14th Meeting of the Hydrographic Services and Standards Committee

IALA Activities affecting HSSC

Agenda Item 7.3A

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HSSC-14, Denpasar, Bali, Indonesia - Hybrid Event, 16 – 19 May 2022

IALA'S ROLE ON S-200 DEVELOPMENT

International Hydrographic Organization

- IHO has approved IALA as a **Submitting Organization** and **Domain Controller**
- IALA Product Specifications compliant with the IHO S-100 standard, use the numbering series S-201 to S-299
- **IALA Domain covers:**
  - Aids to Navigation (AtoN)
  - Vessel Traffic Services (VTS)
  - Positioning Systems
  - Communication Systems
  - AIS, ASM, VDES
- Publications
  - IALA Rnnnn on S-200
  - IALA G1106 on the Development of Product Specifications
  - IALA G1087 on the Management of the IALA Domain
  - IALA Gnnnn on the implementation guideline

DEVELOPMENT STATUS OF S-200 SERIES

International Hydrographic Organization

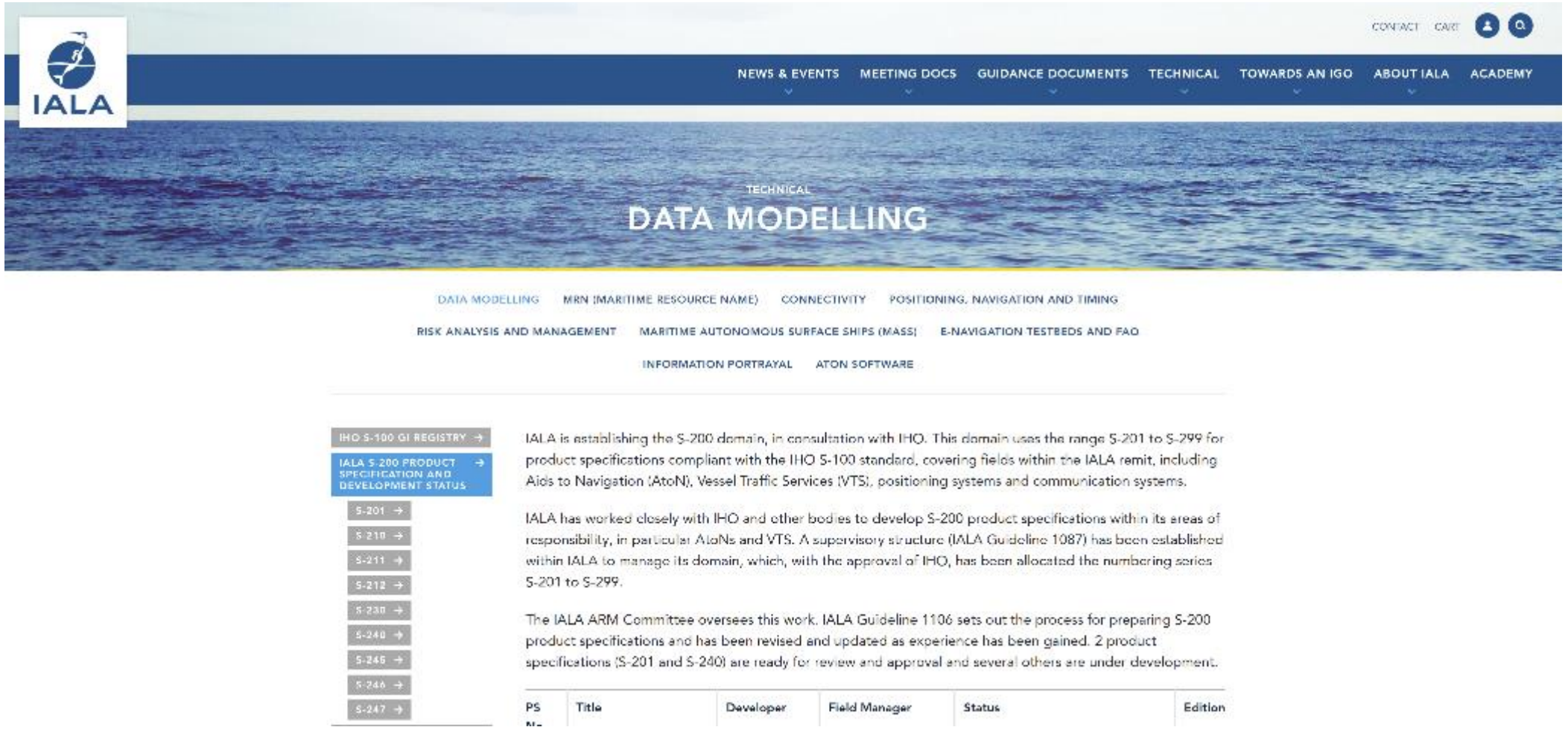
S-200 development summary table

Domain	PS	Title	Developing Committee	Version
AtoN	S-201	AtoN information	ARM	1.1.0
	S-125	Maritime Navigational Service	NIPWG (ARM)	
Positioning	S-240	DGNSS almanac	ENG	1.0.0
	S-245	eLoran ASF	ENG	0.7.0
	S-246	eLoran almanac	ENG	1.0.0
	S-247	eLoran reference stations	ENG	1.0.0
Comms.	S-230	Application Specific Message (ASM)	ENAV	Planned
VTS	S-210	Inter VTS exchange	VTS	Started
	S-211	Port Call Message	IPCDMC	1.0.0
	S-212	VTS digital information service	VTS	0.6.4

IALA‘S ROLE ON S-200 DEVELOPMENT

International Hydrographic Organization

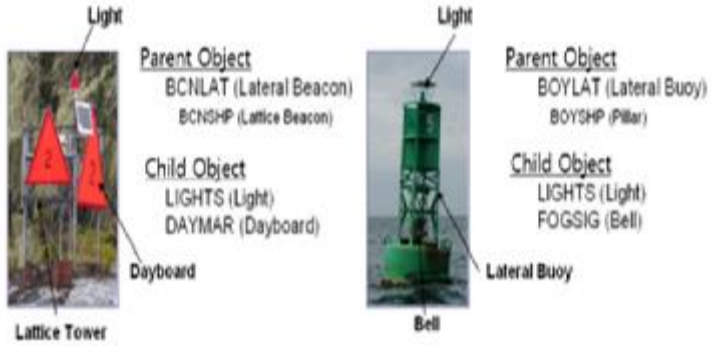
https://www.iala-aism.org/technical/data-modelling/iala-s-200-development-status/

