

Workshop Working Group Terms of Reference

3rd Joint IHO/IALA Workshop on S-100/200 Development and Portrayal
Istanbul, Türkiye, 1 to 4 September 2026

The International Organization for Marine Aids to Navigation (IALA) and the International Hydrographic Organization (IHO) in association with the Directorate General of Coastal Safety are hosting the third joint workshop on S-100/200 development and portrayal to be held in Istanbul, Türkiye, from 1 to 4 September 2026.

Working Groups

In order to achieve the workshop objectives the participants will divide into three Working Groups (WGs) that are open to all participants of the workshop. The Co-chairs of these WGs are:

Working Group	Focus	Co-Chairs
Working Group 1	Operational	Dave Lewald and Selay Turan
Working Group 2	Technical	Alison Contreras and Sewoong Oh
Working Group 3	Training	Heather Gilbert and Ulla Møller

Working Group Objectives

Suggested outcomes from these WGs have been identified as:

Working Group 1 – Operational

- Review the actions identified during the previous workshops and implement necessary follow-up steps.
- Identify remaining gaps relating to portrayal within various product specifications related to Aids to Navigation and VTS product specifications. Additionally, identify and document any gaps in the planned S-101 AtoN portrayal, for example – sector (complex) lights.
- Define the interaction between S-101 ENCs, S-124, S-125 and S-201, as defined/permitted in S-98.
- Liaison, discuss and provide guidance on S-12 (Light List)/S-125 development (carriage requirements fulfilment)
- Consider the requirement for the List of Lights as a separate GIS Layer.
- Consider if AIS AtoN will have S-101, S-124, S-125 symbology or use existing IEC62288 symbology? Will S-124 and S-125 develop same/different symbology for non-ENC displays, i.e. radar?
- Contribute to the proposals for the workshop conclusions.
- Submission of WG notes to the Workshop Report.

Working Group 2 – Technical

- Consider lessons identified from IHO and IALA on S-124, S-125 and S-201 test beds (review test bed report).
- Consider action item HSSC 18/054 on technical service specifications.
- Consider how IHO and IALA should cooperate on SECOM and MCP to ensure interoperability and alignment between relevant IHO and IALA technical frameworks.
- Identify and document technical gaps in standards S-101, S-124, S-125 and S-201.
- Consider and document any actions to undertake to support cyber security.
- Conduct a comprehensive review of standards S-124 and S-201 and its derivative S-125 product specification.
- Develop a framework for a machine-readable environment that includes alerts and alarms, enabling machine-to-machine communication with human response triggers.
- Address and resolve any outstanding questions regarding standard S-124.
- Consider the need for S-258 (Validation) for IALA products.
- Contribute to the proposals for the workshop conclusions.

- Submission of WG report to the Workshop Report.

Working Group 3 – Training

- Discuss IALA S-200 courses, review and document observations.
- Identify training gaps in the S-100 starter course for both external (mariners/users) and internal (Hydrographic Offices and AtoN authorities) audiences in preparation of a submission for IMO MSC. (Update on IMO Model Course 7.03)
- Review and provide recommendations for amendment of relevant IALA and IHO documentation to determine the technical knowledge requirements for managers.
- Consider training needs based on recent changes/developments to AtoN, such as AIS AtoN.
- Discuss and review external training on particular technical aspects.
- Contribute to the proposals for the workshop conclusions
- Submission of WG report to the Workshop Report

Working Methods

In order to achieve their objectives the Working Groups may:

- draw upon the presentations, discussions and experiences shared during the workshop;
- focus on operational, technical and training challenges, implementation experience and practical outcomes, as appropriate to their remit;
- identify gaps, challenges and opportunities relating to S-100 and S-200 implementation and development;
- consider existing IHO and IALA standards, publications and related documentation;
- consider relevant developments in technology, services, regulation and operational practice;
- encourage contributions from all participants and seek to capture a range of perspectives;
- liaise with other Working Groups where topics overlap to promote a coordinated approach;
- seek to reach conclusions and recommendations by consensus wherever possible; and
- identify proposals, recommendations or potential actions for consideration by IHO, IALA and other relevant bodies.

Outputs

The Working Groups should capture their discussions using the template provided by the Workshop Secretary.

Outputs should focus on clarity and usefulness and should identify:

- key findings and observations;
- identified gaps, challenges or issues;
- examples of effective practice, where relevant;
- recommendations for consideration by IHO, IALA or other relevant bodies; and
- proposed actions or tasks arising from the discussions.

The Working Group notes should be provided to the Secretary by the end of the workshop for inclusion as an annex to the Report.

Reporting Back

Each Working Group should provide a short summary of its findings during the final plenary session.

The summary should highlight:

- key findings;

- key recommendations; and
- any proposed actions or tasks identified by the Working Group.