

IALA COUNCIL
80th session



24-28 June 2024
Istanbul, Türkiye

10 – TECHNICAL ACTIVITIES

10.8 – Product specifications and technical services

10.8.1 – Committee work on S-200 PS

Note by the Secretariat

1. INTRODUCTION

Throughout the first half of 2024, the committees have been progressing in the development of the S-200 Product Specifications (PS) within their relevant areas. This document aims to provide the Council with a comprehensive update on the S-200 PS series, reflecting the accomplishments and efforts of the committees.

2. SUMMARY OF THE COMMITTEE WORKS

As the submitting organization and domain control body of Aton, AIS and VTS domains, IALA develops its own PS related to Marine Aids to Navigation.

The following table summarizes the work of the committees as of now:

Domain	PS	Title	Developing Committee	Edition
AtoN	S-201	AtoN information	ARM	1.1.0
	S-125	Marine Aids to Navigation	IHO NIPWG (ARM)	0.0.3
Positioning	S-240	DGNSS almanac	ENG	1.2.0
	S-245	eLoran ASF	ENG	1.0.0
	S-246	eLoran almanac	ENG	1.0.0
	S-247	eLoran reference stations	ENG	1.0.0
Comms.	S-230	Application Specific Message (ASM)	DTEC	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

3. S-201 AIDS TO NAVIGATION INFORMATION

ARM S-201 Task Group (TG) reviewed all gaps identified in version 1.1.0 by the Canadian Coast Guard and formulated a plan to update the UML diagrams, Feature Catalogue/schema, and Data Capture and Encoding Guide (DCEG). These updates necessitated a revision to S-201 version 1.2.0. The work will be conducted through intersessional meetings. During the gap analysis, many concepts requiring registration in the IHO GI Registry were identified. The TG will draft definitions for each concept, seek comments from ARM WG2 members, and confirm these at an intersessional meeting before submission to the IHO GI Registry.

ARM agreed to complete version 1.2 by addressing the identified data model gaps and then sequentially applying these changes to the S-125 product specification, updating it to version 0.0.4. The development of MRN documentation will continue, incorporating inputs from the IALA Secretariat, other committees, and relevant parties.

4. S-201/125 DEVELOPMENT SCHEDULE

ARM reviewed the IHO "Implementation Decade" documents and proposed the following schedule for S-201 and S-125:

- ARM will work to advance S-201 to a version 1.2 effective immediately, for finalization at ARM19. The data model in this version will be aligned with S-57 and be a step in the transition towards S-101 alignment. While work on S-201 version 1.2 is occurring, the Task Group will also work on completing S-125 to version 0.0.4.
- ARM will work to advance S-201 to a version 2.0 within the next 2 years, to be finalized by the end of 2026. This version will be aligned with IHO S-101.
- Once S-201 version 2.0 is published, ARM will continue concurrent work on S-125, with a goal of publishing a version 1.0 by the end of 2027 (dependent on the stabilization of S-201 version 2.0).
- Work on an S-125 version 2.0 will commence following the publication of S-125 version 1.0 and subsequent testing.

5. S-230 APPLICATION SPECIFIC MESSAGE (ASM)

The Japan Coast Guard submitted a proposal (DTEC2-5.2.1.1) to the DTEC Committee for developing a PS on ASM for disaster management. The committee agreed to:

- Develop the Product Specification for disaster management.
- Use digital "file" data transport over VDE as defined in Guideline G1117, with or without MMS, to transport serialized S-100 product specifications.
- Consider providing a "file" data transport method for ASM in Guideline G1117.

6. S-210 INTER VTS EXCHANGE AND S-212 VTS DIGITAL INFORMATION SERVICE

The VTS Committee has been progressing in the development of the S-212. In line with these work, an intersessional meetings focusing on both S-210 and S-212 took a place in Quebec, Canada, in January 2024 with support of the Canadian Coast Guard.

VTS is working on developing relevant Product Specifications, and during VTS 55th session, the committee worked on the following Tasks:

- Revising G1177 on portrayal of VTS information.
- Developing technical service descriptions for digital data exchange between VTS and other entities.
- Developing a Product Specification S-212 under the S-100 framework.
- Reviewing and updating Recommendation R0145 on the Inter-VTS Exchange Format (IVEF) Service.

7. S-240 DGNSS ALMANAC

The S-240 product specification, developed by the IALA ENG committee, facilitates the exchange of GNSS Station information. The committee reviewed input paper ENG18-3.2.2.3, titled "Progress of S-240 Update," and the associated presentation. Additionally, the committee requested a review and testing phase before the ENG 19 meeting.

The committee assessed the work plan, identifying tasks to be completed in upcoming sessions concerning R-Mode, and updated the work plan accordingly.

