

S-100TSM5-4.3

S-100 Registry Improvement

18th – 20 Sep 2017
KHOA

Introduction

- This paper reports on S-100 Registry improvement and future plans following the request of the 2nd S-100 WG meeting in Genoa, Italy.

Introduction

- KHOA developed a new interface and database of two registers (FCD, Portrayal) for S-100 GI Registry, last year.
- NEW requirement
 - Concept Register
 - Improve approval process
 - Other registers (Producer code, Product specification)
 - Test Bed
 - Feedbacks and lessons learn from the registry operation

NEW GI registry

2nd S-100 GI Registry

1. FCD Register
2. Portrayal Register

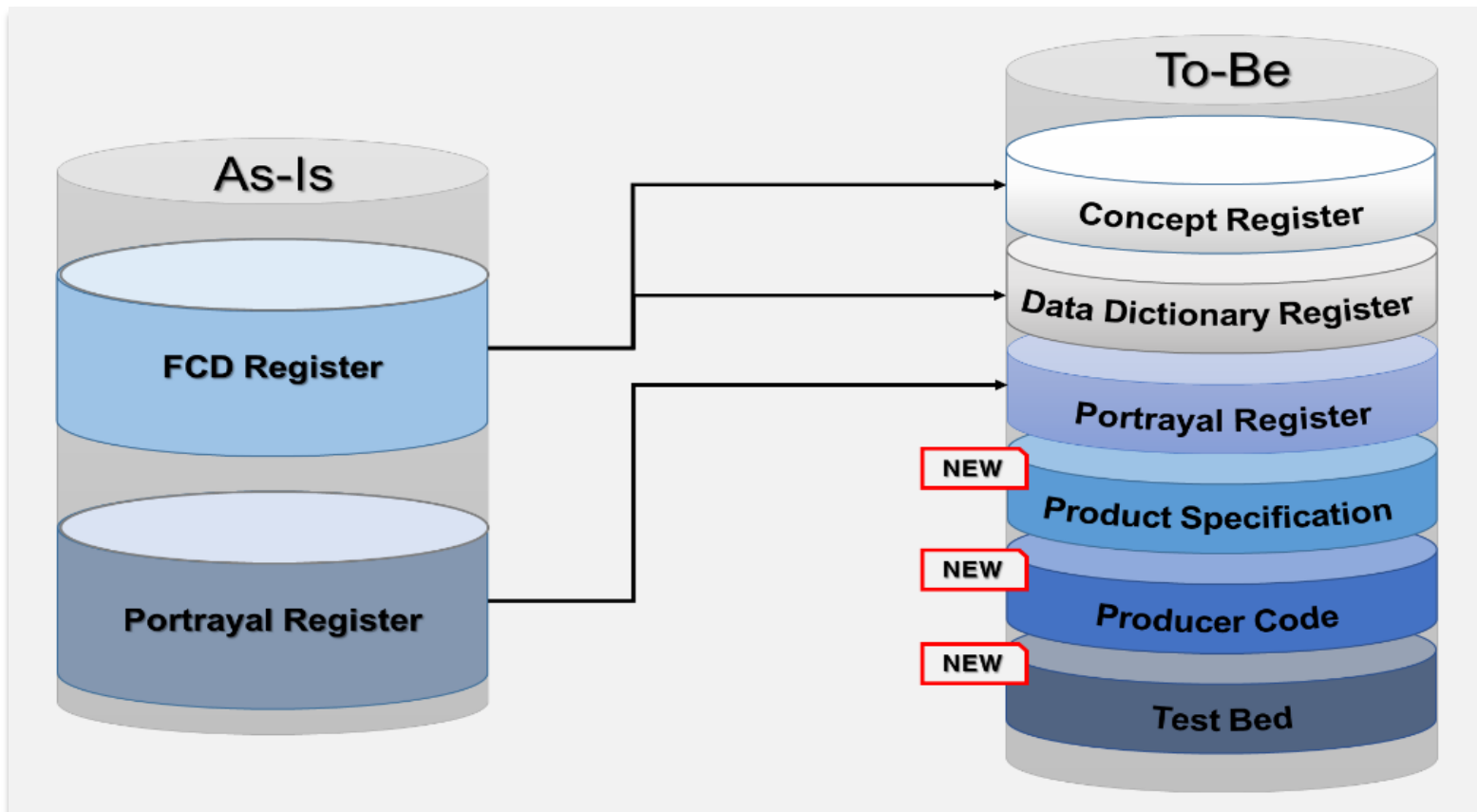


3rd S-100 GI Registry

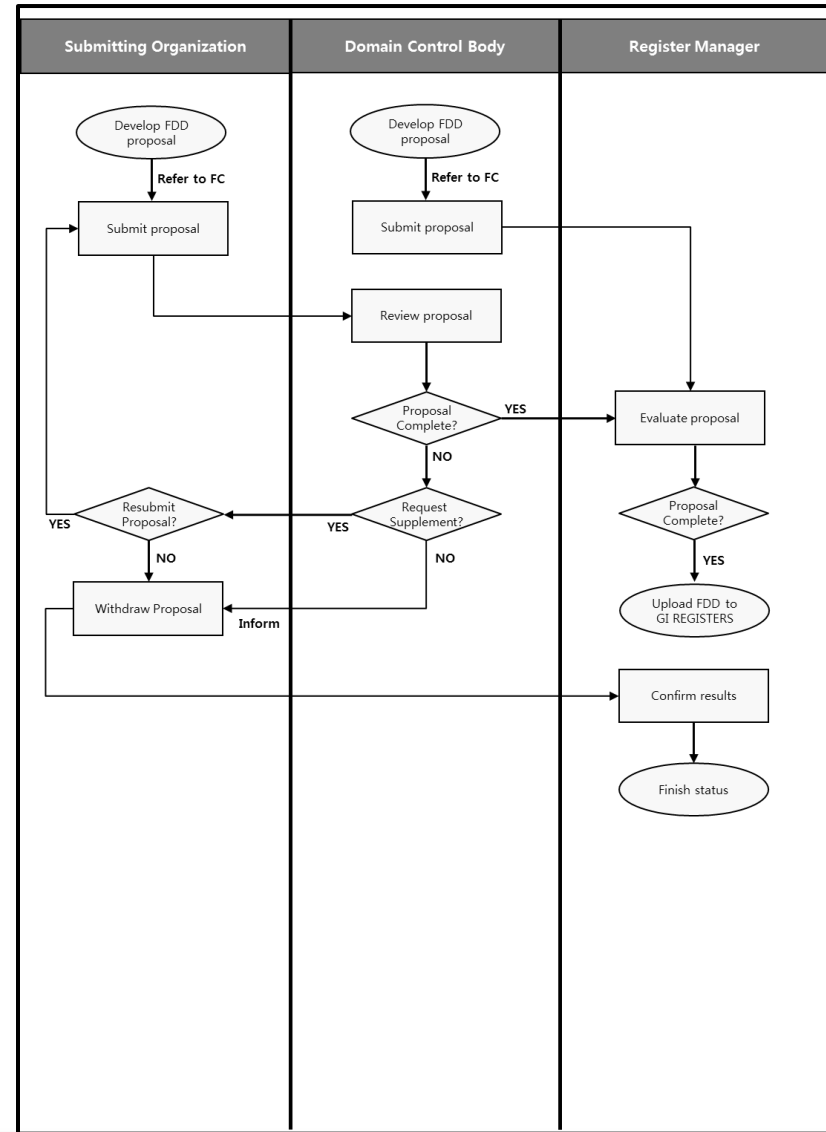
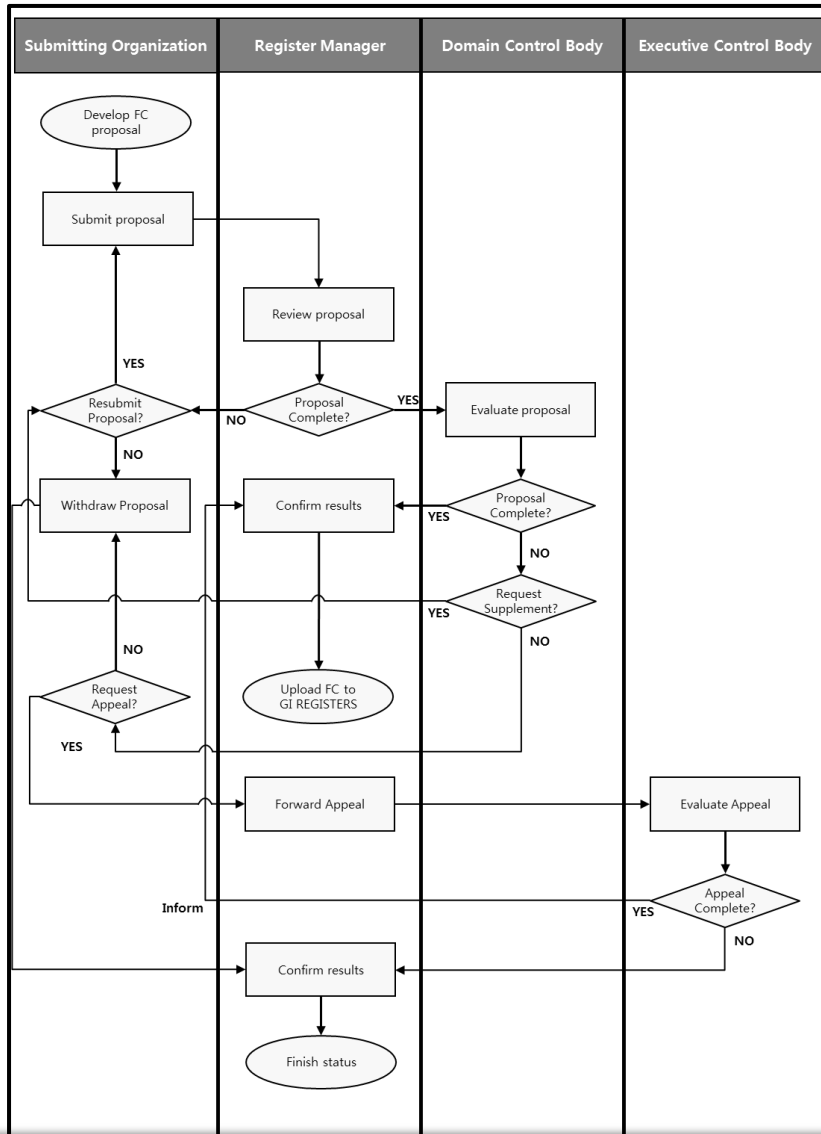
1. Concept Register
2. Data Dic. Register
3. Portrayal Register
4. Product Specification
5. Producer Code
6. Test Bed

