utf-8"?>
<S100FC:S100_FC_FeatureCatalogue xmlns:S100FC="http://www.iho.int/S100FC"
  xmlns:S100Base="http://www.iho.int/S100Base" xmlns:S100CI="
  http://www.iho.int/S100CI" xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:S100FD
  ="http://www.iho.int/S100FD" xmlns:xsi="
  http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="
  http://www.iho.int/S100FC S100FC.xsd">
  <S100FC:name>S-101</S100FC:name>
  <S100FC:scope>Ocean, Coastal, Ports and Harbors. Excludes Inland waters.
  Supports QualityOfBathymetricData and 2015 updates to FC model.</S100FC:scope>
  <S100FC:fieldOfApplication>Marine Navigation</S100FC:fieldOfApplication>
  <S100FC:versionNumber>0.9.3</S100FC:versionNumber>
  <S100FC:versionDate>2018-04-05</S100FC:versionDate>
  <S100FC:producer>
    <S100CI:individualName>BAEK Yong</S100CI:individualName>
    <S100CI:organisationName>International Hydrographic Organization</
    S100CI:organisationName>
    <S100CI:positionName>S-100 Working Group</S100CI:positionName>
    <S100CI:role>pointOfContact</S100CI:role>
  </S100FC:producer>
  <S100FC:S100_FC_SimpleAttributes>
    <S100FC:S100_FC_SimpleAttribute>
      <S100FC:name>Application Profile</S100FC:name>
      <S100FC:definition>name of an application profile that can be used with the
      online resource (ISO 19115)</S100FC:definition>
      <S100FC:code>applicationProfile</S100FC:code>
      <S100FC:alias>APPPRF</S100FC:alias>
      <S100FC:valueType>text</S100FC:valueType>
    </S100FC:S100_FC_SimpleAttribute>
    <S100FC:S100_FC_SimpleAttribute>
      <S100FC:name>Beacon shape</S100FC:name>
```



Organisation Hydrographique Internationale

S-101PT, Monaco, 19 – 21 June 2018

Progress of S-101 FC

- KHOA FCB introduced to the TSMAD27 (2013)
- The baseline of S-101 FC was drafted (2014)
 - Which was used to draft the baseline of S-101 Portrayal Catalogue
- The S-101 FC was improved partially and used by S-100 test bed
 - Creation of S-101 PC
 - S-57 to S-101 Converter
 - S-101 Viewer
- S-101 FC was updated in 2018
 - Based on the S-101 DCEG introduced in the S-100WG3
 - Using the latest version of S-100 FCB



Current status

- Updated of S-101 FC
 - Equivalent with the S101_Data Classification and Encoding Guide_0.0.3_Working_20180302
 - All Associations was included
 - Additional information / Aids to navigation association
 - ASL aggregation / Bridge aggregation / Caution area association
 - Deep Water route aggregation / Fairway aggregation
 - Fairway auxiliary / Island aggregation / Pilotage district association
 - Range system aggregation / Spatial association / Structure/equipment
 - Text association / Traffic Separation Scheme aggregation
 - Two-way route aggregation / Updated information



Future plan

- Update of S-101 DCEG
 - If the S-101 DCEG was finalized in the S-101 PT meeting, the S-101 FC will be updated based on the final version.
 - Super type like Geo features, AtoN equipment, AtoN structure

