

THIS CIRCULAR LETTER REQUIRES YOU TO VOTE

IHO File No S3/8151/S-100

CIRCULAR LETTER 50/2026
22 September 2026

S-100-BASED PRODUCT SPECIFICATIONS

S-101 EDITION 2.1.0 Electronic Navigational Chart

CALL FOR APPROVAL

References:

- A. HSSC18 meeting 18-22 May 2026 – Action HSSC18/51.
- B. HSSC CL 04/2026 dated 28 July 2026 – Call for HSSC Endorsement of S-101 Product Specifications Edition 2.1.0.
- C. IHO Resolution 2/2007 - Procedures for making changes to IHO Technical Standards and Specifications.
- D. HSSC List of Members (HSSC-02 as of 28 July 2026).
- E. HSSC ToRs and RoPs (HSSC-01 as of January 2024).

Dear Hydrographer,

1. As instructed by the HSSC at its 18th meeting (Reference A), the endorsement process of the new Operational Edition 2.1.0 of Product Specification S-101 – *Electronic Navigation Chart* was initiated with Reference B. The required impact study as completed in accordance with Reference A as part of the HSSC endorsement process indicated support for this new Operational Edition of S-101.
2. The HSSC Chair/IHO Secretariat thanks the following twenty (20) HSSC Members who responded to Reference B: Australia, Brazil, China, Denmark, Estonia, Finland, France, Germany, Greece, India, Indonesia, Netherlands, Norway, Peru, Singapore, Spain, South Africa, Sweden, United Kingdom, and United States of America.
3. Nineteen (19) out of the 37 HSSC Members (Reference D) voted in favour of the proposed new edition of the S-101 Product Specification submitted with Reference B, hence receiving endorsement by the HSSC in accordance with Reference E. All comments received (nine in total) are provided in Annex A to this Circular Letter, with responses from the S-101 Project Team Chair, the HSSC Chair and IHO Secretariat. This enabled HSSC to formally endorse the candidate edition which now includes amendments from the endorsement phase by the HSSC as adjudicated in Annex A.
4. Noting the continued efforts by the S-101 Project Team to consolidate the new edition documentation along the endorsement process, the resulting draft Product Specification has been made available in the IHO Geospatial Information (GI) Registry > Test Bed > [Product Specifications](#)

repository (S-101) and on the IHO website > Publications > [Draft Publications](#) > Draft Publications awaiting approval by Member States. Member States are now invited, in accordance with Reference C, to approve the proposed new edition 2.1.0 of the S-101 Product Specifications **no later than 13 November 2026** using the IHO Online Form accessible through the following link:

https://iho.formstack.com/forms/cl_50_2026

5. Member States must note, as part of considerations for their vote, that if edition 2.1.0 of S-101 is adopted and enters into force, edition 2.0.0 of S-101 will continue as an in-force version of S-101 subject to its removal as an effective edition at a future date to be determined by the Member States.

On behalf of the Secretary-General

Yours sincerely,



Dr John NYBERG
Director

Annex:

- A. HSSC Members' responses to HSSC CL 04/2026 and comments from the S-101PT Chair/HSSC Chair and IHO Secretariat (in English only)

**HSSC MEMBERS' RESPONSES TO HSSC CL 04/2026 AND COMMENTS
FROM THE WORKING GROUP and PROJECT TEAM CHAIRS, HSSC CHAIR / IHO SECRETARIAT**

S-101-ENC Product Specification, Ed. 2.1.0	Operational Product Specification
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CHINA (Vote for endorsement = YES)

S-101 2.1.0 Annex A - Section 5.7.1

Suggested Change:

Change""...with attribute category land region = *21* (wadi)..."" to ""...with attribute category of land region = *21* (wadi)...""

Reason: To correct the attribute name to category of land region, ensuring consistency with the attribute's usage throughout other sections of the document (e.g., Section 5.11, Clause 27.34).

