



IHO Worldwide ENC Database Working Group (WENDWG)

3rd Meeting, Monaco, 13-14 May 2013

FINAL MINUTES

Chair: Capt. Jamie McMichael-Phillips (UK)

Vice-Chair: vacant

Secretary: Mr. Alberto Costa Neves (IHB)

Notes: 1) The paragraph numbering is the same as in the agenda (Doc. WENDWG3-02 Agenda)
2) The list of annexes is provided in the end of this report
3) All documents referred to in these minutes are available from the WENDWG page of the IHO website:

http://www.iho.int/mtg_docs/com_wg/WEND/WENDWG3/WENDWG3-Docs.htm

1. Opening and Administrative Arrangements

Docs: WENDWG3-01A *List of Documents, by IHB*

WENDWG3-01B *List of Participants, by IHB*

WENDWG3-01C *WENDWG Membership, by IHB*

WENDWG3-01D *Terms of Reference for WENDWG (Amendment 1), by IHB*

WENDWG3-01E *Observations on the draft Terms of Reference, by USCHC*

The third meeting of the IHO WEND Working Group (WENDWG3) took place at the IHB in Monaco, 13 and 14 May 2013. The WENDWG Chair (Capt. Jamie McMichael-Phillips, UK) opened the meeting and welcomed all 24 participants (two via teleconference) representing eight RHCs (BSHC, NHC, USCHC, MBSHC, SWAtHC, NSHC, EAHC, EAthC), seven Member States, two RENCs (IC-ENC and PRIMAR), and the IHB.

IHO President Robert Ward welcomed the participants and noted the importance of WENDWG to raise the profile of the IHO. He stressed that the WG deals with key information that should be made available to the maritime world. He further noticed that data availability has to be beyond the RENC model. According to him the stakeholders express that their concern number one is ENC coverage, number two is ENC availability, then data inconsistencies. Address these priorities is the challenge to the WENDWG.

The WENDWG Secretary, Assistant Director Alberto Costa Neves (IHB), introduced the documents. The List of Participants was updated (**Annex A**). The Chair noted that an apology had been received from Jens Peter Weiss Hartmann (Denmark). The new representative from SWAtHC (Capt. Cavalheiro) announced that Capt. Medeiros de Albuquerque resigned from the post of WENDWG Vice Chair.

The Secretary presented the Terms of Reference that have been revised in WENDWG2. The WG decided to propose a change in the composition from RHC to MS representatives. The WG also

considered the need to include a clause to clarify the voting process but the decision was to not include such a clause. The WG reviewed the ToR (**Annex B**) and the Chair will submit the document to IRCC5.

Action 1: WENDWG to review of the current ToR during the meeting (Action completed).

Action 2: Chair to submit the Revised ToR to IRCC (Deadline: at IRCC5)

2. Approval of Agenda

Doc: WENDWG3-02 Agenda and Timetable, by IHB

WENDWG Chair introduced the agenda that was approved with no changes.

3. Matters arising from Minutes of WENDWG2 Meeting

Docs: WENDWG3-03A Minutes of WENDWG2, by IHB

WENDWG3-03B Status of Actions List from WENDWG2, by IHB

The WENDWG2 Minutes were presented and approved without comments. The WG discussed and updated the WENDWG2 Actions (**Annex C**).

4. Guidelines for the implementation of the WEND principles

Docs: WENDWG3-04A Guidelines Drafting Group Report, by Task Group

WENDWG3-04B Concept Paper for Cartographic Boundary, by EAHC

The WG discussed the revised Guidelines as proposed by the Task Group. Some participants expressed the concerned that the RHCs may not have the authority to enforce the concepts presented in the Guidelines. The WG approved the Guidelines (Doc. WENDWG3-04A) as proposed and tasked the Chair to submit the document to IRCC for endorsement and subsequent submission to EIHC5 (IHC18 Decision N^o 13).

Action 3: Chair to submit to IRCC the revised Guidelines for ratification (Deadline: at IRCC5)

The Concept Paper for Cartographic Boundary (Doc. WENDWG3-04B) was presented by Malaysia. The WG endorsed the proposal to establish a definition for Cartographic Boundary that has the potential to help neighbouring coastal states to coordinate the production of ENC in areas with conflicting claims. FR pointed out that such a new definition might useful as long as it is coherent with the ENCs schemes that should be developed in every IHO charting region in accordance with S-11, Ed. 2.0.5, May 2012, Part A, Annex C. The WG agreed on the following actions:

Action 4: Chair to propose to IRCC to encourage RHCs to publish the cartographic boundaries (ENC schemes) in their region (Deadline: at IRCC5)

Action 5: Chair to invite the IRCC to submit the new definition of cartographic boundary to the HDWG (Deadline: at IRCC5)

5. WENDWG Risk Assessment Tool Task Group (Terms of Reference, conclusions, etc)

Doc: WENDWG3-05 Guidelines on Assessing the Risk of Overlapping ENC Cells, by UK

UK presented the *Guidelines on Assessing the Risk of Overlapping ENC Cells*. The ECDIS problems in handling overlapping cells were highlighted. It depends on the manufacturer, but it is a main concern for the end user (namely the mariner).