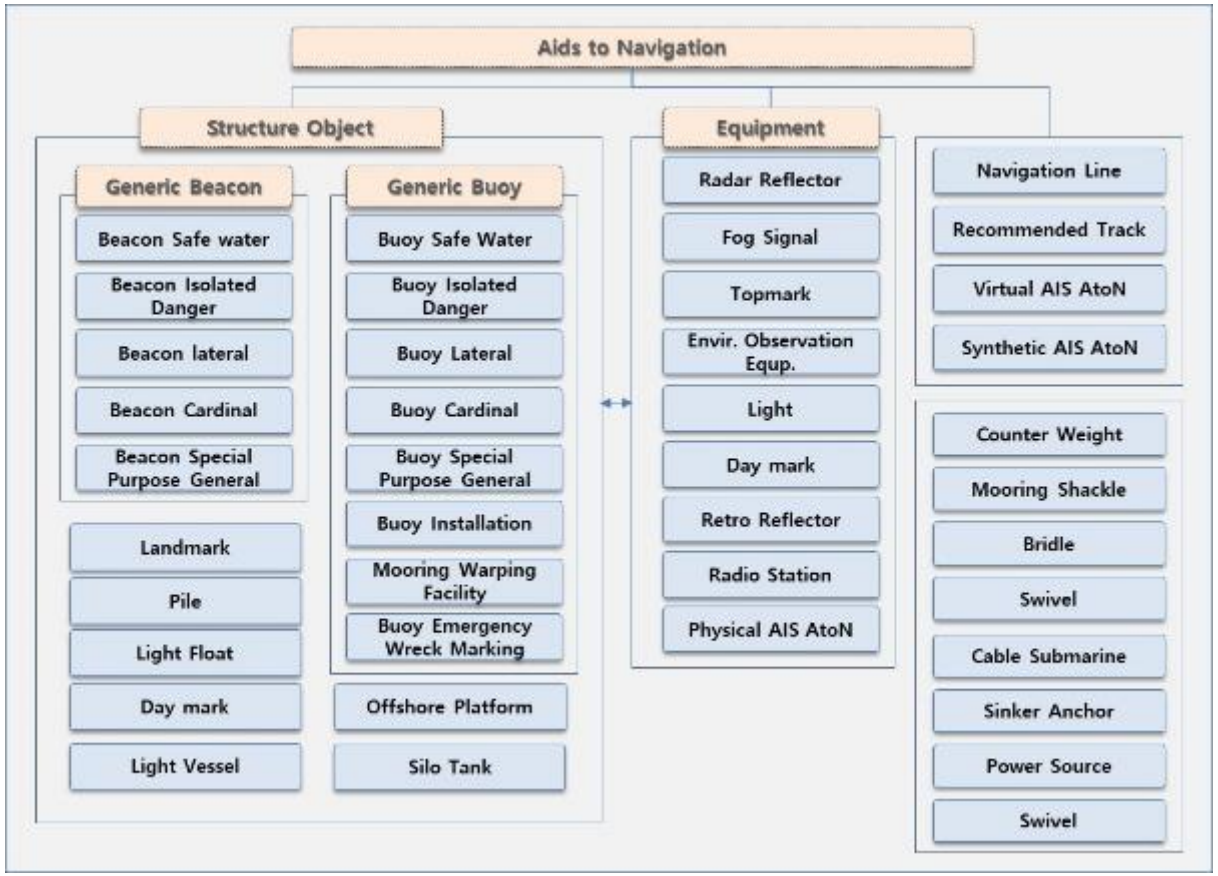


S-201 ATON INFORMATION

International Hydrographic Organization

- Standardised method of exchanging information on AtoN between lighthouse authorities, hydrographic offices, and related organisations.
- The product contains the positions, properties, operational status and general comments related to an AtoN

