International Hydrographic Organization

# Summary of the Activities of the IHO Geospatial Information (GI) Registry

## HSSC11

## Cape Town, South Africa – 06-09 May 2019

## IHO Secretariat (GI Registry Manager)

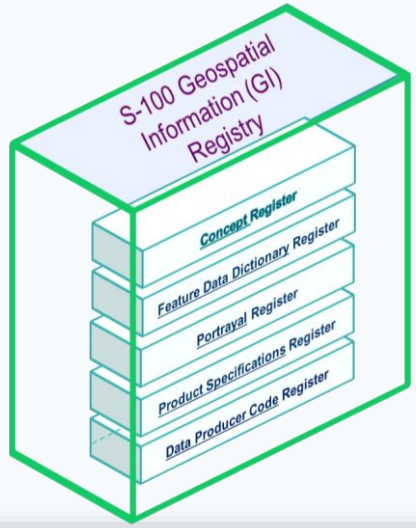
# Introduction

- **<u>IHO Geospatial Information(GI) Registry</u>** is the entire information system in which the collection of hydrographic-related Registers are located.
  - <u>Current Registers:</u> Feature Concept Dictionary; Portrayal; Metadata; Product Specification; and Data Producer Code.
  - <u>Other Components:</u> Feature Catalogue Builder (FCB); Portrayal Catalogue Builder (PCB); DCEG Builder.

**NOTE: Red text = "Beta" Registry**

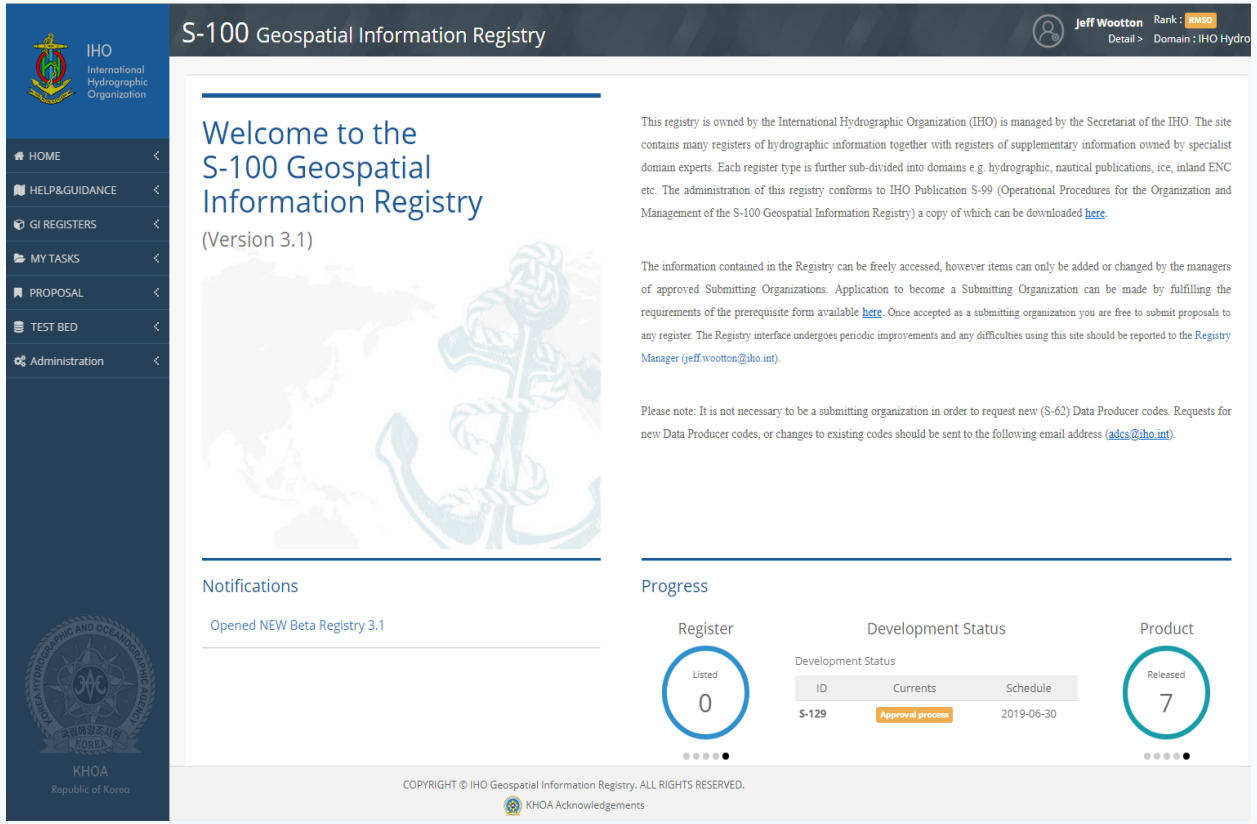
- **<u>KHOA continues to support the development of the new Registry</u>**