Malaysia stressed that defining responsibilities is crucial in solving overlapping ENCs. UK explained that while a RHC has a role in solving overlaps the initiative of individual HO is key. The main

conclusion is that there should be no overlaps due to its potential for causing problems to the mariners.

US noted that altering the ECDIS display standard would be a sub-optimal solution as it would violate what S-57 states and basically stated that it is ok to have overlaps. The best approach would be to stress that when the overlap cannot be resolved then the data should be exactly the same and the updating regime should be exactly the same for both overlapping cells.

IC-ENC supported the paper and Primar: suggested the solution should start with the RENCs due to the capacity to handle the overlap analysis. UK suggested requesting TSMAD to analyse the technicalities of the overlaps. It may be necessary to better define the limit of the overlap (5m). Another problem is that the validation tools not always detected the overlaps.

The WG decided to endorse the paper and tasked the Chair to submit it to IRCC in order to help RHC Chairs to establish priorities to solve overlaps.

Action 6: Chair to submit the Guidelines on Assessing the Risk of Overlapping ENC Cells to IRCC and invite RHCs to consider the document (Deadline: at IRCC5)

6. ENC Issues (Gaps, Overlaps and Poor Quality Source Data) and their Potential Impact

Docs: WENDWG3-06A ENC Issues (Gaps, Overlaps and Poor Quality Source Data) and their Potential Impact, by UK

WENDWG3-06B Summary of Canada's Analysis of WEND-WG Report on Ports with No coverage at Large Scale ENC coverage (Usage Bands 4 - 6), by Canada

The WG discussed the main ENC issues as submitted by UK, tasked by IRCC4 (to prepare a straw paper to be used to report to IMO). These ENC issues (gaps, overlaps and poor quality source data) have the potential to be embarrassing to the IHO. It is then better to first resolve the problems before bringing them to IMO. The ideal is to give a fair opportunity to RHC and MS to solve the problems.

The WG decided to submit doc. WENDWG3-06A to IRCC and propose to IRCC to task the RHC to review the document before reporting to IMO (NAV). Deadline: before the end of the year. If not possible to solve the overlaps, invite hydrographic offices to work to have them identical.

Director Gilles Bessero (IHB) emphasized that the RNC coverage is also an issue and needs to be reported to IMO. He suggested complementing the analysis with the RNC coverage after validating the gaps.

USCHC recognized the contribution of the previous paper (on ports with no coverage at large scale ENCs) and used as a catalyst to produce the summary in doc. WENDWG3-06B.

Action 7: Chair to recommend IRCC to note the "ENC issues" paper and invite the RHCs and MSs to validate the draft ENC coverage audit, within their areas of responsibilities, and provide by 31 December 2013 feedback on resolving the issues identified in the audit (Deadline: at IRCC5)

7. Policy and procedures to verify consistency between ENCs and the corresponding paper charts

UK reported that the UKHO started doing the comparison between ENCs and paper charts to ensure consistency. One of the main problems was that there were far more ENCs (12 000) than UK paper charts (3 000 plus). UKHO then started to work with ENC producers to compare and solve problems. The initial number of inconsistencies (with navigational significance) has been reduced from 1 000 to 700 via bilaterals. The amount of comparisons decreased due to the need to optimize the tasks. This has led to tailoring to individual producer nations based on previous experiences. This exercise also helped UKHO to improve its paper charts.

The comparison also checked other nations' ENC and paper charts and helped them to solve the problems. The exercise also reviewed the updating timeframes (ENC and paper). President Robert Ward suggested the WG to remind ENC producers via IRCC that the problem is still there and exposes the producers. There was general agreement of the need to motivate the ENC producers to get ENC and Paper charts to be produced out of the same foundation database and that paper and ENC product be consistent and up-to-date.

Regarding the actions in RENC operation, President Robert Ward reminded participants that if a RENC spot a potential problem they have the duty of care to take action. In case of a legal action the government of the producer nation is usually the target.

The WG acknowledged the work done by UK and encouraged them to continue the work.

Action 8: UK to make the evaluation criteria available to assist RHCs and Members States in identifying and resolving navigationally significant differences between paper charts and ENCs (Deadline: end of June 2013).

Action 8bis: RHC Chairs to coordinate the validation of the audit within each region in order to allow the audit to form the basis of the IHO reporting to IMO on ENC coverage (Deadline: December 2013).

