

## 11<sup>TH</sup> MEETING OF THE WORLDWIDE ENC DATABASE WORKING GROUP (WENDWG)

Video-conference, 17 – 18 February

Contribution to the IHO Work Programme 2021	
Task 3.4.1	Organize, prepare and report annual meetings of the WEND Working Group - Foster the implementation of the WEND principles including WEND100 principles). Monitor progress and report to IRCC.

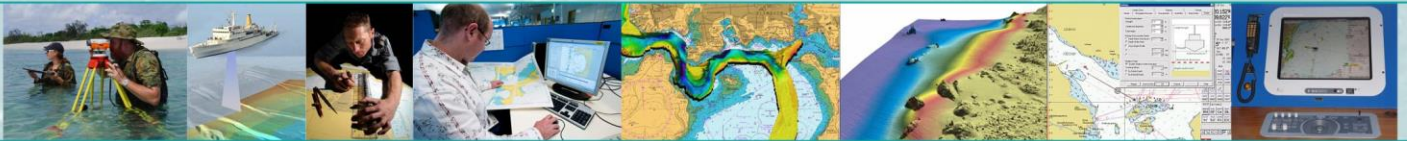
The 11<sup>th</sup> meeting of the Worldwide ENC Database Working Group (WENDWG), initially scheduled in the USA, was arranged by video teleconference (VTC) from 17 to 18 February 2021 as an effect of the persistence of the pandemic and in order to match the countdown for submission proposals to the IRCC and Council. The meeting was chaired by Mr John Nyberg (United States of America). Fifty-six delegates from 24 Member States (Argentina, Brazil, Canada, China, Croatia, Denmark, Finland, France, Germany, India, Indonesia, Italy, Japan, Malaysia, Netherlands, Norway, Republic of Korea, Portugal, Singapore, South Africa, Sweden, Turkey, United Kingdom and United States), the Chairs of the S-100WG, MSDIWG<sup>1</sup> and NIPWG<sup>2</sup>, the Chairs of the IC-ENC Steering Committee and PRIMAR Advisory Committee and the directors/managers of the RENCs/RECC attended the meeting. Director Luigi Sinapi and Assistant Director Yves Guillam (Secretary) represented the IHO Secretariat.

The Chair welcomed the participants, reviewed the tasks given by the IRCC, the Assembly and the Council and invited the WENDWG Members to agree on the objectives of the meeting:

- Final development of a new IHO Resolution on WEND-100 Principles to be submitted to the IRCC in June;
- Development of Guidelines for the Implementation of WEND-100 Principles and their application to the various S-1xx Products;
- Contribution of the WENDWG to the incremental development of the Roadmap on the S-100 Implementation Decade;
- Proposal for the evolution of INTogIS II to INTogIS III, as a platform to manage and monitor the availability of S-100 services as they develop

<sup>1</sup> Marine Spatial Data Infrastructures Working Group.

<sup>2</sup> Nautical Information Provision Working Group.



- Follow-up on the Status of the Production of HD ENC's by Region.

The WENDWG Secretary presented the proposed IHO Resolution on the WEND-100 Principles as endorsed by the Assembly in November 2020, as well as the possible consequences on the associated documentation framework (Resolution, S-11 Part A, Specific Annex on the recommendation for S-101 ENC's Scheming for the transition from S-57 to S-101, Guidelines for the Implementation of S-1xx Products). This led to an important discussion on the unique opportunity offered to Member States, Regional Hydrographic Commissions, supported by the IHO and the WENDWG in particular, on the most cost-effective option(s) to move from existing S-57 ENC schemes to S-101 ENC schemes. A feasibility and impact study on new grid-based schemes, where possible, or keeping the existing S-57 ENC schemes for the next decades, were recommended to assess the best way forward for each commission and for end-users, including mariners. An ad hoc drafting group will prepare some guidelines and recommendations on the establishment of S-101 ENC's Schemes before the production starts.