The following is a summary of the discussion, While testing the S-240 data model, the Finnish Transport Infrastructure Agency identified several issues:

- Differences in the S-240 product specification editions on the IALA website and the IHO GI Registry.
- Inconsistencies between the S-240 data model and the feature catalogue, such as a lack of associations and roles.
- The existing edition was based on an older version of S-100.
- Incorrectly defined data types for some attributes.

8. S-200 TESTBED

Significant updates to the S-200 test bed have been introduced, including a new login function. The domain address will be transitioned to IALA's official domain, and the login method will be harmonized with the IALA website. In response to the VTS Committee's request regarding the applicability of S-210/S-212 data to the S-201 test bed, the Task Group decided to enhance the user interface, enabling users to input complex data model data through the Feature Catalogue of the S-200 series product specifications. Korea MOF and KRISO will support the task.

A live demonstration of the web-based IALA Questionnaire was conducted using the S-201 test bed.

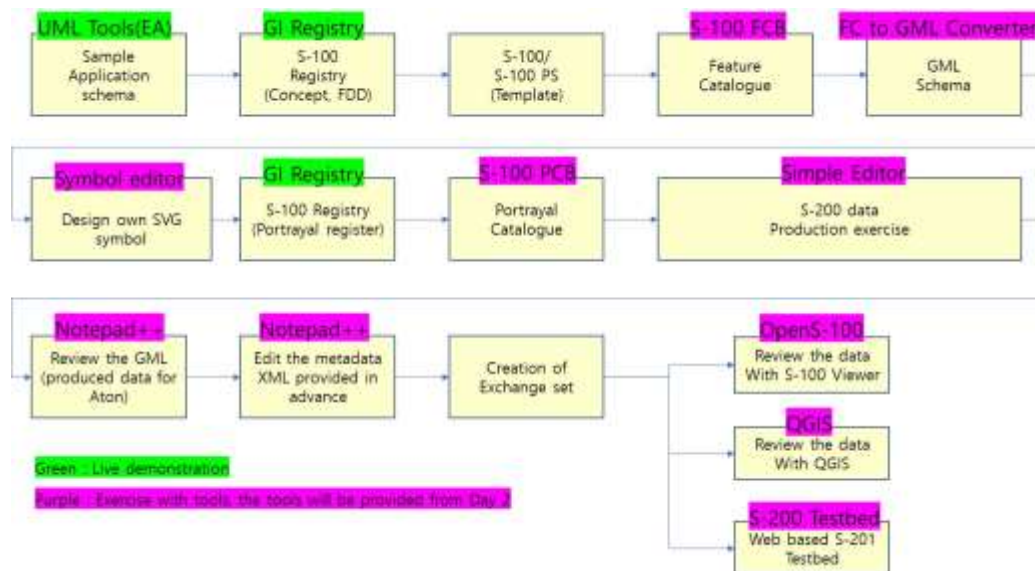
At the ARM committee level, the need to prepare content for the AtoN Questionnaire was discussed, and the IALA secretariat drafted a preliminary version. This content will be developed in collaboration with other ARM working groups. Once finalized, MOF/KRISO will conduct a pilot survey on AtoN and report the results at the next ARM committee meeting.

9. IALA S-200 PILOT TRAINING

IALA WWA conducted an S-200 pilot training course from 6-8 February 2024 at the IALA headquarters. The purpose of the course was to develop a regular curriculum for those responsible for developing and utilizing S-200 series product specifications. UKHO, PRIMAR, and KRISO served as instructors, while trainees from the UK, Ireland, France, Denmark, Finland, Norway, Sweden, and Japan, working in the AtoN and VTS domains, attended.

The course covered the process of drafting a sample data model in AtoN and producing sample data. Participants used IHO's latest S-100 tools to practice creating feature catalogues, GML Schemas, and SVG symbols. The revision of S-240 is also possible using the S-100 tools utilized during the pilot training course.

This first pilot training course was successful in establishing a foundation for developing proper training courses. At the end of the training, it was identified that the course should be more specifically divided into AtoN and VTS courses. Additionally, a separate course should be prepared for those without knowledge of computer languages. Based on this feedback, the first proposed S-200 training course will be conducted in the latter half of this year.



Steps of practical exercise in the S-200 pilot training

10. 2ND JOINT IHO IALA WORKSHOP

The first joint workshop hosted by IALA and IHO, focusing on the development and portrayal of the S-100/200 series, was successfully conducted in September 2022 in Alesund, Norway. This event marked a significant milestone in fostering cooperation and alignment between the two organizations.

Building on the positive outcomes and constructive engagements from this workshop, the ARM committee has prepared a proposal for a second workshop, which has been approved by the Council. This forthcoming event is scheduled for 9-13 September 2024 in Annapolis, USA.

11. THE COUNCIL IS REQUESTED TO

NOTE the information provided in this document.