The screenshot displays the IHO Geospatial Information Registry website. The header includes the IHO logo and navigation links like HOME, HELP & GUIDELINE, and GI REGISTERS. The main content area features a 'Welcome to the S-100 Geospatial Information Registry (Version 2.1)' message. A 'Description' box explains that the registry is owned by the International Hydrographic Organization (IHO) and contains registers of hydrographic information. A 'News' section at the bottom highlights the launch of the 3rd Generation of the GI registry, mentioning the introduction of a Concept level and the availability of guidance documents.

proposed S-100 Database



New proposal process of Concept, Data Dic.



Registry improvement

■ **Concept Register**

Present FCD register has non-harmonized data issue which various overlapped items have been consistently proposed in different domains even if their name, definition and camelcase is the same. CR has been introduced which common matters (name, definition, camelcase, etc.) are registered in concept step to fix this issue.

■ **Data Dictionary Register**

In DD register, concepts which were registered in CR could be registered into registry database by designating its item type (ex., feature or attribute etc.) and submitting additional information.

Registry improvement

■ Portrayal Register

Presentation colour of symbols has been improved by CSS (Cascading Style Sheets) file replacement and this improvement had a validation check through test registry server. Preview image error of BLOB type was fixed using images from 7cs.

■ Product Specification Register

Product specification register has been introduced to manage various products based on S-10X and share product specification files for related S-100 systems.

Registry improvement

- **Producer Code Register**

The producer code service will be developed in the GI registry as present IHO data producer codes website.

- **Test Bed**

Test bed webpage will be developed in order to share the test catalogue and test data sets for developing Product Specifications.