8. Capacity Building Project for short-term Secondments to RENCs

The WG discussed the possibilities for improving the profile of the RENCs and their work via capacity building actions like:

- a) HO's secondment at the RENCs;
- b) High level seminars for the decision makers (RHC Chairs and HO Heads);
- c) Technical seminars on RENC operation;
- d) Training courses for the RHCs (quality, etc.).

RENCs can do direct investment or through the CB Fund (procedures and standard courses in place). The idea was supported by the RENCs and EAHC. President Robert Ward suggested presenting the general nature of the RENC opportunities so that RHC can understand how to proceed (priorities, time frames, options, etc.).

Action 9: IC-ENC, on behalf of the RENCs, to raise the issue of training and awareness opportunities to CBSC as an additional input to CBWP (Deadline: at CBSC11).

9. Development of a policy to address the withdrawal of ENCs after they are issued

The WG discussed the development of a policy to address the withdrawal of ENCs after they are published. Primar explained that ENCs are withdrawn frequently and the RENCs need a procedure to this end. From the RENC perspective, as soon as they identify a problem the RENC will act. Canada suggested having the bilaterals as the main tool to establish the policy to withdraw the ENC.

The following question was posed to US: "would US support a RENC withdrawing an ENC once a problem is spotted?". The answer was "No. It would have to be covered by an agreement between the RENC and the specific Member State. Our agreements state that they cannot do that or they are in violation of the entire agreement and we can withdraw our suite from that service. One other thing: If a problem is spotted then the RENC should inform the Member State about the issue and let the MS rectify it. In addition, having a RENC withdrawal policy will not handle those MS that do not belong to a RENC. One last thing - the legal responsibility lies with the producer nation and not with the RENC. Our office is cognizant of this issue, thus we always work quickly to resolve safety critical issues. Non-safety critical issues may take longer to resolve."

The WG decided to further develop the policy:

Action 10: Task Force to further develop the policy, including communication arrangements, related to ENC's found to be inadequate after they have been published (Deadline: WENDWG4, with first draft to be circulated before 1 December 2013)

10. Development of a Performance Monitoring Procedure

President Robert Ward invited the WG to discuss what to report and what the report is intended for. There are a number of performance indicators (PI) and most of them are beyond the control of the IHB. The DC is thankful to the support received from Norway for the developments done in this subject. The new DC is committed to progressing the performance monitoring and hired an external consultant specialized in International Organizations' PIs. The WG discussed the need to simplify the PIs in order to allow the representatives to report and monitor.

Action 11: Chair to ensure that appropriate briefing material/achievement is submitted to the IHB in time for the appropriate IMO and IHO reporting processes (Permanent)

11. The requirement for an IHB ENC reference (library) collection

Docs: WENDWG3-11A Establishment of a standardised IHO ENC metadata resource to provide consistent and up-to-date data for web services, by IHB

WENDWG3-11B Circular Letter 51/2012, by IHB

The WG discussed the need of one consolidated metadata catalogue, one consolidated data store and a data service (web service). President Robert Ward reminded the WG that there is a credibility issue as the IHO was invited to produce an authoritative catalogue by the IMO. The group assessed that there may be some problems due to communication (lack of understanding).

France agrees in principle but does not want to see duplication on what RENCs and Member States have done. There is the need to work one only consolidated catalogue.

US (via teleconference) presented the following views:

1. It would be useful to know what metadata is required.
2. The RENCs should provide the services for those that are members
3. That leaves the independents that need to supply the information
4. Ideally someone should write an application for Member States and RENCs that harvests the metadata that is required and publish it out as a service. That way it can be used by the RENCs and the independents. In addition, it can then be utilized by the RHCs in building a GIS interface to perform analysis on things such as gaps/overlaps
5. US/NOAA has an XML metadata file that conforms to S-100 – which provides that type of metadata. The intention was to have this format become an IHO PS (but the US has not submitted this to HSSC to have this added to the TSMAD work plan). It seems that there is a tool - but it is not used by the MS.
6. US essentially supports the ideas of the IHB.

IC-ENC: requested clarifications to the IHB on what is at stake: only metadata or the ENC as well. The answer is both.

PRIMAR expressed that it is possible to view the ENC's using their tools. The IHB clarifies that it uses the RENCs catalogues, but there no AVCS data and a hole as a consequence. The challenge is to build the IHO data store and maintain it.

IHB Director Mustafa Iptes reminded that CL51/2012 is always emphasized during RHC meetings and this issue will be brought up during IRCC5. Chair wishes to encourage ENC producers to answer CL51/2012 and provide the information to the Bureau.

IHB President Robert Ward, on behalf of the IHB DC, invited the Chair to solve this issue (building the IHO Metadata Data Store) within the WENDWG in view of the obligation the IHO has to provide an authoritative catalogue.