<b>IHO WEND-100 Principles – IHO Resolution xx/2021</b>	
<b>S-1xx World</b>	
<p><b>WEND-100 Principles</b> including Annex: <a href="#">Guidance for the Establishment of S-101 ENC Schemes and Production Responsibilities</a></p> <p><b>Stakeholders:</b> S-101 ENC Producers, S-1xx Producers, ICCWG, RHCs, RENCS, WENDWG, HSSC, IRCC, Council</p>	<p><b>S-11 Part A</b> including Section 200: <b>Guidance for the Preparation and Maintenance of ENC Schemes (to be updated?)</b></p> <p><b>Guidelines for the Implementation of the WEND-100 Principles for S-1xx Products</b></p>
<p><b>Roadmap for the Implementation Decade</b></p>	<p><b>Repository: INToGIS III</b></p>

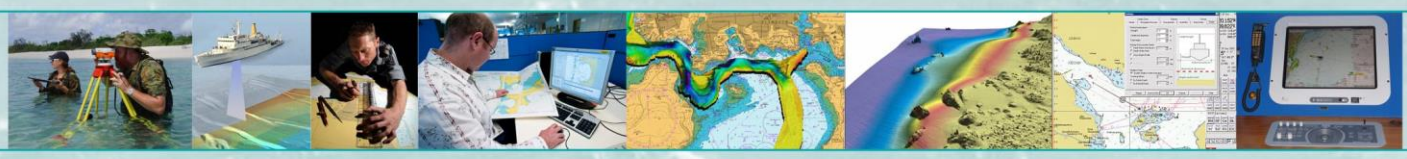
<b>IHO PROPOSALS FOR NEW IHO RESOLUTION WEND-100 PRINCIPLES</b>
<p>... unless we think that, noting that there is no one-to-one obvious relationship between the 6 UBs of S-57 ENC's and the 14 Display Scales of S-101 ENC's by construction (see Doc. WENDWG11-04.1C), there may be great opportunity under the S-100 framework for WENDWG to consider other technical options such as grid-based schemes (on case-by-case basis, for some charting regions only) that might enable much better co-ordination, seamless coverage, harmonized production, elimination of significant overlaps!</p>

*Can we ensure a smooth and cost-effective transition and do better in the S-1xx World that we did in the S-57 World?, that is a WEND question.*

The status reports delivered by the SAIHC and ARHC representatives (respectively Region H and N) on the possible evolution of ENC Schemes, including pros and cons, were duly noted. The representative of the MBSHC (Region F) reported on the increasing ENC overlaps in some areas and the difficulties to apply the IHO Resolution 1/2018<sup>3</sup>. Some other participants indicated that solutions for this particular issue should be implemented in ECDIS loading strategies, since they cannot be solved at the IHO and RHCs levels.

On the assumption that some S-1xx products (i.e. S-102, S-104, S-111, S-128 and S-129) may be ready for implementation and dissemination before S-101 ENC's are produced, the WENDWG agreed to set up another ad hoc drafting group led by the Netherlands to develop

<sup>3</sup> Elimination of overlapping ENC data in areas of demonstrable risk to the safety of navigation.



some Implementation Guidelines in application of the WEND-100 Principles, without waiting for the adoption by the Member States<sup>4</sup> of the new IHO Resolution.

Thanks to the support provided by KHOA (ROK), the WENDWG agreed on the way forward to consider the subsequent development of INTOGIS III, using S-128 standard as far as possible, in order to allow HOs and other users to manage and visualize S-1xx products coverage in the future. This new functionality offered through the IHO GIS toolbox could become a key component of the Roadmap for the S-100 Implementation Decade. Suggestions were made by the RENCs to first make an inventory of the existing digital catalogues, overlap and gap checkers, in order to optimize the efforts.

It was also agreed to report to IRCC on the value of a survey among Member States, questioning on their plans for producing HD ENC's... in particular once S-102 is under production.

At the end of the meeting, Mr John Nyberg (USA) and Ms Annika Kindeberg (Sweden) were re-elected respectively as Chair and Vice-Chair of the WENDWG.



Participants of the WENDWG11 VTC meeting.

The 12<sup>th</sup> meeting of the WENDWG is scheduled to be held in the USA, from 22 to 24 February 2022.

<sup>4</sup> With Council 5 in October 2021, the new IHO Resolution will be adopted at the beginning of 2022.