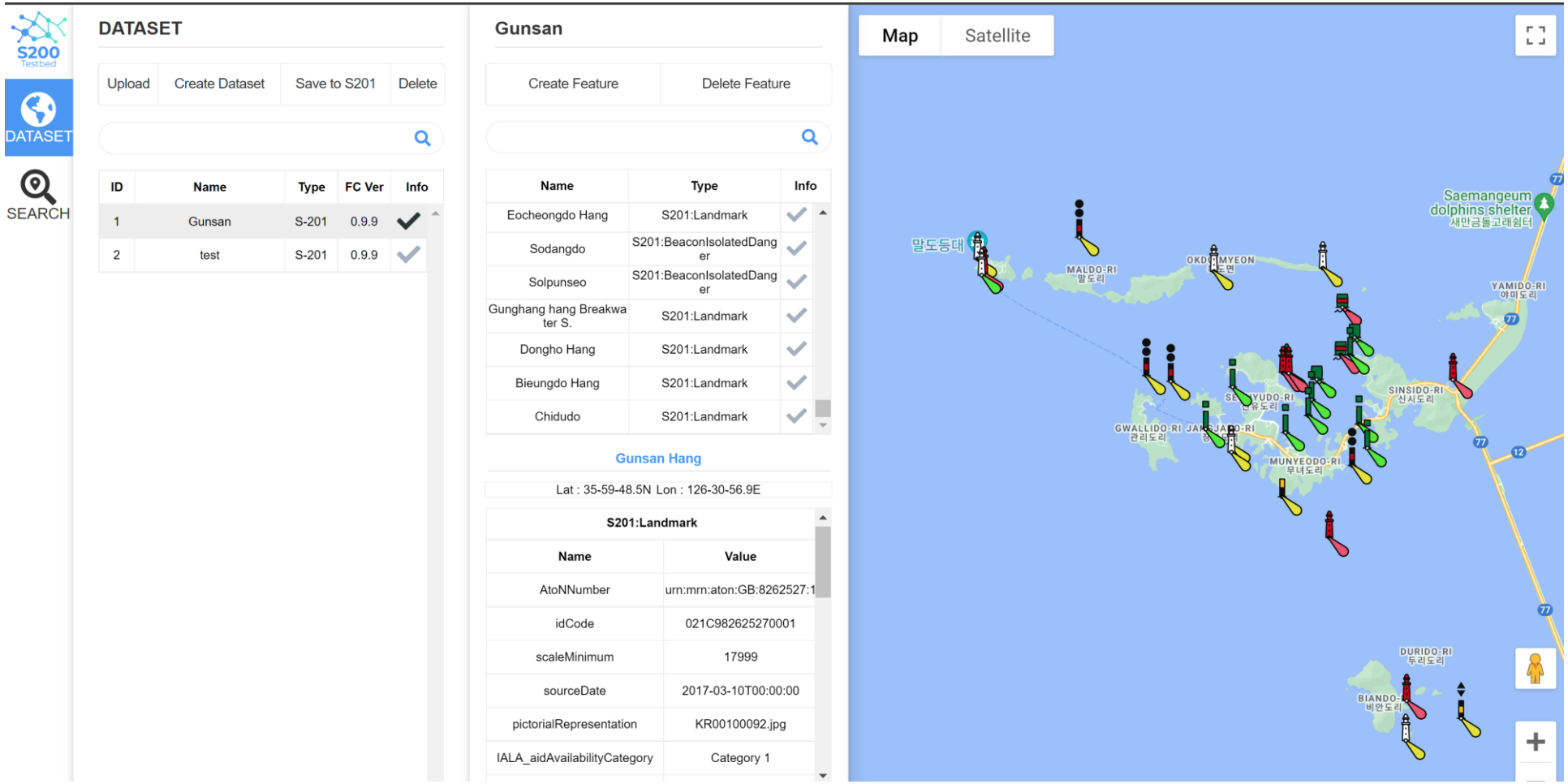




S-201 ATON INFORMATION

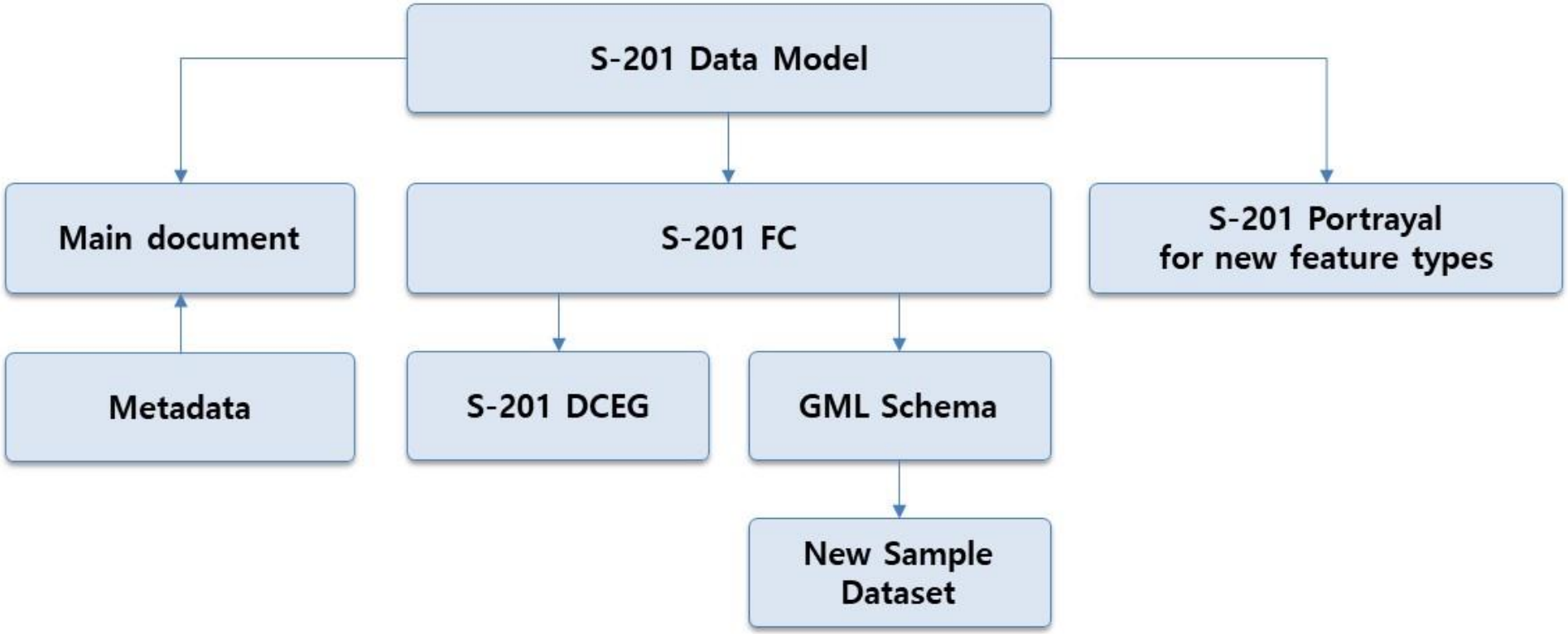
International Hydrographic Organization

- Testbed



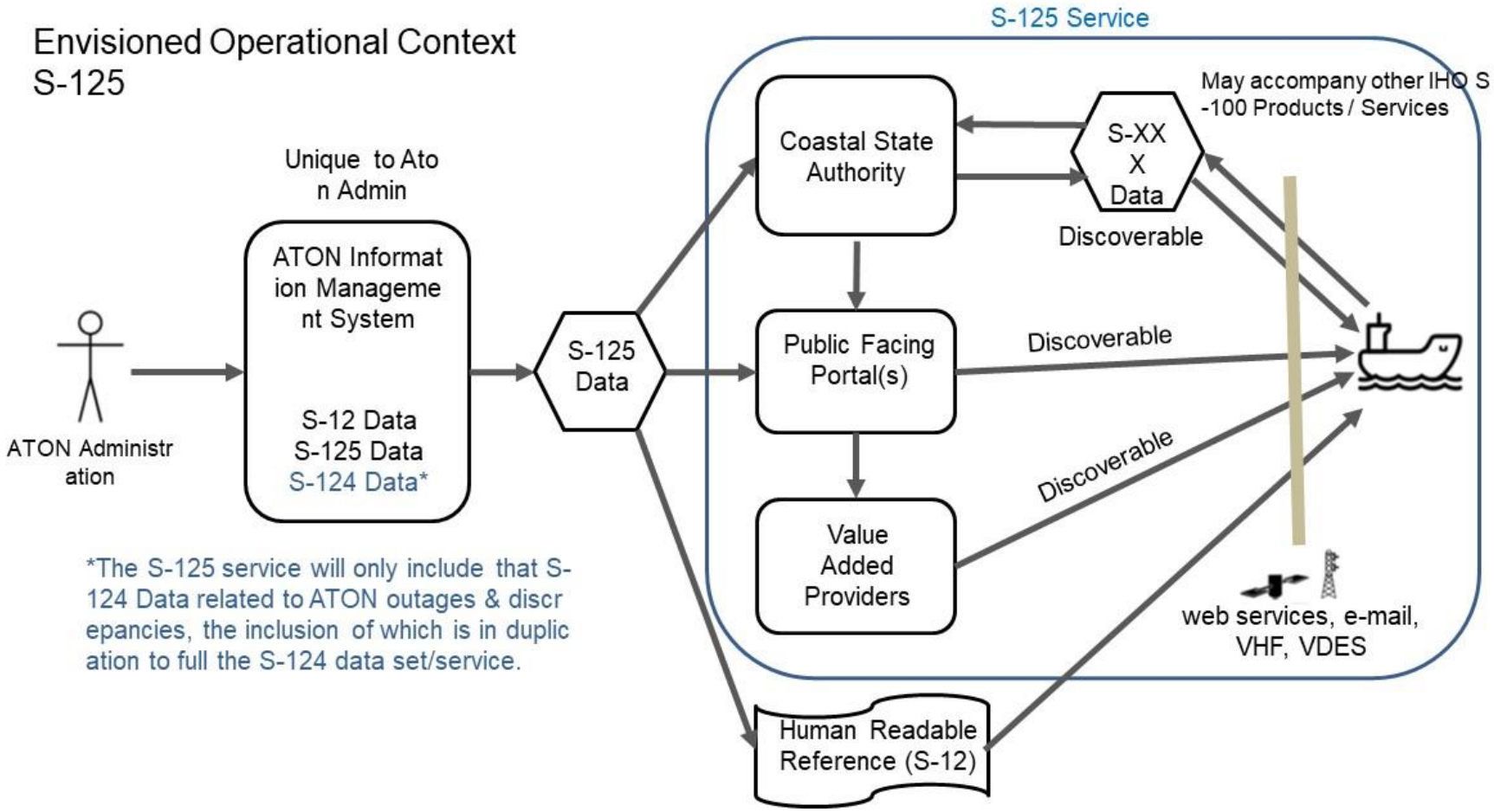
S-201 ATON INFORMATION

- S-201 Data model



S-201 ATON INFORMATION

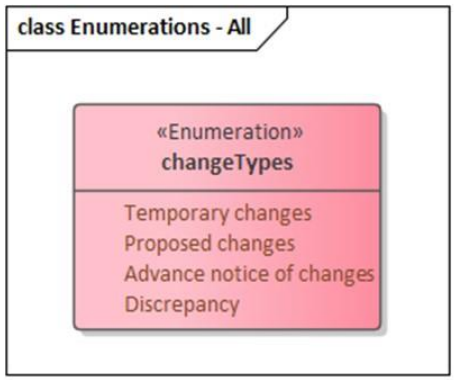
- S-201 and S-125

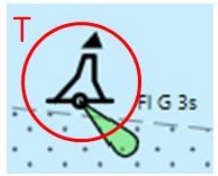


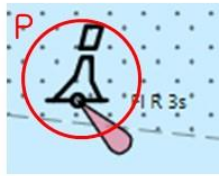