Korea Hydrographic and Oceanographic Agency



http://registry.iho.int/

# Summary of Activities of the IHO GI Registry



# Summary of Activities of the IHO GI Registry

- Some statistics:
  - **Total number of items** = **7758** [6371]

***FCD Register***

- Features (Geo/Meta) = **971** [860]
- Information = **29** [18]
- Simple Attributes = **1076** [908]
- Enumerates = **4612** [4237]
- Complex Attributes = **196** [154]
- Codelists = **22** [20]
- Codelist Values = **185** [174]

- **Portrayal Items** = **667** [658]

Feature Concept Dictionary Register according to S-100

| No. | Type | Valid | Superseded | Retired |
|---|---|---|---|---|
| 1 | Feature Type | 373 | 310 | 288 |
| 2 | Information Type | 28 | 1 | 0 |
| 3 | Simple Attribute Type | 637 | 281 | 158 |
| 4 | Enumerated Type | 2792 | 832 | 988 |
| 5 | Complex Attribute Type | 90 | 66 | 40 |
| 6 | Code List Type | 9 | 2 | 11 |
| 7 | Code List Value Type | 84 | 2 | 99 |

Portrayal Register

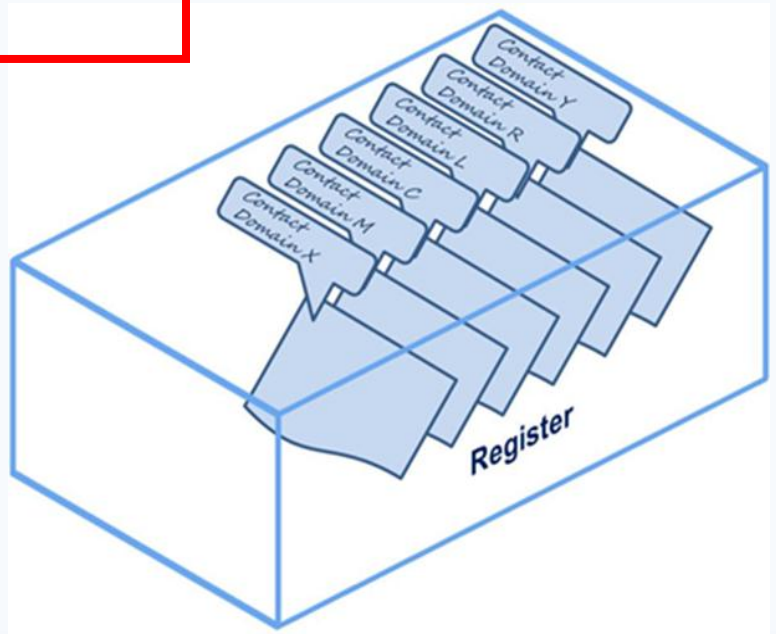
| No. | Type | Valid | Superseded | Retired |
|---|---|---|---|---|
| 1 | Symbol | 582 | 0 | 0 |
| 2 | Line Style | 55 | 0 | 0 |
| 3 | Area Fill | 26 | 0 | 0 |
| 4 | Font | 4 | 0 | 0 |

