

IHO File No S3/8152 & S3/8151/S-65

**CIRCULAR LETTER 26/2021**  
**01 July 2021**

**SURVEY ON THE PRODUCTION  
OF HIGH DENSITY ENC<sub>s</sub> (HD ENC<sub>s</sub>)**

- References:
- A. Action IRCC11/04.
  - B. S-65, Annex A, Edition 1.0.0, January 2020 – *HD ENC Production and Maintenance Guidance*.
  - C. Doc. IRCC13-07D1 and Annex B – *WENDWG Report to IRCC and Proposed Questionnaire*.
  - D. Decision IRCC13/15.

Dear Hydrographer,

1. The 11<sup>th</sup> meeting of the Inter-Regional Coordination Committee (IRCC-11) tasked the Worldwide ENC Database Working Group (WENDWG) to prepare a questionnaire to capture the status and plans of users/producers of High Density ENC<sub>s</sub> and report back to IRCC (Reference A).

2. Following IRCC-11, the WENDWG noted that an approved definition and other specifics of HD ENC<sub>s</sub> were not available yet and this task was postponed.

3. In January 2020, Edition 1.0.0 of HD ENC Production and Maintenance Guidance was issued as Annex A to S-65 - *ENC<sub>s</sub>: Production, Maintenance and Distribution Guidance* (Reference B).

4. At WENDWG-11 (February 2021), the WENDWG noted the report of IC-ENC on HD ENC<sub>s</sub> and agreed on the value to conduct a Member States survey on their respective HD ENC<sub>s</sub> Production Plans. The WENDWG developed a questionnaire intended for ENC producers to report their production plans of HD ENC<sub>s</sub>. The Working Group also noted that the impending release of S-102 data from hydrographic offices makes it increasingly important to understand global plans regarding HD ENC<sub>s</sub>. The proposed WENDWG questionnaire (Reference C) was approved by IRCC-13 and it was decided to commence the survey. (Reference D).

5. The general objectives of the survey are as follows:

- To gather IHO Member States' intentions on the production plans of HD ENC<sub>s</sub> in their areas of responsibilities (national level, or as primary charting authority).
- To collate the production techniques, timeliness dataflow and arrangements with port authorities.
- To identify challenges faced by the current and prospective HD ENC producers namely, production and distribution chain, quality control and consistency with other nautical products (ENC<sub>s</sub>, ENC coverage, nautical publications, etc).

- To share harmonization/best practices insights and know-how.
- To interview HD ENC Producers on their intentions once S-102 becomes operational.
- Survey target: IHO Member States<sup>1</sup>. Information: RENCs/RECC.

6. The outcome of the survey is planned to be made available on the WENDWG webpage (<https://iho.int/en/wendwg>). The consolidated report will be finalized at the WENDWG-12 meeting planned for February 2022 with conclusions and recommendations to be reported at IRCC-14 (May/June 2022).

7. As requested by the IRCC (Reference D), the IHO Secretariat now invites Member States to participate in the survey, by email ([cl-lc@iho.int](mailto:cl-lc@iho.int) when using the form in Annex A), but preferably using the IHO Online Form System by accessing the following link:

[https://IHO.formstack.com/forms/cl\\_26\\_2021](https://IHO.formstack.com/forms/cl_26_2021)

8. Responses should reach the IHO Secretariat **not later than 30 September 2021**.

On behalf of the Secretary-General  
Yours sincerely,



Luigi SINAPI  
Director

Annex : HD ENCs Questionnaire

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<sup>1</sup> In accordance with P-5 contact details.

**HD ENC's QUESTIONNAIRE**

(to be returned to the IHO [cl-lc@iho.int](mailto:cl-lc@iho.int) by 30 September 2021)

**Member State**

Note: circle the correct answer.

**Q1** Are you aware of the publication of Edition 1.0.0 of Annex A to S-65 (HD ENC's)?

Yes No

Comment: .....

**Q2** Since the publication of Edition 1.0.0 of Annex A to S-65 (HD ENC's), do you plan to or do you produce specific HD ENC's, or did you produce HD-like ENC's even before Annex A was available?