S-201 ATON INFORMATION

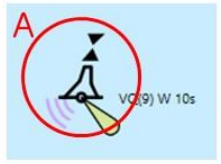
International Hydrographic Organization

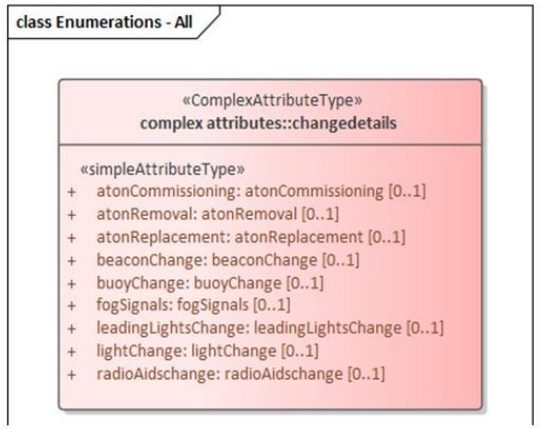
- Portrayal

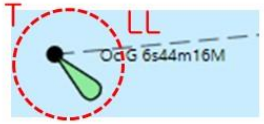


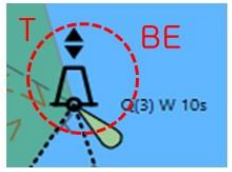


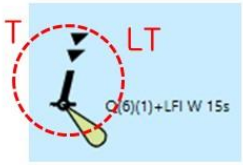


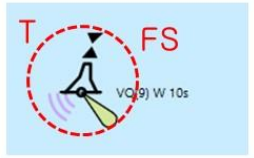












Change Types

1. Temporary changes : T