- FCD Register:
  - Valid items = **4013** [4610]
  - Superseded items = **1494** [1190]
  - Retired items = **1584** [571]

- No. of proposals Apr 18 – Apr 19 = **1127** [624]

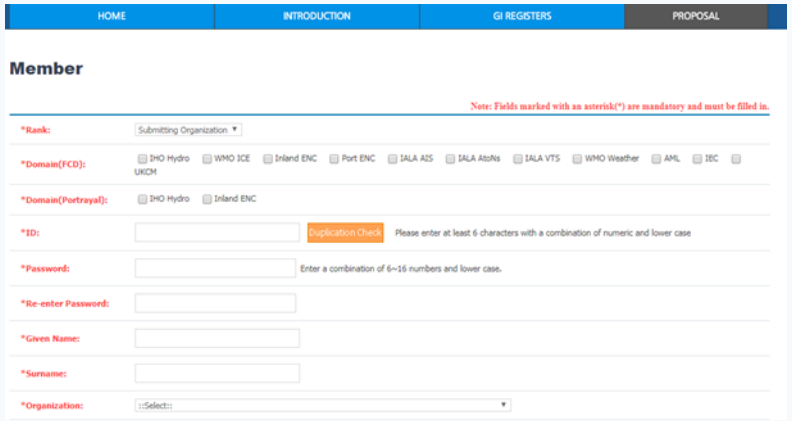
# Summary of Activities of the IHO GI Registry

- Domains (FCD Register):
  - IHO Hydrographic – (IHO Working Groups (S-100WG, NIPWG, S101PT, S-102PT, S-121PT, TWCWG, WWNWS Sub-WG) (UKCMPT)
  - Inland ENCs – (IEHG)
  - Sea Ice – (WMO)
  - Weather – (WMO)
  - IALA AtoNs – (IALA)
  - IALA VTS – (IALA)
  - IALA AIS – (IALA)
  - IEC – (IEC)
  - ~~Under Keel Clearance Management – (UKCM Project Team)~~



# Summary of Activities of the IHO GI Registry

- Submitting Organizations (FCD Register):
  - IHO, IEC, IALA, WMO, IEHG
  - S-100WG (KHOA, NOAA, SMA, Spanish HO)
  - NIPWG (BSH, UNH)
  - UKCMPT (AMSA)
  - S-121PT




- Domain Control Body (FCD Register):
  - IHO, IEC, IALA, WMO, IEHG
  - S-100WG, NIPWG

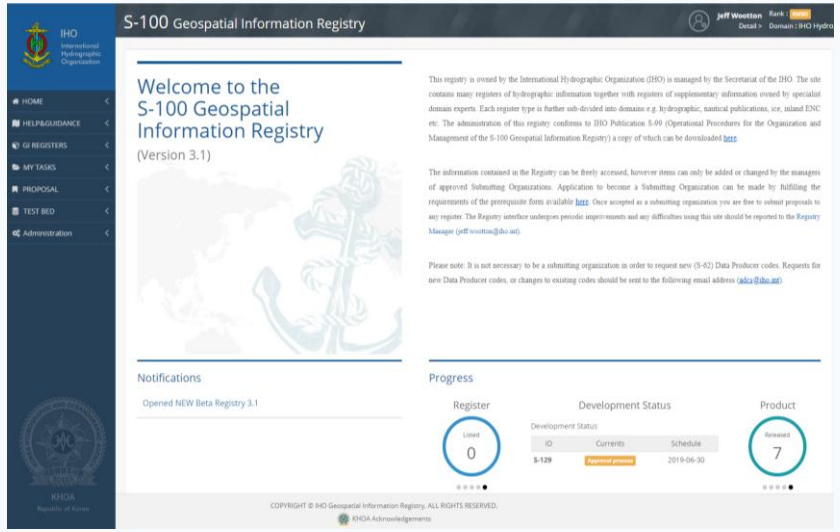
~~Executiv~~ ~~al~~ Body?