S-101 2.1.0 Product Specification- Document History

Suggested Change:

In the Document History section, the first table, last row under the ""Date"" column, change ""Xxxx 2025"" to ""Xxxx 2026"", ""IHO CL xx-2025"" to ""IHO CL xx-2026"".

Reason: The cover page and metadata section both indicate the publication year as 2026. The date in the Document History table should be consistent with the cover page (Edition 2.1.0.20260310 -- Xxxx 2026) and the metadata (Date: Xxxx 2026).

Comments by the S-101 PT Chair and HSSC Chair/Secretariat:

The S-101 PT Chair/HSSC Chair/Secretariat thank China for their comments. The changes as identified by China have been applied to the S-101 Main document and DCEG for S-101 Edition 2.1.0.

DENMARK (Vote for endorsement = YES)

DGA supports the endorsement of the Edition 2.1.0 of Publication S-101, but have the following comments:

- 1) Recommend that DCEG clause 3.5.1, second Remarks bullet is removed.

"Where a dataset consists of only one Data Coverage feature, the value for the optimum display scale populated in the dataset discovery metadata must be the same as the value populated for optimum display scale on the Data Coverage."

There is an inconsistency between the Product Specification and the DCEG regarding **DataCoverage** features and **datasetDiscoveryMetadata**. The Product Specification has the revised statement (clause 4.5.3) and is the appropriate place for this information and does not need to be duplicated in the DCEG.

- 2) Recommend that Figures 4.5 and 4.6 in the Product Specification are amended to include Maximum Display Scale, to assist with ENC scheming.

Comments by the S-101 PT Chair and HSSC Chair/Secretariat:

The S-101 PT Chair/HSSC Chair/Secretariat thank Denmark for their comment. The former guidance in S-101 Annex A – *Data Classification and Encoding Guide* (DCEG) has been replaced with a reference to the relevant clause (5.4.3) of the S-101 Main document.

FRANCE (Vote for endorsement = YES)

An inconsistency between the S-101 features **Fairway** and **FairwaySystem** has been identified: the complex attribute **periodicDataRange** is an allowable attribute for **FairwaySystem** but not for **Fairway**, while the attribute status is an allowable attribute for **Fairway** but not for **FairwaySystem**.

FR suggests correcting this inconsistency in Edition 2.1.0, subject to agreement and endorsement by the S-101PT/S-100WG as part of the ongoing endorsement/adoption process.

As these changes would have no impact on the S-101 Portrayal Catalogue, would require no consequential changes to S-98, and would have no retrospective impact on S-101 data already produced, FR considers that they can be incorporated into Edition 2.1.0.

Comments by the S-101 PT Chair and HSSC Chair/Secretariat:

The S-101 PT Chair/HSSC Chair/Secretariat thank France for their comment. The inconsistency as pointed out by France has been discussed within the S-101 Project Team and it has been agreed that the change to the S-101 data model as suggested by France is required. It is also noted that the resultant changes would have no impact on the S-101 Portrayal Catalogue and S-98. The changes have therefore been applied for the S-101 Feature Catalogue and DCEG for S-101 Edition 2.1.0.

GERMANY (Vote for endorsement = NO)

Please see the uploaded file for additional Information. Thank you.

Comments by the S-101 PT Chair and HSSC Chair/Secretariat:

The S-101 PT Chair/HSSC Chair/Secretariat thank Germany for their comment. The following addresses the issues raised by Germany:

- Issue 1: This was an oversight by the S-101PT and S-100WG executives. A summary report of the S-101 Edition 2.1.0 was shared among the S-100WG and S-101PT executives, but was not forwarded on to the full membership of the S-101PT and S-100WG. This oversight is noted and will be raised for discussion on a more formalised approach to the conduct of Impact Assessments at the upcoming S-100WG11 meeting and possibly at the IHO Council (C-10) in October. It should be noted that there were no negative/adverse comments received for moving forward with the publication of S-101 Edition 2.1.0.
- Issue 2: An XSD file reflecting the Product Specification specific Exchange Catalogue restrictions additional to the S-100 restrictions was not developed for S-101 Edition 2.0.0 due to limited resources. A draft XSD has been prepared and has been submitted to the upcoming S-101PT18 meeting (October 2026) for consideration and approval. It is also hoped that a corresponding XSD file will also be prepared to cover the gap that existed in S-101 Edition 2.1.0.