2. Proposed changes : P
3. Advance notice of change : A
4. Discrepancy : D

(Option) Restored

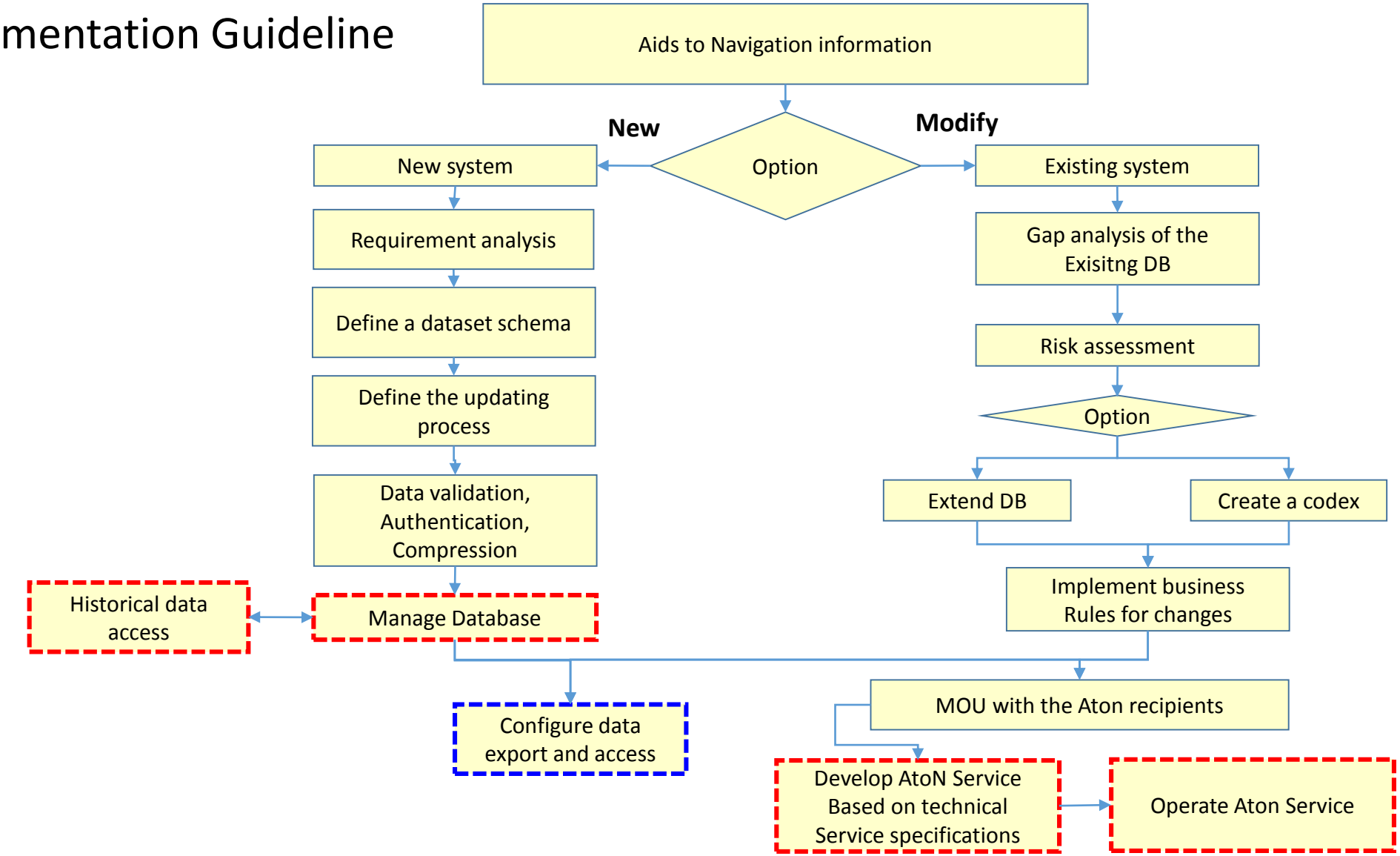
Change Details

4. Beacon Change (BE)
5. Buoy Change (BU)
6. Fog Signals (FS)
7. Leading Lights (LL)
8. Light change (LT)
9. Radio aids (RA)

S-201 ATON INFORMATION

International Hydrographic Organization

Implementation Guideline



