



10 – TECHNICAL ACTIVITIES

10.6 – Product specifications and technical services

10.6.2 – Committee work on Technical Services

Note by the Secretariat

1. INTRODUCTION

During their respective sessions held between September 2025 and April 2026, the ARM, DTEC, ENG and VTS Committees continued their coordinated efforts to advance the development of standardised Technical Services (TS) under the IALA S-200 framework.

This work, encompassing the production of Service Specifications, Service Designs and Service Instance documentation, represents a significant step toward achieving interoperable digital maritime services in alignment with the S-100 framework. The activities reflect the growing maturity of IALA's approach to digital service delivery, particularly within the AtoN, PNT and VTS domains.

2. SUMMARY OF THE COMMITTEE WORKS

The following sections provide a summary of each Committee's ongoing work on Technical Service development.

Service Specification	Committee	PS	Completion Date	Service Design	Service Design Completion Date
Marine Aids to Navigation (AtoN) Technical Service Specification for the provision of AtoN information	ARM, DTEC	S-125	Edition 1.0.0: ARM18 Edition 2.0.0 (SS0003 IALA test version): ARM22	SECOM based (SD0003)	Edition 1.0.0: ARM19 Edition 2.0.0 (SD0003 IALA test version): ARM22
Marine Aids to Navigation (AtoN) Technical Service Specification for the provision of enhanced AtoN information	ARM, DTEC	S-201	Intersessional development post-ARM22 (TG Lead: GLA)	SECOM based (planned)	Planned
Voyage information service	VTS, DTEC	S-421, ...	WP v0.3 forwarded to VTS60 (VTS59)	Planned	Planned
Route exchange service	VTS, DTEC	S-421, ...	Edition 1.1.0: VTS58 Edition 1.2 WP forwarded to VTS60 (VTS59)	Route exchange Ed.1.1.0: VTS58	Edition 1.2 WP forwarded to VTS60 (VTS59)
S-200 based ASM provision	VTS (transferred from DTEC)	S-230	Operational considerations within draft Guidelines for the Implementation and Operation of S-200	Planned	Planned

Service Specification	Committee	PS	Completion Date	Service Design	Service Design Completion Date
Traffic clearance service	VTs, DTEC	S-212, S-421	Edition 1.5.0: VTS57 Ed. 1.5.X and Ed. 1.6 WPs forwarded to VTS60 (VTS59)	SECOM based	Edition 1.2.0: VTS57
Under Keel Clearance (UKC) Digital Service (new)	VTs, DTEC	S-100 framework	Edition 1.0: VTS59 (published on IALA website)	Planned	Planned

3. ARM

At ARM22, the Committee approved, as IALA test versions for publication, Technical Service Specification SS0003 (ARM22-10.2.2) - a technology-agnostic specification for the Provision of AtoN Information to End Users, based on the IHO S-125 data product specification - together with Technical Service Design SD0003 (ARM22-10.2.3) implementing SS0003 over IEC 63173-2 (SECOM).

Members are invited to test these documents and provide feedback. In addition, draft Guideline G1155-1 (ARM22-10.6.2.3) on the Description of the Aids to Navigation Maritime Service (MS 2) in the context of e-Navigation was prepared and forwarded for Secretariat quality-check and Member review.

An intersessional task group (Lead: Nikolaos Vastardis, GLA) will commence the definition of a Service Specification for the exchange of “Enhanced AtoN Information for AtoN Authorities”. Participation from all Committee members is encouraged.

4. ENG

At ENG22, work on the Technical Service framework for resilient PNT services was advanced through draft G1180 Edition 1.1 on Resilient PNT, amendments to Recommendation R1017 Edition 2.0, and the new Guideline on GNSS Satellite-based Precise Point Positioning (PPP) Maritime Service (ENG22-9.2.2.4).

The Committee also progressed the draft Guideline on the Implementation of MF and VDES R-Mode systems and services in coordination with DTEC and IMO NCSR, and initiated the table of contents for a future Guideline on the retransmission of SBAS data via VDES, supported by a draft Recommendation on SBAS Service to be presented at ENG23. A new Terrestrial-Based PPP Maritime Service task was also established.

5. VTS

The VTS Committee made significant progress on digital VTS Technical Services. At its 59th session, the Committee:

- Completed and published Service Specification for UKC Digital Service v1.0 (VTS59-12.2.1) on the IALA website under topical matters / technical services.
- Forwarded to VTS60 the working papers on Service Specification for Route Exchange Edition 1.2, Service Specification for VTS Information Service v0.3, and two iterations of the Service Specification for VTS Traffic Clearance (v1.5.X and v1.6).
- Agreed that joint sessions between WG1 (Operations) and WG2 (Technology) will become a standing feature at future committee meetings to ensure alignment between the operational and technical aspects of digital services.

These documents are key building blocks of the forthcoming S-212 Product Specification and ensure interoperability with digital route formats such as S-421 (Route Plan Exchange).

6. DTEC

At DTEC6, the Committee finalised Revised Guideline G1191 on the Maritime Service Registry (MSR) Technical Specification (DTEC6-15.2.1), the core infrastructure underpinning Technical Service discovery and registration across all domains.

The feasibility study for an operational IALA MCP instance under IALA custodianship was advanced (DTEC6-15.2.5 / 15.2.6), and further intersessional and inter-committee meetings are planned to progress the harmonisation of Technical Services. Further amendments to G1128 (Specification of e-Navigation Technical Services) have been deferred pending stabilisation of the SECOM Standard.

7. CONCLUSION

The ARM, ENG, VTS and DTEC Committees have made tangible advances in the development of IALA Technical Services by producing detailed Service Specifications, Service Designs and the foundational documents and infrastructure necessary for future implementation.

Ongoing close coordination among the Committees will be essential to complete validation and testing of these services, to align with the SECOM Standard and IEC type-approval timelines, and to support early operational deployments of these services over the coming years.

8. THE COUNCIL IS REQUESTED TO

NOTE the information provided in this document.