

S-101 ENC Project Team

# Report on the S-100 FCB

Presented by KHOA



# Overview

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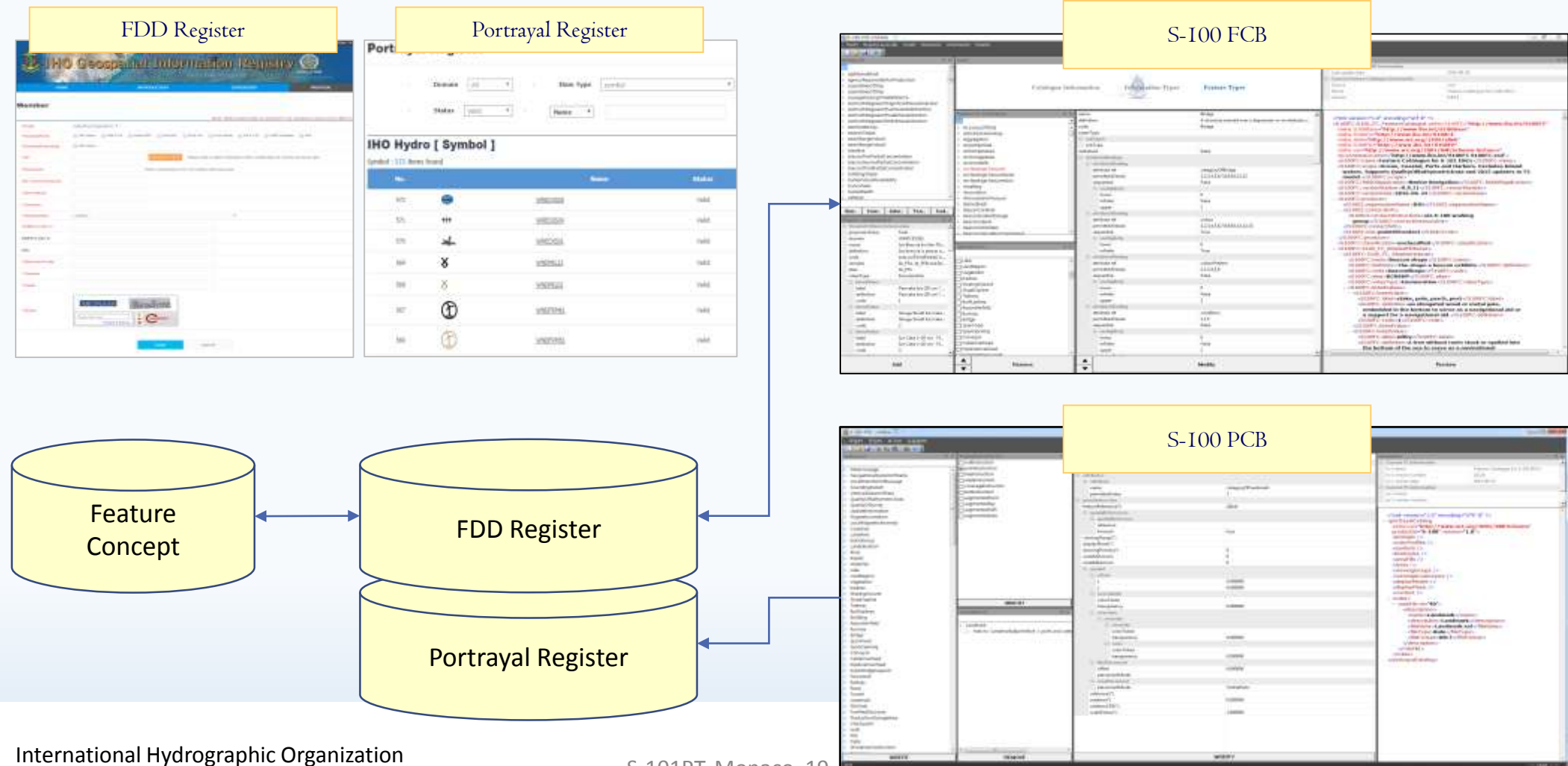
- **S-100 FCB**