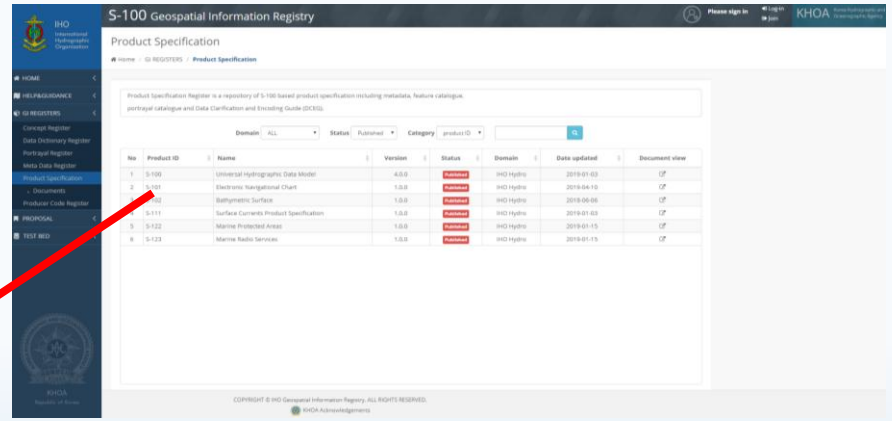
- Submitting Organizations (Portrayal Register):
  - IHO, IALA, IEHG
  - S-100WG (KHOA, NOAA, SMA, Spanish HO)
  - NIPWG (BSH), TWCWG

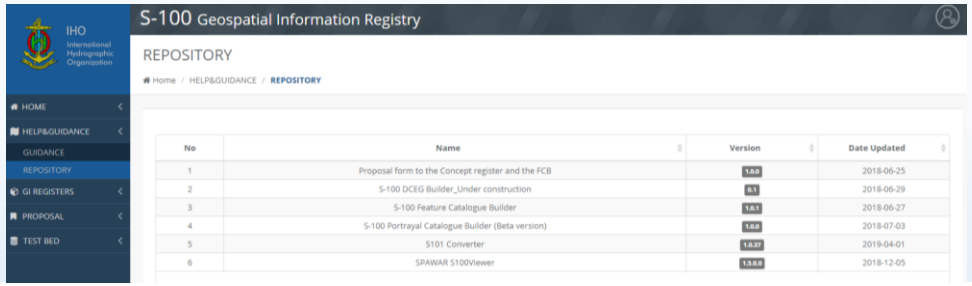
- Domain Control Body (Portrayal):
  - IHO, IEHG
  - S-100WG, NIPWG

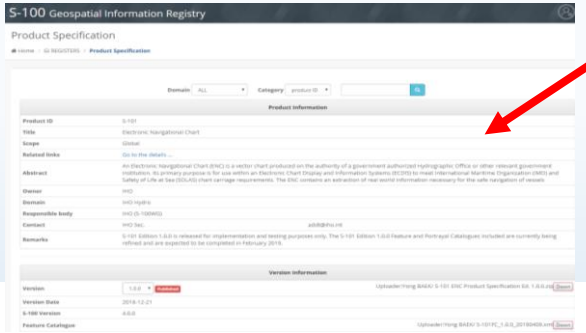
# Summary of Activities of the IHO GI Registry

- "Beta" Registry:
  - Portrayal, Product Specification, Data Producer Code and Metadata Registers now active
  - Includes links to Test Bed, guidance and tools – (FCB, PCB, DCEG Builder, S-57 to S-101 Converter, S-100 viewers)
  - All IHO web site links to published S-100 based Product Specifications link to the associated item in the Product Specification Register
  - "Clean-up" of current FCD Register content in progress for transition to Concept Register