- Option 3: Options have been proposed to resolve this issue, and these will be discussed at the upcoming S-100WG 11 meeting (September 2026) and the S-101PT18 meeting. The agreed solution addressing this issue will be implemented for S-101 Edition 2.1.0.

INDONESIA (Vote for endorsement = YES)

Indonesia endorse the proposed S-101 Edition 2.1.0. We believe that this revision will further improve the standard and facilitate the implementation and production of S-101 ENC by Hydrographic Offices.

Comments by the S-101 PT Chair and HSSC Chair/Secretariat:

The S-101 PT Chair/HSSC Chair/Secretariat thank Indonesia for their comment.

SPAIN (Vote for endorsement = YES)

The proposed draft of Revision 2.1.0 of S101 is endorsed, although it may be necessary to check two possible errors:

- On page 46, in clause 12.1.2.6 **S100_ProductSpecification**, the version attribute states 2.0.0 instead of 2.1.0.
- On page 31, it states that the Exchange Set must include **CATALOG.XML** and **CATALOG.SIGN** with the signature, but on the following page, 32, in section 11.3.1 Datasets, the paragraph ends by stating that the Exchange Set must only include **CATALOG.XML**, omitting **CATALOG.SIGN**.

Comments by the S-101 PT Chair and HSSC Chair/Secretariat:

The S-101 PT Chair/HSSC Chair/Secretariat thank Spain for their comment. The updating of the Edition of S-101 to Edition 2.1.0 has been applied. In regard to the omission of the CATALOG.SIGN file from clause 11.3.1 of the S-101 Main document, input from the relevant S-100WG/S-101PT experts indicate that reference to the CATALOG.SIGN is not required for this clause, as clause 11.3.1 has only datasets as its scope so does not need to include any reference to CATALOG.SIGN.

SWEDEN (Vote for endorsement = YES)

To be able to update S-101 ENC with new or updated VTS Areas in advance of their in-force date, the complex attribute **fixedDateRange** needs to be added to the **VesselTrafficServiceArea** feature as described and justified in this GitHub issue: <https://github.com/iho-ohi/S-101-Documentation-and-FC/issues/257>

This comment has been coordinated with the S-101PT chair team.

Comments by the S-101 PT Chair and HSSC Chair/Secretariat:

The S-101 PT Chair/HSSC Chair/Secretariat thank Sweden for their comment. The use case for a requirement to provide advance notification of changes to Vessel Traffic Service information as pointed out by Sweden has been discussed within the S-101 Project Team via the referenced GitHub Issue and it has been agreed that the change to the S-101 data model as suggested by Sweden is required. It is also noted that the resultant change would have no impact on the S-101 Portrayal

Catalogue and S-98. The change has therefore been applied for the S-101 Feature Catalogue and DCEG for S-101 Edition 2.1.0.

UNITED KINGDOM (Vote for endorsement = YES)

All proposed draft changes (as supplied in S-65 Annex B, Edition 2.0.1, S-65 Annex B, Edition 2.1.0, S-65 Annex C, Edition 1.0.1, & S-65 Annex C, Edition 1.1.0 are logical and make complete sense when aligned to the overarching development of Edition 2.1.0 the S-101 Standard.

The United Kingdom therefore fully accepts and endorses these proposals.

Comments by the S-101 PT Chair and HSSC Chair/Secretariat:

The S-101 PT Chair/HSSC Chair/Secretariat thank United Kingdom for their comment.