- KHOA has developed the S-100 FCB (Feature Catalogue Builder) to support the S-100/S-10X Testbed
- and drafted the baseline of S-101 FC (Feature Catalogue)
- KHOA updated the S-100 FCB on topics which was the discussion results of S-100WG/TSM
- and several errors identified in the review process of S-100 FCB



# Overview

- S-100 infra and FCB



# Update of S-100 FCB

- S-100 FCB

S-100 FCB 1.0.0\_Powered by KHOA

File(F) Registry access(R) Tool(T) Option(O) Window(W) Help(H)

Binding List Select

AdditionalMark  
administrativeDivision  
agencyResponsibleForProduction  
aidAvailabilityCategory  
allowedConsumption  
amountOfAmps  
amountOfAtmosphericPressureChan  
applicationProfile  
areaOfComplexSea  
areaOfContinuousPrecipitation

Simple Attribute Complex Attribute Feature Information CodeList

Property Binding Information

Catalogue Information Information Types Feature Types

Feature List - FeatureType

name	Floating dock
definition	A form of dry dock consisting of a fl...
code	FloatingDock
superType	
subTypes	
subType	
isAbstract	False
attributeBindings	
attributeBinding	
attribute ref	colour
permittedValues	1,2,3,4,5,6,7,8,9,10,11,12,13
sequential	True
multiplicity	
lower	0
infinite	True
attributeBinding	
attribute ref	colourPattern
permittedValues	1,2,3,4,5,6
sequential	False
multiplicity	
lower	0
infinite	False

Generated List

☐ Gate  
☐ Dam  
☐ Crane  
☐ Berth  
☐ MooringWarpingFacility  
☐ DryDock  
☒ FloatingDock

Add Remove Modify

Information

Current Local FCD DB Information

Last update date 2018-05-28

Current Feature Catalogue Information

Source xml

Name S-101

```
<?xml version="1.0" encoding="utf-8" ?>
<S100FC:S100_FC_FeatureCatalogue
  xmlns:S100FC="http://www.iho.int/S100FC"
  xmlns:S100Base="http://www.iho.int/S100B
  xmlns:S100CI="http://www.iho.int/S100CI"
  xmlns:xlink="http://www.w3.org/1999/xlinl
  xmlns:S100FD="http://www.iho.int/S100FD"
  xmlns:xsi="http://www.w3.org/2001/XMLS
  -instance"
  xsi:schemaLocation="http://www.iho.int/S10
  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:ver
  <S100FC:versionDate>2018-04-
```

Preview

Powered by KHOA (Korea Hydrographic and Oceanographic Agency)



# Update of S-100 FCB

- Major updates
  - Feature / Information Associations

**Aids to navigation association:** IHO Definition: A feature association for the binding between navigational aids and the traffic systems (such as routeing measures) that they define.

Remarks:

- No remarks.

Role Type	Role	Associated With	Multiplicity
Association	Consists of	Beacon Cardinal, Beacon Isolated Danger, Beacon Lateral, Beacon Safe Water, Beacon Special Purpose/General, Bridge, Building, Buoy Cardinal, Buoy Emergency Wreck Marking, Buoy Installation, Buoy Isolated Danger, Buoy Lateral, Buoy Safe Water, Buoy Special Purpose/General, Crane, Conveyor, Daymark, Fishing Facility, Floating Dock, Fortified Structure, Hulk, Landmark, Light Float, Light Vessel, Mooring/Warping Facility, Offshore Platform, Pile, Pipeline Overhead, Pontoon, Pylon/Bridge Support, Shoreline Construction, Silo/Tank, Span Fixed, Span Opening, Wind Turbine	1,*
	Component of	Archipelagic Sea Lane, Bridge, Deep Water Route, Fairway System, Traffic Separation Scheme, Two-Way Route	0,1