New interface of S-100 registry (main)

HyunSoo CHOI Level: Submitting Organization Domain: IHO, IALA

Log out | Join

Welcome to the S-100 Geospatial Information Registry (Version 2.1)

This registry is owned by the International Hydrographic Organization (IHO) is managed by the Secretariat of the IHO. The site contains many registers of hydrographic information together with registers of supplementary information owned by specialist domain experts. Each register type is further sub divided into domains e.g. hydrographic, nautical publications, ice, inland ENC etc. The administration of this registry conforms to IHO Publication S-99 (Operational Procedures for the Organization and Management of the S-100 Geospatial Information Registry) a copy of which can be downloaded [here](#).

The information contained in the Registry can be freely accessed, however items can only be added or changed by the managers of approved Submitting Organizations. Application to become a Submitting Organization can be made by fulfilling the requirements of the prerequisite form available [here](#). Please note: It is not necessary to be a submitting organization in order to request new (S-62) Data Producer codes. Requests for new Data Producer codes, or changes to existing codes should be sent to the following email address (ads@iho.int).

Once accepted as a submitting organization you are free to submit proposals to any register. The Registry interface undergoes periodic improvements and any difficulties using this site should be reported to the [Registry Manager](#).

Description

- Displaying authority of each system (current HO Authority)
- Fill out form (vary first draft (on the work))
- If click, display filled or filling out list show up**
- Update form which is rejected or fillna out
- Save your application that work on it
- Submission application

TOP ▲

Link site

- KHOA
- IHO
- WMO
- IALA
- IOC

News

Recent

IHO lunched 3rd Generation of the GI registry introduced a
IHO lunched 3rd Generation of the GI registry introduced a Concept level IHO lunched 3rd Generation of the GI registry introduced a Concept level

The guidance of "How to use the registry" is now available here.

IHO lunched 3rd Generation of the GI registry introduced a Concept...

The guidance of "How to use the registry" is now available here.

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KHOA Acknowledgements

New interface of S-100 registry (Repository)



IHO Geospatial Information Registry

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S-100 GI Registry

HOME

HELP & GUIDANCE ▾

- GUIDANCE
- REPOSITORY

GI REGISTERS ▶

PROPOSAL ▶

TEST BED

How to use S-100 Infrastructure
 The Geospatial Information Register consists of five registers, ...

The bellow is a guidance of "how to use the registry" with various of standards.
 Please contact the registry manager(tsso@iho.int) if you need any further assistance.


Name	Version	Uploader	Date Updated
GI Registry Guidance	1.0	KHOA	18 th June 2017
Feature Catalogue Builder Guidance	1.2	IHO	12 th June 2016
Portrayal Catalogue Builder Guidance	2.4	IHO	06 th May2016
How to use S-100 FC(XML)	2.4	IHO	20 th Feb 2016
How to use S-100 PC(XML)	2.1	IHO	08 th Feb 2016
S-57 Standards	3.0	IHO	20 th Dec 2015
S-57 Standards	3.0	IHO	20 th June 2015
S-200 Standards(Draft)	1.4	IALA	08 th Jan 2015
About S-100 Standards (Video Clip)	2.0	KHOA	16 th Dec 2014
...			
GI Registry Guidance for ADMIN	2.1	KHOA	18 th May 2014

< 1 ... 4 5 6 ... 9 >



Search a document by name

Q

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 KHOA Acknowledgements

New interface of S-100 registry (Concept Register)


IHO Geospatial Information Registry

S-100 GI Register

HOME

HELP & GUIDELINE ▶

GI REGISTERS ▼

- Feature Concept
- Feature Data Dictionary
- Portrayal
- Product Specification
- Producer Code

PROPOSAL ▶

TEST BED

Feature Concept Register


Feature Concept is a definition of object, information or phenomena of nature without any relation to other concept.

Search a feature concept by name


Concept Details	
Name	Clouds
Alias	CLOUDS
CamelCase	Clouds
Definition	A hydrometeor consisting of minute particles of liquid water or ice, or of both, suspended in the free air and usually not touching the ground. It may also include larger particles of liquid water or ice and non-aqueous liquid or solid particles such as those present in fumes, smoke and dust.
Reference	Unspecified
Definition Source	Unspecified
Similarity to Source	Unspecified
Remarks	Clouds may be coded in addition to Weather to indicate height

Management Details	
Proposal Type	Addition
Submitting Organization	IALA
Successor	-
Predecessor	-
Date Proposed	18 th June 2017
Date Accepted	20 th June 2017
Proposed Change	New feature following S-201
Justification	Add feature to capture environmental observation equipment.

