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**X** ARM **□** ENG **□**  PAP **X** Input

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Agenda item [[2]](#footnote-3) 8.4

Technical Domain / Task Number 2 7.1.4, 7.1.6

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Update of S-201 and S-125

# Summary

The S-201 Task Group of the IALA ARM Committee is responsible for S-201 and S-125 product specifications. The task group updated the Aton PSs based on the S-100 Ed. 5.2 and applied the IHO NIPWG's review of S-125 version 0.0.3.

## Purpose of the document

This document reports updates of S-201/S-125 and includes discussions on future plans.

## Related documents

S-201 Aton Information (Edition 1.1.0, October 2022)

S-125 Marine Aids to Navigation (AtoN) (Edition 0.0.3, October 2022)

# Background

The S-201 Task group of IALA ARM WG2 developed the S-201 and began developing the S-125 in cooperation with IHO NIPWG. From the revision of S-100 Ed. 5.2 and changes in feature data registered in the IHO GI Registry, revision of the S-201 became necessary. Meanwhile, S-125 has been updated according to IHO NIPWG's S-125 0.0.3 review.

# S-200 Pilot training project of IALA WWA

IALA WWA hosted the S-200 pilot training project to support S-200 PS series development of VTS and ARM, and participated as an instructor at the UKHO, PRIMAR and KRISO. In this pilot training project, product specification developer and business managers in the VTS/AtoN domain participated as trainees, and 2 days of S-100/S-200 theory training and 1 day of S-100 tool practice course were conducted.

The S-100 tool practice course conducted in the S-200 pilot training project provided the latest and integrated operation functions for IHO GI Registry and S-100 tools, and accordingly, It can now be used as a tool for updates of S-201/S-125.