# Update of S-100 FCB

- Major updates
  - Feature / Information Associations

<b>Structure/equipment:</b> <u>IHO Definition:</u> A feature association for the binding between a navigation aid equipment feature and the structure that supports it.  <u>Remarks:</u> <ul style="list-style-type: none"><li>• Valid structure and equipment features are listed in clause X.X.</li></ul>			
Role Type	Role	Associated With	Multiplicity
Composition	Supports	Daymark, Fog Signal, Light All Around, Light Fog Detector, Light Sectored, Physical AIS Aid to Navigation, Radar Reflector, Radar Transponder Beacon, Retroreflector, Signal Station Traffic, Signal Station Warning	1,*
	Supported by	Beacon Cardinal, Beacon Isolated Danger, Beacon Lateral, Beacon Safe Water, Beacon Special Purpose/General, Bridge, Building, Buoy Cardinal, Buoy Emergency Wreck Marking, Buoy Installation, Buoy Isolated Danger, Buoy Lateral, Buoy Safe Water, Buoy Special Purpose/General, Crane, Conveyor, Daymark, Fishing Facility, Floating Dock, Fortified Structure, Hulk, Landmark, Light Float, Light Vessel, Landmark, Mooring/Warping Facility, offshore Platform, Pile, Pipeline Overhead, Pontoon, Pylon/Bridge Support, Shoreline Construction, Silo/Tank, Span Fixed, Span Opening, Wind Turbine	0,1



# Update of S-100 FCB

- Major updates
  - Feature / Information Associations

Association Manager

Info to Info | Info to Feature | Feature to Feature

Feature Association

- deepWaterRouteAggregation
- districtBoardingLocations
- fairwayAggregation
- fairwayAuxiliary
- fairwayZoneAggregation
- IslandAggregation**
- plotageDistrictAssociation
- rangeSystemAggregation
- serviceProvisionArea
- structureEquipment
- textAssociation
- trafficSeparationSchemeAggregation
- twoWayRouteAggregation
- updatedInformation

Role

Binding Value

☐ multiplicity

lower	
infinite	False
upper	

Feature Type List

Up Down

Delete

Remove Add

Add to List

Binding

Export Import Cancel

Association Manager

Info to Info | Info to Feature | Feature to Feature

Feature Association

- IslandAggregation

Role

constitutesOf

Binding Value

☐ multiplicity

lower	2
infinite	False
upper	

Feature Type List

Up Down

Delete

Remove Add

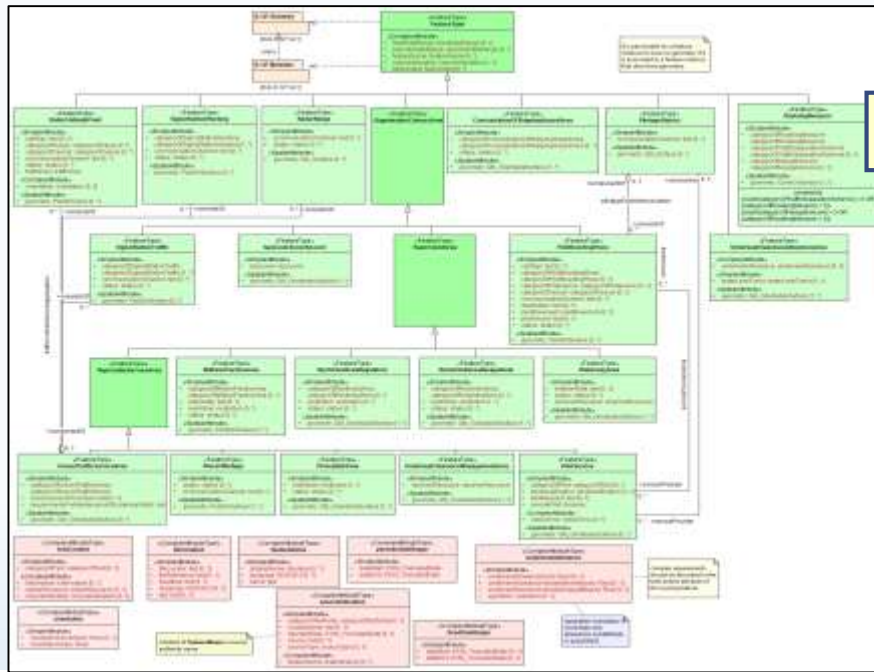
Add to List

Binding

Export Import Cancel

# Future plan

- Function to create FC from the Application schema
  - Application schema is created by UML modeling tool like EA
  - EA can extract XML schema for the application schema
  - The function to link between application schema and FC



**S-10X FC**