New interface of S-100 registry (Data Dictionary Register)


IHO Geospatial Information Registry

Log-in
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S-100 GI Registry

HOME

HELP & GUIDANCE ▶

GI REGISTERS ▼

- Feature Concept
- Feature Data Dictionary
- Portrayal
- Product Specification
- Producer Code

PROPOSAL ▶

TEST BED

Feature Data Dictionary Register

Feature Data Dictionary is a repository of information about data such as meaning, relationships to other data of specific domain.

Domain : All ▼

Status : Valid ▼

Item type : Simple ▼

Q

[Code listed Value] Dictionary Details	
Domain	WMO Weather
Name	Calm Wind
Alias	knots
CamelCase	calmWind
Definition	Absence of air motion or wind with a speed of less than 1 knot (Beaufort scale wind force 0)
Data Type	Codelist Value
Reference	C0030
Definition Source	Unspecified
Similarity to Source	Unspecified
Remarks	Unspecified
INT1	C-12.4 ▼
S4	4.1.1 ▼

Management Details		
Proposal Type	Supersession	
Submitting Organization	WMO	
Related Concept	-	
Related Attributes	Codelist Value Number	Associated Simple Attributes
	2	Speed Units
	9	Sector Limit
	4	Tidal Stream Value
	2	Vessel Speed Limit
5	Surface Gust Speed	
Successor	-	
Predecessor	-	
Date Proposed	02 nd May 2017	
Date Accepted	13 th May 2017	
Proposed Change	Changing code list number. Will need to change it again to make it "13" after all other values have been renumbered.	
Justification	Beaufort force numbers will match up with code list number.	

Back to list

New interface of S-100 registry (Portrayal register)



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S-100 GI Registry












- HOME
- HELP & GUIDANCE ▶
- GI REGISTERS ▼
 - Feature Concept
 - Feature Data Dictionary
 - Portrayal**
 - Product Specification
 - Producer Code
- PROPOSAL ▶
- TEST BED

Portrayal Register

Portrayal register is a repository of symbols, lines, area and font necessary to portrayal S-100 product features.

Domain : All ▼
Status : Valid ▼
Item type : Symbol ▼

Name 🔍

Preview	Name	Definition	Status	Date accepted
	BCNLAT21	A distinctive structure...	Valid	18 th May 2017
	BOYCAR03	The implements used...	Valid	12 th June 2016
	BOYSPP15	That part of a river...	Valid	06 th Jan 2016
	BUIREL13	A distinctive structure...	Valid	08 th Jan 2015
	CHINFO06	A fixed artificial navigation...	Valid	20 th Feb 2015
	TOPMAR28	A floating object moored...	Valid	21 th Feb 2016
	TWRTP53	A fairway system...	Valid	08 th Jan 2016
	TOWERS02	An opening component...	Valid	16 th June 2014
	SOUNDSC2	The text placement...	Valid	29 th May 2012
	TIDCUR03	An area within which...	Valid	30 th Dec 2016
	UWTROC03	A scheme which aims...	Valid	05 th Dec 2015

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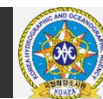
New interface of S-100 registry (Product Spec. register)



IHO Geospatial Information Registry

Log-out

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My Info.



Log-in

Name: HyunSoo CHOI
Level: Submitting
Organization
Domain: IHO, IALA, ...

Detail

S-100 GI Registry

HOME

HELP & GUIDANCE

GI REGISTERS

- Feature Concept
- Feature Data Dictionary
- Portrayal
- Product Specification**
- Producer Code

PROPOSAL

TEST BED

Product Specification Register

Product Specification Register is a repository of S-100 based product specification including metadata, feature catalogue, portrayal catalogue and Data Clarification and Encoding Guide (DCEG).

