

**8<sup>TH</sup> WEND COMMITTEE MEETING**  
**Tokyo, Japan, 5-6 March 2004**

**FINAL MINUTES**

*Notes: 1) Paragraph numbering is the same as in the agenda (Annex D)*  
*2) A list of acronyms used in this report is provided in Annex A*  
*3) A list of actions agreed at WEND/8 is provided at Section 11*

**1. OPENING AND ADMINISTRATIVE ARRANGEMENTS**

Docs: *WEND8-1A List of documents (also Annex B)*  
*WEND8-1B List of Participants (also Annex C)*  
*WEND-MEM Membership of WEND*

**The Chairman** of the WEND Committee (Radm. K.R. SRINIVASAN, Chief Hydrographer of India) opened the meeting welcoming the participants and observers. He noted the upcoming celebration of 300 years of hydrographic activity in India and the Silver Jubilee of the Indian Hydrographic Office.

**The WEND Secretary** (Michel HUET, IHB) reviewed the list of documents, noting that several new documents had recently been received and are now included in the meeting materials.

**2. APPROVAL OF AGENDA**

Docs: *WEND8-2A Agenda*

**Germany** proposed to move agenda items 7 and 8 to precede agenda item 4.

**The Chair** hearing no dissenting comments approved that agenda items 7 and 8 be addressed ahead of agenda item 4.

**3. MATTERS ARISING FROM MINUTES OF THE 7<sup>TH</sup> WEND MEETING**

Docs: *WEND8-3A Minutes of the 7<sup>th</sup> WEND Meeting*  
*WEND8-3B List of Actions arising from the 7<sup>th</sup> WEND Meeting*  
*WEND-TOR Terms of Reference for the WEND Committee*  
*WEND-PRI WEND Principles (as amended)*

**The Secretary** reviewed the Action Items from WEND 7, noting that most items had been completed or are in progress. Those items still pending include:

- ENC Production Assistance – CLs 54/2002 and 47/2003 solicited input from Member States regarding those MS that needed assistance in ENC production and those MS that could provide assistance to others in ENC production. Fifty MS have responded and the next step is to recommend bilateral or multilateral projects to provide assistance to those MS requesting assistance.

- ENC “Cookbook” – A “Cookbook” on ENC production is under development by the UKHO and will be made available through the IHB upon completion. Completion is expected within three months.
- Policies of Maritime Safety Administrations with respect to ECDIS – The IHB has received little information in response on this topic from MS. MS are again encouraged to liaise with their Maritime Safety Administrations to determine the status of the implementation of SOLAS V regulated carriage requirements as they relate to ECDIS.
- Distribution to MS of ICS Publication “Bridge Procedures Guide” – This was not accomplished because the publication pre-dates SOLAS V and therefore is not current regarding ECDIS and chart carriage requirements. The IHB will liaise with ICS and provide updated information for their publication.

**ACTIONS:**

***IHB, in liaison with UKHO, to complete a draft ENC Production Cookbook, to be circulated to WEND Members by WEND Letter for comments / approval; final version to be posted on the IHO website.***

***IHB to communicate with ICS regarding updating of the ICS Bridge Procedure Manual.***

**Norway** reported its intention to submit a proposal to IMO regarding the status of ECDIS implementation by maritime safety authorities and recommend a harmonization or implementation and enforcement of ECDIS carriage requirements.

**France** reported the West Africa Action Team (WAAT) visits to 15 countries included a discussion with each country’s maritime authorities on their obligation under SOLAS V including ECDIS carriage requirements

**The Secretary** noted the following other actions arising from WEND 7 have been accomplished:

- ENC Coverage Catalogue - completed by IHB and hosted on the IHO website. Further discussion of this topic is included in agenda item 4C.
- ENC Production Boundaries – A French and Australian proposal was approved by MS and the WEND Principles subsequently amended.
- User-friendly, integrated service - An additional WEND Principle on user – friendliness has been approved by MS and the WEND Principles amended accordingly.
- SENC Specification – The specifications, as developed by Primar- Stavanger, for the distribution of ENC in SENC format was provided to all MS for information.

- Corresponding Members to the WEND Task Group – All but two Regional Hydrographic Commissions have nominated Corresponding Members to the WEND Task Group. (note: these RHCs nominated corresponding members during the meeting).
- Dr. Ehlers was officially thanked for his years of service as WEND Chairman.

#### **4. REPORTS BY THE WEND TASK GROUP**

Docs: *WEND8-4A Summary of Task Group Activities*  
*WEND8-4B Definition of “Integrated Services”*  
*WEND8-4C Proposals for a World ENC Coverage Catalogue (IHB)*  
*WEND8-4D Issues arising from 2003 ECDIS Conference, Singapore*  
*WEND8-4E Proposed Way Ahead for ENC Coverage*  
*WEND8-4F ENC Assistance Questionnaire and Actions (with IHB)*  
*WEND8-4G The Role of the RENC*

##### **A. Summary of Task Group Activities**

**WEND Task Group Chair (WTGC)** provided a summary of the problems facing effective use of ECDIS, the goals of the TG, the work program of the TG to attain these goals, and the required actions to execute this work program.

**ICCL** noted that standardization and reliability of data is a major concern. Currently users may receive hundreds of error messages while attempting to load ENCs into ECDIS, this erodes the user’s confidence in the product. Ease of distribution is also an important concern.