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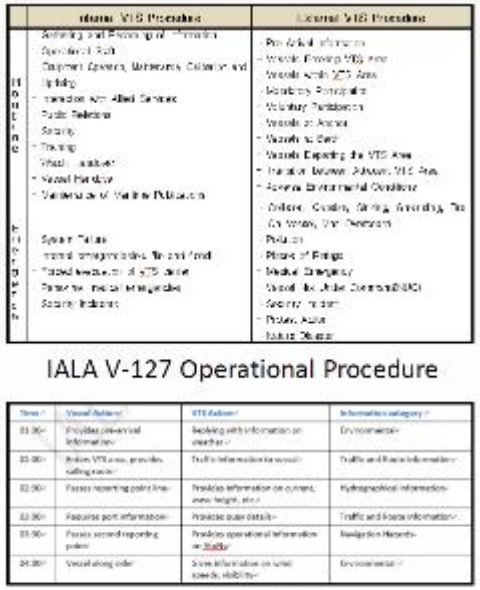
S-212 VTS DIGITAL INFORMATION SERVICE

What	What data is exchonged in VTS?
Who	Who is data sender? Who is data receiver?
When	When do vessels send this data?
Where	Where do vessels send this data?
Why	Why this data is sent?
How	How do vessel and VTS exchonge this data?

In the scenario, ship and VTS location are represented by virtual picture.