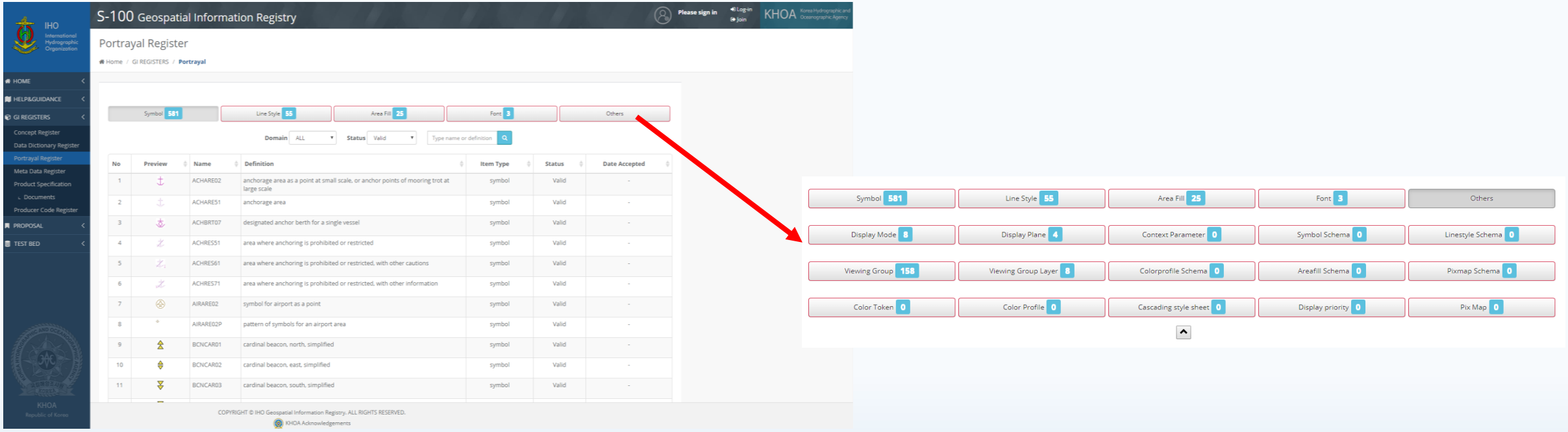



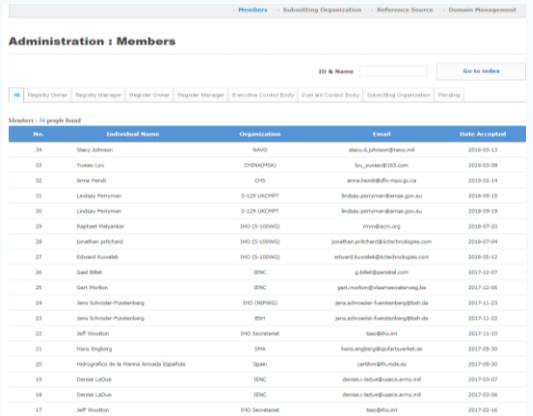
# Summary of Activities of the IHO GI Registry

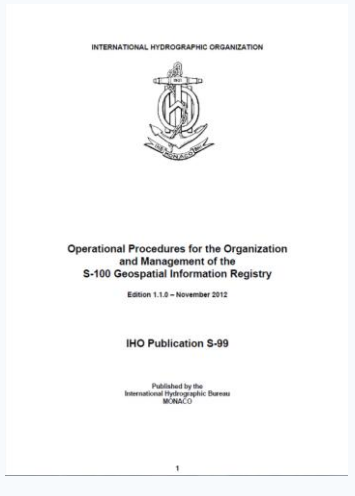
- "Beta" Registry:
  - Portrayal Register: Additional 15 types added to support all Product Specification portrayal requirements in ECDIS