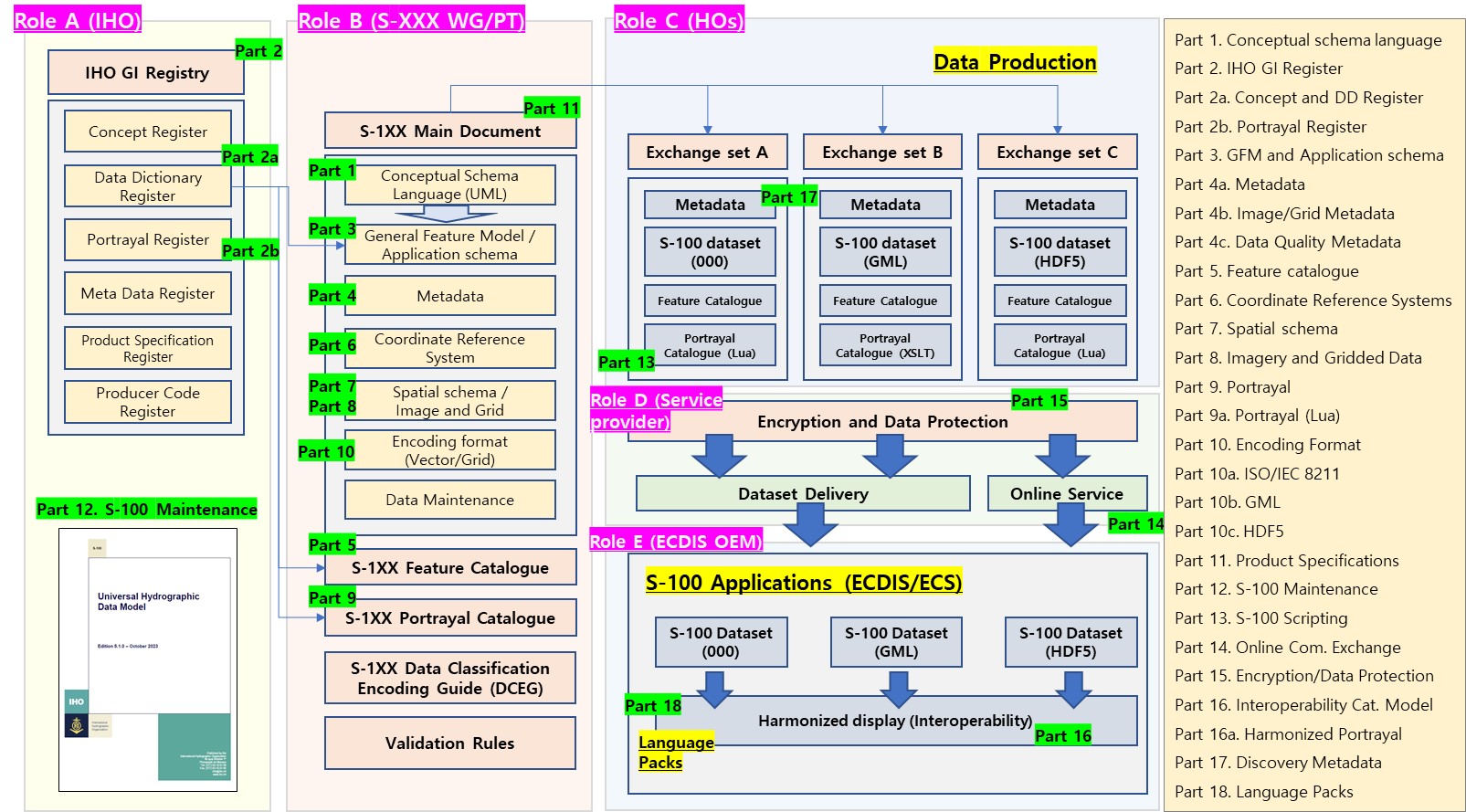


Fig. 1 Relationship between S-100 components and S-100/S-200 series PS development

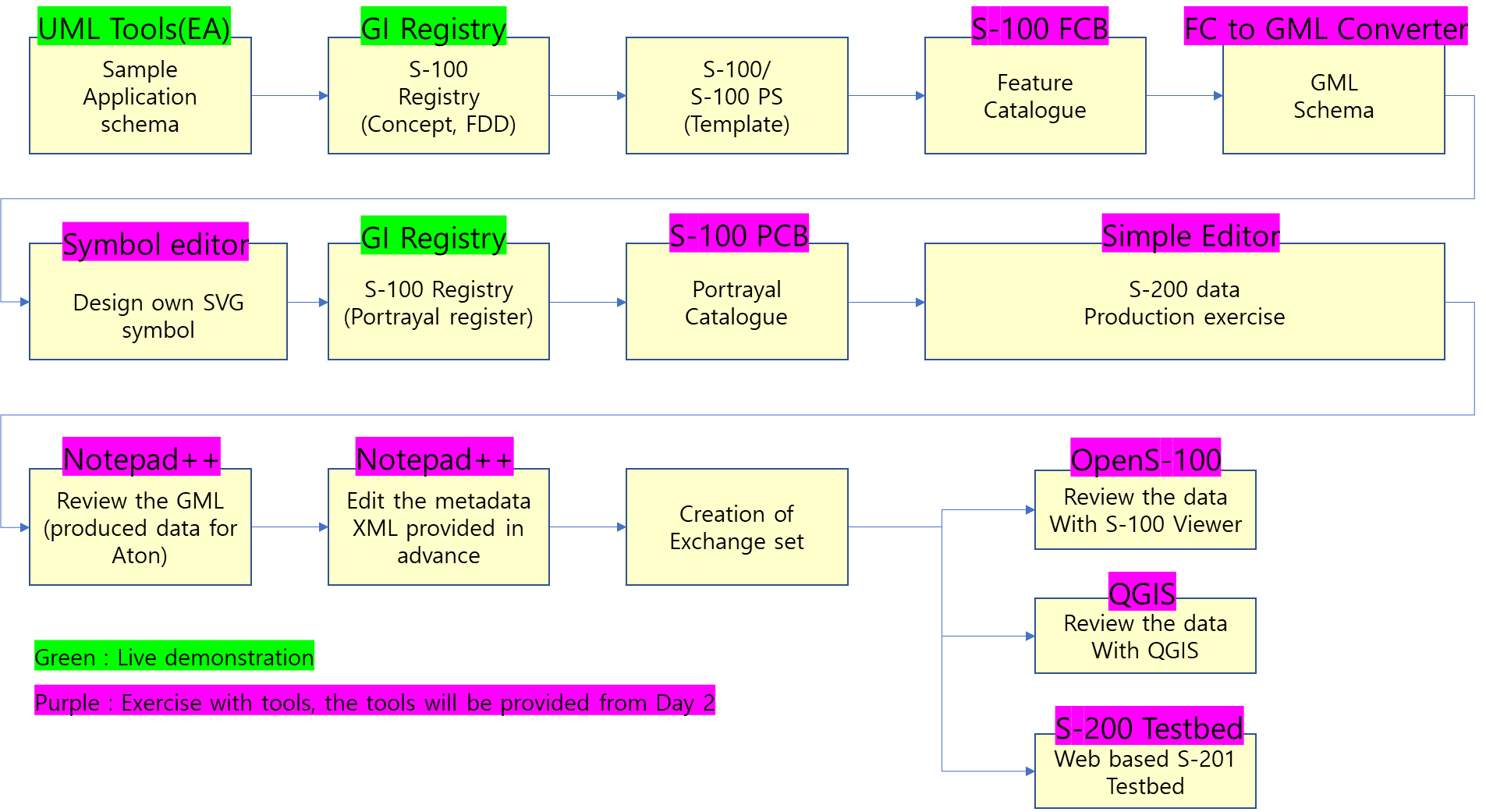


Fig. 2 Practice procedures using the S-100 tools

# Update of S-201

The S-201 was revised to Ed. 1.1 in 2022 and was used as a standard for conversion to Aton information management system in Korea/Canada. The International Hydrographic Organization decided to apply the S-100 implementation roadmap based on S-100 version 5.2, and the product specifications included in the S-100 implementation roadmap are supposed to be update to S-100 Ed. 5.2. The S-201 Task group has revised the following contents and intends to have consultations with task group members and work on S-201 Ed. 1.2 during the ARM18 meeting.