VTS-INS draft Scenario



IALA V-127 Operational Procedure

IALA MS Guideline

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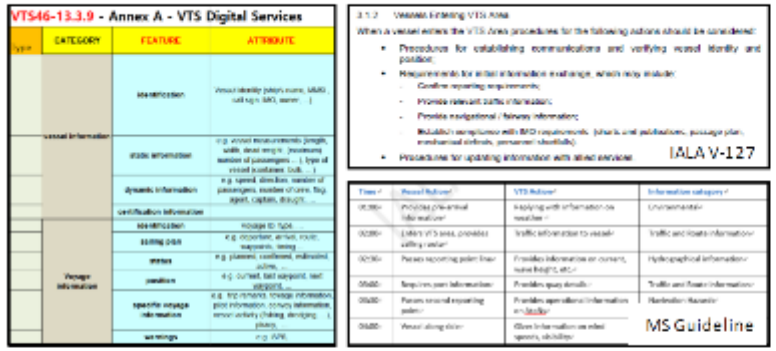
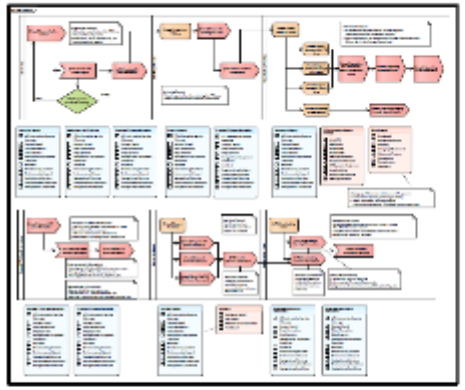
S-212 VTS DIGITAL INFORMATION SERVICE

1. VTS user needs



Researching about product specification requirement(=need)
- VTS46 result, MS Guideline, VTS Guideline, VTS operator's comment, SMCP