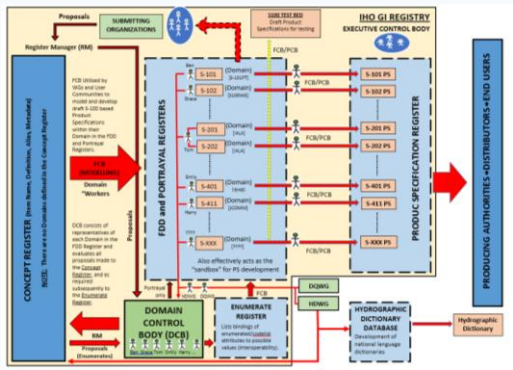


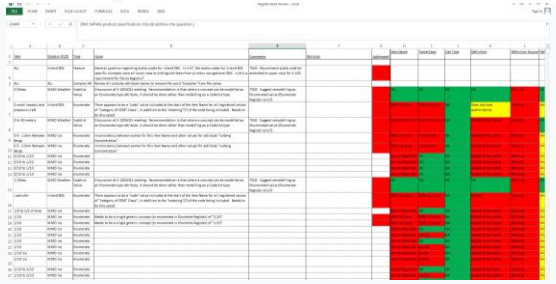
# Summary of Activities of the IHO GI Registry

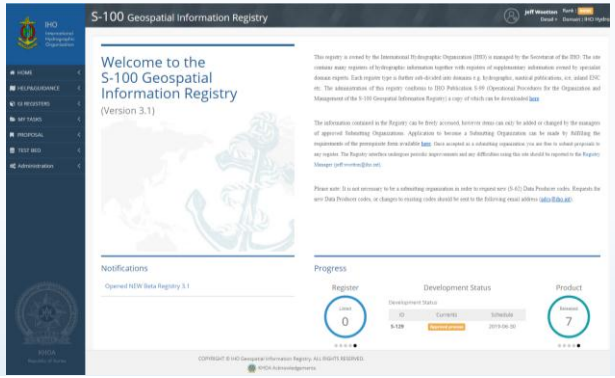
- "IHO GI Registry Workshop"
  - Overview and familiarity
  - Registry roles and responsibilities
  - Registry structure
  - Registry content
  - "Beta" Registry
  - Tools
    - Feature Catalogue Builder
    - Portrayal Catalogue Builder
    - DCEG Builder
  - Documentation (S-99, S-99 Annex A, S-100 Part 2)