Yes No

If yes, please explain production basic strategy in few words and use cases you are aware of.

Comment: .....

**Q2.1** If you don't produce specific HD ENC's, does it mean that HD-type information is incorporated into existing regular ENC cells?

Yes No

Comment: .....

**Q2.2** Do you plan to adopt a systematic coverage of specific areas?

Yes No

What are these specific areas?

- a. Main ports
- b. Channels and waterways
- c. Others

Comment: .....

**Q2.3** How do you determine where HD ENC's will add value to users?

- a. customer feedback
- b. port recommendation
- c. analysis of traffic patterns and depth constraints
- d. other

**Q3** In your country, who is the organization responsible for the production of HD ENC's?

**Q3.1** The Hydrographic Office?

Yes No

**Q3.2** Port authority(ies) (or equivalent)?

Yes No

Comment: .....

**Q3.3** Both

Yes No

Comment: .....

**Q4** When the Hydrographic Office is not the official producer of the HD ENC's, is there any delegation of production responsibilities to the port authority (or equivalent)?

Yes No

Comment: .....

**Q4.1** do you use the national S-62 producer code for these HD ENC's?

Yes No

Comment: .....

**Q4.2** or does the port authority use its own agency S-62 producer code?

Yes No

Comment: .....

**Q5** What is the update regime of your HD ENC's? Is it driven by the update regime of the surveys? Impact on quality control? Impact on the distribution chain? (RENC, etc.)? Impact on the other usage bands?

Comment: .....

**Q5.1** Periodic updates (weekly?)

Yes No

Comment: .....

**Q5.2** Non periodic, depends on new survey data

Yes No

Comment: .....

**Q5.3** Average time between two HD ENC editions

Comment: .....

**Q5.3.1** Depend on the variability of the area?

Yes No

Comment: .....

**Q5.3.2** Depend on the last survey order?

Yes No

Comment: .....

**Q5.3.3** Do you maintain other ENC editions (usage band 5 for instance, produced by HO) using data from new HD ENC editions? Even when the production chain is shared with other authorities?

Yes No

Comment: .....

**Q6** In critical areas where HD ENC editions are produced...

**Q6.1** what is the average time between two surveys?

1 week? 2 weeks? 1 month? 2 months?

Comment: .....

**Q6.2** how are the surveys aiming to provide data to HD ENC editions processed/validated?

automatically? Semi-automated? Manual?

Comment: .....

**Q6.3** what is the average time between the outcome of a new survey and the availability on the bridge of your HD ENC edition?

1 week? 2 weeks? 1 month? 2 months?

Comment: .....

**Q7** Are you aware of the availability of Edition 2.0.0 of S-102 Product Specification - *Bathymetric Surface*?

Yes No

Comment: .....

**Q8** Are you aware of specific requirements by Port State Control authorities?

**Q8.1** for these HD ENC editions?

Yes No

Comment: .....

**Q8.2** or for S-102 products when they start to become available?

Yes No

Comment: .....

**Q8.3** In your opinion, what are the advantages and drawbacks if any, of a HD ENC compared to a non HD S-101 ENC coupled with S-102 product?

Comment: .....

**Q9** Is it your intention to start the regular production of S-102 products in some areas in your country?

Yes No

Comment: .....

**Q10** If you intend to produce S-102 products, do you intend to adapt or withdraw your HD ENCs, if you are producing them?

Yes No

Comment: .....

**Q11** Once S-101 becomes operational and S-100 ECDIS become available, do you envisage to “convert” your existing HD ENCs

**Q11.1** to new S-101 [HD-like] ENCs?

Yes No

Comment: .....

**Q11.2** to S-102 products only?

Yes No

Comment: .....

**Q11.3** or do you envisage to maintain both HD ENCs and S-102 products?

Yes No

Comment: .....

**Q12** Based on your experience (HD ENCs, S-102 test data sets), what are the top 3 recommendations you would like to share with the IHO Member States willing to start their production of HD ENCs?

Comment: .....

**Q13** Based on your experience (HD ENCs, S-102 test data sets), what are the top 3 recommendations you would like to share with the IHO Member States willing to start their production of S-102 products?

Comment: .....