France called the attention of the WG to the new catalogue at <http://data.shom.fr>. The WG agreed on the following actions:

Action 12: IHB, RENCs to meet to provide the simple solution to build the definitive WEND metadata data store (Deadline: 25 June 2013, during JTEWG)

Action 13: IHB invited to reissue CL 51/2012 (Deadline: when the IHO WEND metadata data store is established)

12. Development of an IHO RENC/WENC

Doc: WENDWG3-12 Development of an IHO/RENC, by RHSG

The WG discussed the paper and the presentation provided by the RHSG. Suggestions to improve the presentation about an IHO RENC/WENC were including a list of benefits; explanations about the financial impacts, if any; the consequence in the administrative side (secretary, governance, etc.); and the reporting system.

IHB President Robert Ward informed the WG that the additional workload is expected to be relatively small and can be met by the resources from the RENC arrangement. The WG agreed on the following actions:

Action 14: France and Netherlands to draft the paper with concept and draft terms of reference of WENC to IRCC – Version 0 (Deadline: 2 June 2013)

Action 15: Chair to present the paper to IRCC for approval in principle – Version 1 (Deadline: 4 June 2013)

Action 16: Chair to circulate the first draft proposal to WENDWG Members - Version 2 (Deadline: 19 June 2013)

Action 17: Chair to circulate the second draft proposal to WENDWG Members – Version 3 (Deadline: 30 June 2013)

Action 18: Chair to submit the final proposal to IRCC Chair for outsession approval by IRCC for submission to EIHC5 (Deadline: before the end of January 2014)

13. Development of the 2013 WENDWG Work Programme (Chair)

The WG discussed and approved the 2013 WENDWG Work Program (**Annex D**).

14. Review of the Actions (Secretary)

The WG discussed and approved the List of Actions (**Annex E**).

15. Preparation of the WENDWG3 Report to IRCC5 (Chair)

a) (Agenda item 1) Submit the revised TORs to IRCC.

b) (Agenda item 4) Revised Guidelines for the Implementation of the WEND Principles and invite IRCC to endorse them. To include:

- a proposal to IRCC to encourage RHCs to publish the cartographic boundaries in their region.
- an invitation to IRCC to submit the new definition of cartographic boundary to the HDWG

- c) Agenda items 5 and 6) Status report of “ENC Issues” and “*Guidelines on Assessing the Risk of Overlapping ENC Cells*” papers and invite the RHCs and Member States to validate the draft ENC coverage audit, within their areas of responsibilities, and provide feedback on resolving the issues identified in the audit.
- d) (Agenda item 7) Report on the evaluation criteria available to assist RHCs and Members States in resolving navigationally significant differences between paper charts and ENCs.
- e) (Agenda item 8) Status report on training and awareness opportunities to CBSC as an additional input to CBWP.
- f) (Agenda item 9) Report the development of the policy, including communication arrangements, related to ENCs found to be inadequate after they have been published.
- g) (Agenda item 10) Performance monitoring: ensure that appropriate briefing material/achievement is submitted to the IHB in time for the appropriate IMO and IHO reporting processes.
- h) (Agenda item 11) Progress report and recommendations concerning the development of the IHO WEND metadata data store.
- i) (Agenda item 12) Submission to IRCC of a paper with concept and draft terms of reference of WENC for approval in principle

16. Any other business (All)

The WG agreed on the following composition of the Task Force:

Australia: Mike Prince

Brazil: Wesley Cavalheiro

France (Chair): Yves Guillam

UK: Paul Canham

Turkey: Esref Gunsay

IHB: Director Mustafa Iptes

17. Election of the next Chair and Vice Chair

Doc: WENDWG3-17 List of Candidates, by IHB

The WG agreed not to hold any election and forward subsequent submission to IRCC because the proposed revised ToR will change the office bearers from RHC to Member States with election at the first meeting after ordinary conferences. The decision was to first invite IRCC to approve the proposed revised ToR and to elect the office bearers for a term of office running until the next post IHC meeting.

18. Date and time of the next meeting

WENDWG decided to hold its 4th Meeting in Niteroi/Brazil from 18 to 20 March 2014 (pending confirmation by IRCC5 if possible). The Netherlands offered to hold WENDWG5 Meeting in Den Haag/Netherlands in March 2015.

19. Closure

On behalf of the meeting, the Chair warmly thanked the IHB for the excellent arrangements for the meeting. He also thanked all participants for their valuable contribution to the meeting.

WENDWG3 closed at 16h00 on 14 May 2013.

Annexes:

- A) List of Participants
- B) Revised Terms of Reference
- C) WENDWG2 Action List Update
- D) 2013 Work Program
- E) List of Actions