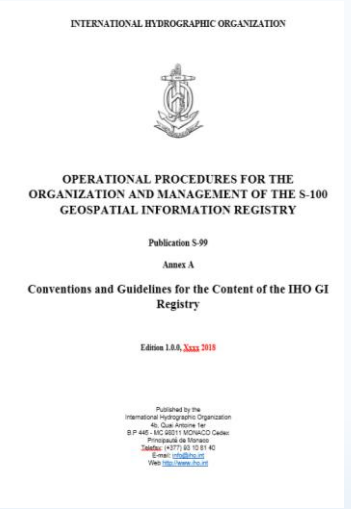


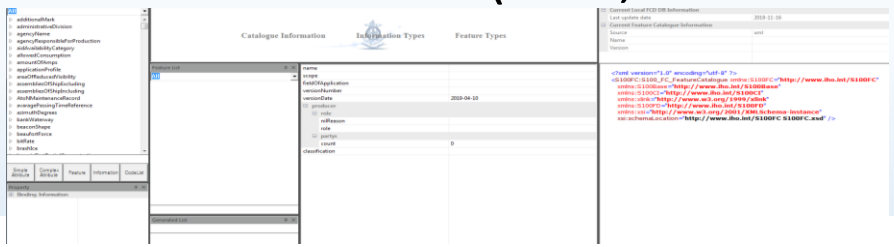



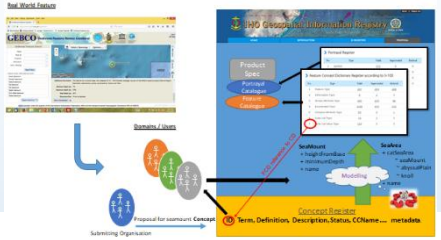







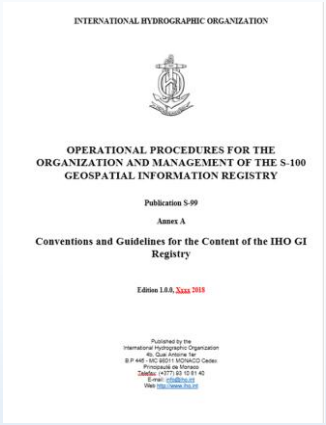
# Summary of Activities of the IHO GI Registry

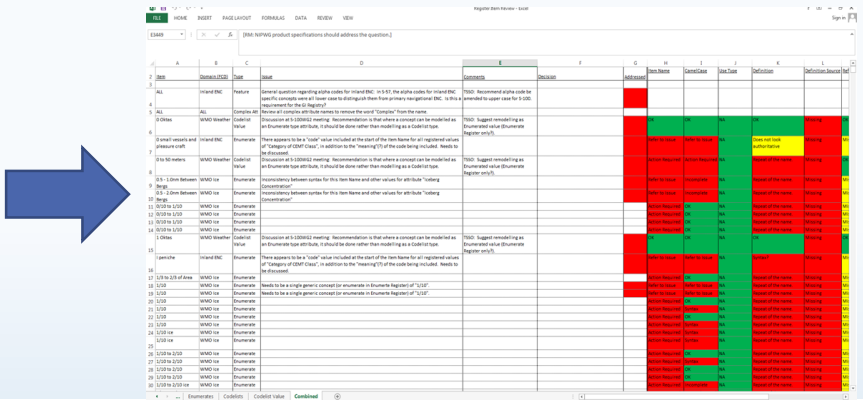
- "IHO GI Registry Workshop" outcomes
  - Common understanding of the structure and processes of the IHO GI Registry
  - Further work required to finalize the final structure of the "Beta" Registry (TSM6)
  - Agreement on fundamental conventions for FCD (Concept) Register content
  - Demonstration of Registry associated tools (FCB, PCB, DCEG Builder)
  - Commitment to progress the review of Registry management-related documentation (S-100 Part 2, S-99, S-99 Annex A) (TSM6 and S-100WG5)
  - Enhancement and confirmation of membership of the IHO GI Registry Project Team (GIRegPT)

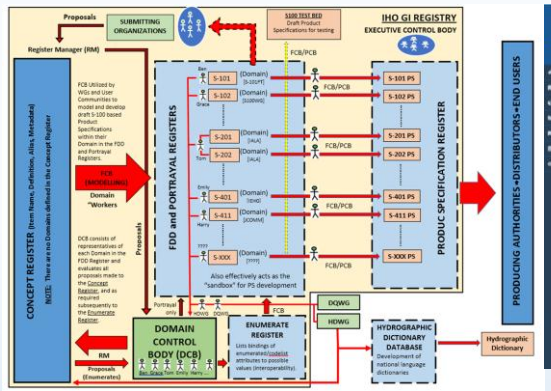
# GI Registry – Way Forward

- Progressive improvement:
  - Complete Conventions and Guidelines document (in progress);
  - Apply approved fundamental guidelines and conventions to content of the FCD Register (in progress);
  - Populate “new” Concept Register and Data Dictionary Registers with consistent, “clean” concepts (late 2019).
    - Minimum impact on Product Specifications in development

Consultation – GI Registry PT and DCB





# Activities of the IHO GI Registry

- Actions for HSSC11:
  - **Note** the activities of the IHO GI Registry since April 2018.

# Activities of the IHO GI Registry

**THANK YOU**

# Activities of the IHO GI Registry

For more information: https://www.iho.int

IHO Secretariat Contact: jeff.wootton@iho.int