2. Define data exchange scenario

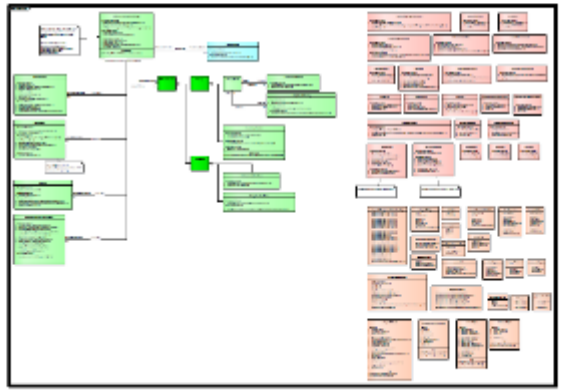


Define data exchange scenario based on requirements

3. Define Features & Attributes

Analysis another standard(S-101, 124, 127, 211, 412, 421)
New feature for VTS determined

4. Product specification

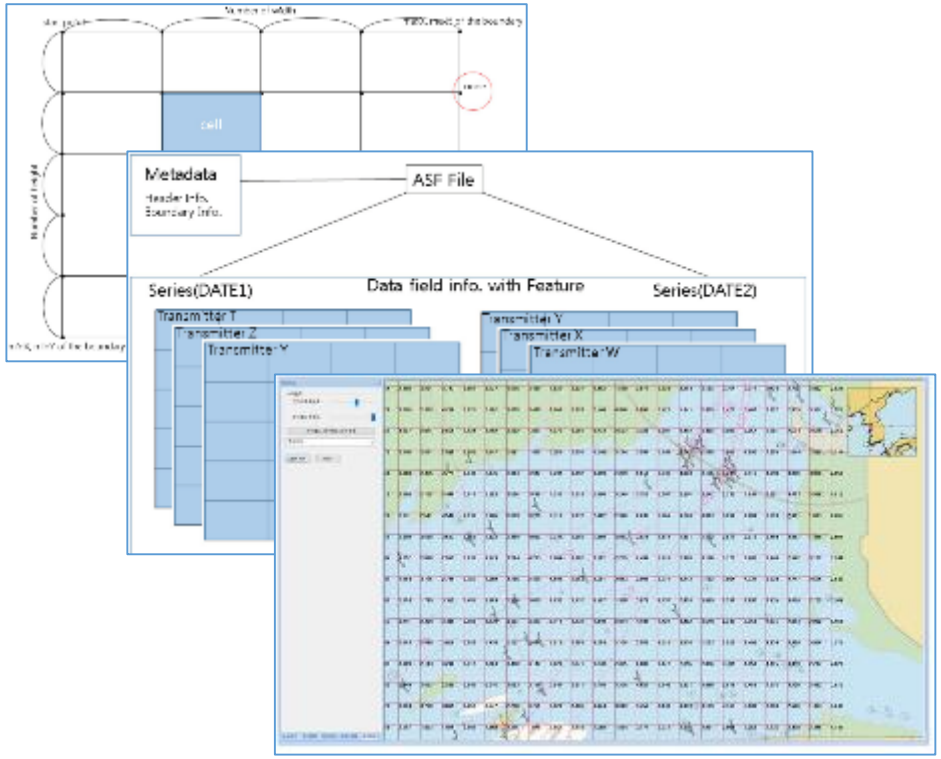


Finally, development VTS-INS Product Specification

S-240 PNT SERIES

- Position Navigation Timing Product Specification
- S-240 DGNSS station almanac
- S-245, 246, 247 eLoran ASF data, almanac, reference station

S-240 viewer



S-245 Additional Secondary Factor (ASF) data

JOINT IALA IHO WORKSHOP

International Hydrographic Organization

05 - 09 September 2022

Joint IALA/IHO workshop on S-100/200 development and portrayal

Norwegian Coastal Administration, Ålesund, Norway

IHO International Hydrographic Organization

IALA

KYSTVERKET

The International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) and the International Hydrographic Organization (IHO) in association with the Norwegian Coastal Administration (NCA) are hosting a joint workshop on S-100/200 development and portrayal to be held in Ålesund, Norway, from 05 to 09 September 2022.

IHO

International Hydrographic Organization

IALA STRATEGY

- IALA is developing and coordinating PS and data exchange formats that will underpin e-navigation services in the future.
- Focus on the technical service and streaming of the data.
- S-200 Product Specifications reaching maturity and their use needs to be tested and promoted.
- Promote the S-200 Testbed and invite members to participate.
- Continue the IALA/IHO technical cooperation meeting.
- Joint IALA/IHO Workshop is planned to be held on 5- 9 Sep 2022 in Ålesund, Norway.

HSSC is invited to note the information provided.