* Building is used as a Aton structure, so Structure Feature type has been added.
* Feature type name change for Buoy and Beacon
* Update based on S-100 Ed. 5.2 (FC model, metadata model, etc.)
* Update FC, GML Schema, and DCEG using S-100 tools
* Discuss registration plan for feature data not registered in IHO GI Registry

|  |  |
| --- | --- |
| Change of Feature type name | |
| Buoy Lateral → Lateral Buoy | Beacon Lateral → Lateral Beacon |
| Buoy Cardinal → Cardinal Buoy | Beacon Cardinal → Cardinal Beacon |
| Buoy Special Purpose General →  Special Purpose General Buoy | Beacon Special Purpose General →  Special Purpose General Beacon |
| Buoy Safe Water → Safe Water Buoy | Beacon Safe Water → Safe Water Beacon |
| Buoy Isolated Danger → Isolated  Danger Buoy | Beacon Isolated Danger → Isolated  Danger Beacon |
| Buoy Installation → Installation Buoy |  |

# Update of S-125

The S-201/S-125 Task Group attended the IHO NIPWG meeting, reported the status of S-125 development, and discussed reviewing version 0.0.3. The IHO NIPWG meeting reviewed version S-125 0.0.3 and provided comments.

Major comments of IHO NIPWG can be summarized as follows:

* Questions regarding virtual Aton feature types
* Change to mandatory for the attribute type of S-125 data model
* Update the S-125 according to the S-100 Ed. 5.0
* Follow the schema of exchange set catalogue following the S-100 Ed 5.0

The S-125 was updated according to the above comments from IHO NIPWG, and the S-125 components were updated as follows using the S-100 tools introduced in the S-200 Pilot training project hosted by IALA WWA. During the ARM18 meeting, task group intends to review S-125 updates and complete work on S-125 Ed. 0.0.4.

* Revision of S-125 application schema according to S-201 revision (addition of structures, change of feature names, etc.)
* Update FC/GML Schema/DCEG based on the revised application schema
* Check S-125 feature/symbol data not registered in IHO GI Registry and discuss proposal plan

S-125 Marine Aids to navigation (AtoN) aims to exchange Aton information between data provider and ship and is included in the phase 2 of the IHO S-100 implementation roadmap. In order to satisfy the S-100 roadmap, it is necessary to address the S-100 Ed. 5.2 and finish the operational version, so it is required to discuss the S-125 development timeline during the ARM18 meeting.

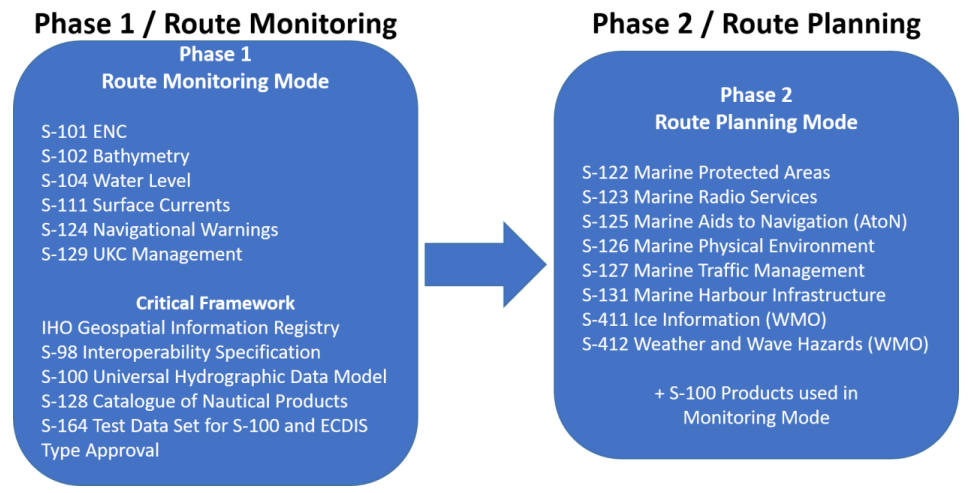


Fig. 3 Priorities and phases of S-100 products in the IHO S-100 implementation roadmap (Phase 1 / Phase 2)

# Action requested of the Committee

The Committee is requested to note the updates of S-201 and S-125 and take actions as appropriate.

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-2)
2. Leave open if uncertain [↑](#footnote-ref-3)