IALA COUNCIL
4th Session

8-11 June 2026
HQ, France

10 – TECHNICAL ACTIVITIES

10.6 – Product specifications and technical services

10.6.1 – Committee work on S-200 PS

Note by the Secretariat

1. INTRODUCTION

Following their respective sessions held between September 2025 and April 2026, the four Technical Committees (ARM22, DTEC6, ENG22 and VTS59) continued to make significant progress on the development of S-200 series Product Specifications. This paper summarizes the outcomes and current status of S-200 PS development across the Committees in support of the S-100 framework and the mandatory introduction of S-100-compliant ECDIS in January 2029.

2. SUMMARY OF THE COMMITTEE'S WORK

The table below presents a consolidated summary of the active Product Specification (PS) development work by each Committee, updated to reflect ARM22, DTEC6, ENG22 and VTS59 outcomes:

Domain	PS	Title	Developing Committee	Edition
AtoN	S-201	AtoN information	ARM	2.0.0 (2.1.0 dev)
	S-125	Marine Aids to Navigation	IHO NIPWG (ARM)	1.0.0 (HSSC 18)
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~~
	S-241(New)	PNT station almanac	ENG	0.1.0
	S-242(New)	PNT grid data	ENG	0.1.0
Comms.	S-230	Application Specific Message (ASM)	ARM	Planned
VTS	S-210	Inter VTS exchange	VTS	0.2.0
	S-211	Port Call Message	IPCDMC	1.0.0
	S-212	VTS digital information service	VTS	0.7.3

3. ARM

Following the publication of S-201 Edition 2.0.0 (AtoN Information) and the submission of S-125 Edition 1.0.0 (Marine Aids to Navigation) to IHO NIPWG, the ARM Committee at its 22nd session reviewed comments returned from IHO and Members. Five technical decisions were taken on the S-201 data model: multiplicity of VirtualAISAidToNavigation and SyntheticAISAidToNavigation; Mobile AIS AtoN

feature modelling; Bridge “no geometry” attribute; CardinalBuoy clarification; and the Daymark correction in the S-201 DCEG. The CCG-proposed addition of “Cautionary” to the enumerated Category of Special Purpose Mark was also accepted.

The Joint IHO NIPWG–IALA S-125 Task Group was re-established (Lead: Caroline Johansson, Sjöfartsverket; Co-lead: Dave Lewald, USCG). S-125 Edition 1.0.0 was submitted for HSSC 18 approval (May 2026, Poland) and is positioned as an optional Product Specification within IHO’s S-100 Implementation Phase 2; a new AtonStatusIndication feature with simplified portrayal was introduced for S-100 ECDIS Phase 1.

A new IALA validation framework, S-258:S-201 Validation Checks (using IALA S-258 numbering rather than IHO S-158), was introduced by the Netherlands / Rijkswaterstaat, and an intersessional task group was launched. KRISO has updated the S-201 Test & Validation Tool with Feature Catalogue-based validation, and the migration of the tool to the IALA domain is in progress.

Although S-201 Edition 2.0.0 has been developed and approved by Council, Member States and Associate Members continue to encounter practical difficulties in producing S-201 datasets. As a way forward, increased promotion (via the IALA e-Bulletin), expanded education (in both number and geographic coverage of training events), and provision of technical support for actual data production — including tangible assistance pledged by the Korea MOF and KRISO — are required.

In addition, ARM22 progressed the draft Guidelines for the Implementation and Operation of S-201 (and operational considerations for S-230), the draft Guideline on the Symbology and Portrayal of AtoN for charting and other use, and continued coordination with VTS on Maritime Resource Names (MRN). A standardised communication protocol among the S-201, S-125 and S-101 development teams will be considered at the 3rd Joint IHO–IALA Workshop on S-100 and S-200 (Istanbul, September 2026).

4. ENG

At the 22nd session of the ENG Committee, work on Positioning, Navigation and Timing (PNT) Product Specifications continued under the consolidated approach agreed at ENG21:

- S-241 (New) – PNT Station Almanac to support precise navigation and positioning, in particular for R-Mode and other resilient PNT services.
- S-242 (New) – PNT Grid Data Product Specification to enhance integrity monitoring.

ENG22 reached common agreement on the S-241 data model based on input papers from China MSA and the Republic of Korea, with R-Mode station-almanac data also proposed for inclusion. China MSA will draft the S-241 document and the Republic of Korea will validate it via the S-200 testbed. eLoran-related content (GRI, ASF map version) was reviewed in the eLoran PS data working document for further development. Initial work on S-242 will continue intersessionally.

5. VTS

The VTS Committee continued development of S-212 (VTS Digital Information Service) under the S-100 framework. KRISO-led intersessional work was endorsed; a Proposal to the GI Concept Register for S-212 (2026) was submitted, and S-212 Product Specification v0.7.3 DRAFT, the data model and annexes were forwarded to VTS60. Joint sessions between WG1 (Operations) and WG2 (Technology) on Traffic Clearance, Route Exchange, VTS Information and Under Keel Clearance were held to ensure operational and technical alignment of the S-212 services.

Significant progress was also made on S-210 (Inter-VTS Exchange). Three iterations of the S-210 Product Specification v0.2.0 were forwarded to VTS60, together with supporting IVEF meeting outputs and IHO C9 list of decisions. The data model has been newly updated and reorganised into track data, target data, voyage data, voyage waypoint, and other elements.

The VTS Committee will hold an in-person intersessional meeting on Tasks 2.5.2 / 2.8.1 in Oslo from 6 to 8 July 2026, hosted by the Norwegian Coastal Administration.

6. DTEC

The DTEC Committee did not progress any of the S-200 Product Specifications at DTEC6, but identified a security risk associated with the inclusion of Lua scripts in S-100 Product Specifications and issued formal Liaison Notes to the IALA committees, IEC TC80 and IHO. With regard to S-230 (ASM-related Product Specification), the transfer of the development task from DTEC to ARM (agreed at DTEC5) is reflected in the table below; ARM is progressing S-230 operational considerations within the draft Guidelines for the Implementation and Operation of S-200.

7. IALA S-200 TRAINING

Two S-200-related training events have been delivered or are planned in the current cycle: the first at IALA HQ on 23–27 February 2026, and the second (tentative) in the Dominican Republic on 25–29 May 2026.

Interest in S-200-related training remains very high among other international organisations such as IMO and IHO, and the training will be disseminated globally for IALA Members. To date, support for IALA training has been provided by IHO, PRIMA, USCG, CCG, the Korea Ministry of Oceans and Fisheries, and KRISO.

8. CONCLUSION

The four Committees have demonstrated strong, coordinated progress in developing the S-200 series. In preparation for the mandatory introduction of S-100-compliant ECDIS in 2029, IALA, IHO, IMO and other international organisations are striving to develop the required standards and product specifications.

Nevertheless, training remains insufficient in scope; the number and geographic coverage of S-200 training sessions should be increased. These developments collectively support the delivery of standardised, digital and interoperable solutions for aids to navigation, vessel traffic services and wider maritime communication services within the S-100 framework.

9. ACTION REQUESTED

The council is requested to **NOTE** the information provided in this document.