Domain :

ID	Version	Name	Domain	Status	Date accepted
S-101	1.2	ENC	IHO	Ready	18 th May 2017
S-102	2.0	Bathymetric surface	IHO	Ready	12 th June 2016
S-104	1.0	...	IHO	Ready	06 th Jan 2016
S-111	1.1	...	IALA	Ready	08 th Jan 2015
S-114	1.0	...	IALA	Test	20 th Feb 2015
S-128	2.4	...	WMO	Test	21 th Feb 2016

Management Details

Version	1.2	<input type="button" value="Down"/>
Version Date	06 th Jan 2016	
S-100 Version	3.0.0	
Status	Approved	
Feature Catalogue	0.8.11	<input type="button" value="Down"/>
Portrayal Catalogue	0.8.12	<input type="button" value="Down"/>

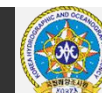
New interface of S-100 registry (Test Bed)



IHO Geospatial Information Registry

Log-in

Join



My Info.



Log-in

Name: HyunSoo CHOI

Level: Submitting

Organization

Domain: IHO, IALA, ... [Detail](#)

S-100 GI Register

HOME

HELP & GUIDELINE

GI REGISTERS

- Feature Concept
- Feature Data Dictionary
- Portrayal
- Product Specification
- Producer Code

PROPOSAL

TEST BED

Test Bed

Welcome to the S-100 Test Bed.

Purpose of the Test Bed are as below.

1. Provide a framework and infrastructure for Product Specification Developers
2. Receive feedback by relevant stakeholders and provide opportunity for preparation on their system improvement..
3. Share outcomes of the test bed to meet IHO M-3 2/2007 resolution

ID	Title	Version	Status	Organization
S-101	ENCs	0.8.7	Ready	S-100WG
Details				
Draft Version	1.2	Down		
Version Date	06 th Jan 2016			
S-100 Version	3.0.0			
Status	Ready / Testing / Completed/Approved (4개 중 1개 선택)			
Feature Catalogue	0.8.11	Down		
Portrayal Catalogue	0.8.12	Upload	Down	
Date Started				
Date End (Scheduled)				
Test Scenario	<i>Enter text</i>	Upload	<input type="text"/>	+
Test Data Sets	<i>Enter text</i>	Upload	<input type="text"/>	+
Test Results	<i>Enter text</i>	Upload	<input type="text"/>	+

New interface of S-100 registry

The screenshot displays the IHO Geospatial Information Registry Administrator interface. A modal window titled 'Structure Object' is open, showing details for a feature concept named 'Clouds'. The interface includes a navigation menu on the left, a top header with the user's name (HyunSoo CHOI) and organization (IHO, IALA), and a main content area with a sidebar and a list of feature concepts.

Structure Object Modal Window:

Concept Details	
Name	Clouds
Alias	CLOUDS
CamelCase	Clouds
Definition	A hydrometer consisting of minute particles of liquid water or ice, or of both, suspended in the free air and usually not touching the ground. It may also include larger particles of liquid water or ice and non-aqueous liquid or solid particles such as those present in fumes, smoke and dust.
Reference	Unspecified
Definition Source	Unspecified
Similarity to Source	Unspecified
Remarks	Clouds may be coded in addition to Weather to indicate height.

Concept Details		FDD Binding Contents	
Proposal Type	Addition	FeatureType	Name
Submitting Organization	IALA		Name
Successor	-		Name
Predecessor	-		Name <input type="button" value="More +"/>
Date Proposed	18 th June 2017		Name
Date Accepted	20 th June 2017	Complex Attribute	Name
Proposed Change	New feature following S-201		Name
Justification	Add feature to capture environmental observation equipment.		Name <input type="button" value="More +"/>

Discussion

- 1) Domain concept: Items (Data Dictionary and Portrayal) do not belong to each submitted domain according to Concept Register. Any items can be used in whole domain and this concept should be applied to portrayal register.
- 2) S-32 Hydrographic Dictionary: S-32 DB or website needs to be connected to concept register.
- 3) NEW registry will be made available after the test operation in early 2018.

Action Required of S-100 TSM

The S-100 TSM5 is invited to:

- a) Note the progress reported in this paper
- b) Discuss pending issues brought up in this paper.

Thank you