

**IALA COUNCIL
3rd Session**



**8 - 12 December 2025
Mumbai, India**

10 – TECHNICAL ACTIVITIES

10.4 – DTEC

10.4.1 – DTEC5 summary report

Note by the Secretariat

1. INTRODUCTION

The fifth session of the Digital Technologies (DTEC) Committee was held from 29 September to 9 October 2025, chaired by Hideki Noguchi and vice-chaired by Dennis Khoo, with Alisa Nechyporuk serving as Secretary.

The physical meeting week took place from 29 September to 3 October at IALA Headquarters, followed by an approval period and a virtual closing plenary on 9 October. A total of 150 participants from 27 countries and two Sister Organizations attended DTEC5, including 27 first-time participants.

2. SUMMARY OF THE WORK ITEMS

The Committee reviewed and updated its work programme for 2025–2027, achieving substantial progress across three Working Groups:

Working Group 1 – Digital Information Systems

- Revision of Guideline G1191 Maritime Service Registry, submitted for Council approval.
- Preparation of an input paper to IMO NCSR 13 on IP-based connectivity and standardization of SECOM and MCP.
- Initiation of a feasibility study for establishing an operational IALA MCP instance under IALA custodianship, with liaison notes issued to PAP, ARM, ENG, and VTS.
- Continuation of work on MRN, reaffirming DTEC's role in managing MRN-related documentation.
- Review of Guideline G1128 Specification of e-Navigation Technical Services, with further updates planned for DTEC6.
- Closure of the Product Specification for Disaster Management task, with recommendations transferred to ARM Committee.

Working Group 2 – Emerging Digital Technologies

- Development of a draft Recommendation on the Digitalization of Marine AtoN and Services for Vessels of Varying Autonomy, in liaison with ARM.
- Initiation of a complete rewrite of Guideline G1178 on Artificial Intelligence (AI), addressing new technologies such as generative AI and explainable AI.

- Support to IALA WWA in refining the C1004 Model Course on GNSS and e-Navigation, aligning training content with emerging digital skills.
- Advancement of the draft Guideline on Marine AtoN over IMT-2030 (6G), including coordination for IALA's prospective participation in 3GPP as a Market Representation Partner.
- Development of the IALA Discussion Paper "Vision Towards Digitalization in the IALA Domain", distributed to ARM, ENG, and VTS for input.
- Substantial progress on the Guideline on the Digitalization of Waterways, emphasizing connectivity, cybersecurity, and digital twin implementation.
- Completion of reviews of several emerging technologies (e.g. 5G-NR positioning, resilient PNT, Galileo OSNMA, and remote pilotage), with results incorporated in the Technology Review Tracker.

Working Group 3 – Digital Communication Systems

- Continued progress on VDES resource sharing, shore-based infrastructure, and VDES roadmap maintenance.
- Ongoing coordination with ITU-R, IEC, and IMO on the finalization of VDES-related standards, including VDES Performance Standards and ITU-R M.2092-2 revision.
- Support to the development of VDES R-Mode and related contributions for IMO and ITU study groups.

3. OUTCOMES OF THE COMMITTEE

The following draft documents have been prepared for Council approval:

- C03-10.4.2 (DTEC5-15.4.3) Revised Recommendation R0144 Harmonised implementation of Application Specific Messages (ASM)
- C03-10.4.3 (DTEC5-15.2.5) Revised Guideline G1191 on Maritime Service Registry (MSR) technical specification.

The following liaison notes have been prepared for Council approval:

- C03-12.2.1 (DTEC5-15.2.1) Input paper to IMO NCSR 13 on IP-based connectivity.
- C03-12.2.2 (DTEC5-15.3.3) Information paper to IMO NCSR on the result of the IALA IMT Workshop.

4. THE COUNCIL IS REQUESTED TO

NOTE the information provided in this document.