**WTGC** stated that quality doesn’t reflect inaccuracies of data but in the inconsistent display of the data. We are changing our view from the need to produce data to the need to distribute data.

##### **B. Definition of “Integrated Services”**

**WTGC** presented a definition for “integrated services” that appears in the recently accepted WEND Principle.

**India** questioned if “a single set...” meant a common price.

**Norway** expressed concern that this definition may be imposing IHO onto end service businesses rather than navigation issues; it is possibly beyond the TOR of WEND and would be difficult to support.

**Sweden** believed this to be a sensitive issue with fair competition and collaboration concerns.

**Portugal** supported the definition as written.

**Australia** wished to verify that this was within the TOR of WEND

**France** expressed concern over this sensitive issue that probably requires further reflection.

**Chair** requested that the Task Group, the two RENCs and any other interested Member to meet and refine the definition

The next day the WEND Task Group provided the following revised definition:

*Integrated services are a variety of end-user services where each service is selling all its ENC data, regardless of source, to the end user within a single service proposition embracing format, data protection scheme and updating mechanism, packaged in a single exchange set.*

The 8<sup>th</sup> WEND approved this definition to be added as a footnote for the purpose of clarifying the WEND Principles.

**ACTION:**

***IHB to include, as a footnote to the WEND Principles, the above definition agreed by WEND for “Integrated Services”.***

### **C. The IHO World ENC Catalogue**

**Secretary** provided background on the development of the World ENC Catalogue by the IHB. The catalogue was developed as the result of a 7<sup>th</sup> WEND action item but with RENCs (specifically, IC-ENC) developing marketing catalogues the need for an IHO catalogue has come under question.

**Netherlands** observed the contents of the two catalogues differed and was in favor of only one catalogue aimed at the end user – i.e. the RENC version.

**Norway** observed that both catalogues had very similar functionalities.

**IC-ENC** stated that their catalogue was developed as the result of the Singapore ECDIS Conference.

**ICCL** stated that a web-based catalogue would not serve all the end-user market and that a CD based catalogue was also needed.

**Chair** moved that the recommendations contained in document *WEND8-4C* be adopted with the provision that any organisation may develop a world ENC catalogue.

*The chair’s motion was seconded and approved.*

**ACTION:**

***IHB to continue maintaining an IHO World ENC Catalogue on the IHO website, with links to other catalogues (RENCs, MS, etc.).***

### **D. ECDIS Conference Issues and Actions**

**Wend Task Group Secretary (WTGS)** presented a summary of the issues raised at the ECDIS Conference held in Singapore in 2003. He noted that the UKHO has hired a consultant to formalize these issues so that they may be acted upon.

## **E. Proposed Way Ahead for ENC Production**

**WTGS** presented a series of proposals for small scale ENC schema based on the INT Chart series for each Regional Hydrographic Commissions to review, adopt or formulate alternative proposals. If nations are not prepared to produce ENCs at this time, they should seek assistance for the production through bilateral arrangements.

**France** noted that the adoption of this INT Chart scheme takes advantage of several technical issue that have been agreed to within the context of paper INT Charts.

**India** stated that within the NIOHC there were MS wishing that the INT Chart scheme could be extended into national waters.

**WTGC** presented a resolution on the way ahead contained in document *WEND8-4H*.

The ensuing discussion debated whether the tenor should be negative or positive, whether the resolution is too dictating rather than encouraging, what timeline should be assigned to the actions and the need to assign priorities.

**Chair** noted the contents of the resolution and directed the IHB to refine and circulate the resolution for approval by WEND Membership.

***ACTION:***

***IHB to draft a CL, based on the resolution by WEND (Doc. WEND8-4H), to speed up ENC production.***

## **F. ENC Assistance Questionnaire**

**IHB** presented the results of the CL 54/2002 and 43/2003 that requested MS inform the IHB if they needed assistance in the production of ENC or if they could provide assistance to other MS in their efforts to produce ENCs.

The following was agreed by the meeting:

***ACTION:***

***Based on the responses to the ENC Assistance Questionnaire, as contained in Annex A to Doc. WEND8-4F, IHB to propose matching those MS that can provide assistance with those MS needing assistance.***

## **G. The Role of the RENC**

**WTGC** lead a discussion regarding the role of the RENC now that the IHO has gained experience with two operational RENCs. A definition was proposed and discussed.

On the second day the 8<sup>th</sup> WEND approved the following definition:

*“RENCs are organizational entities where IHO members have established cooperation amongst each other to guarantee a world-wide consistent level of high quality data, and for bringing about coordinated services with official ENCs and updates to them.”*

**ACTION:**

*IHB to communicate the above definition for RENC, agreed by WEND, to CHRIS for consideration and inclusion in S-52 Appendix 3 “Glossary of ECDIS-related Terms”.*

## **5. REVIEW OF ACTIVITIES OF OTHER IHO COMMITTEES DEALING WITH ECDIS, PERTINENT TO WEND**

Docs: WEND8-5A CHRIS Input to WEND/8 (CHRIS Chair)

**Secretary** presented Document WEND8-5A noting that CHRIS has adopted an efficient method of submitting proposal to CHRIS meeting. The Secretary recommended that WEND adopt this method of submitting proposals, and adapt it to meet WEND’s needs.

**Chair** noted the recommendation and proposed the CHRIS method for submissions be adapted for WEND meetings.

This was agreed by the meeting.

**ACTION:**

*IHB to adapt the CHRIS document (Annex B to Doc. WEND8-5A) to WEND needs, then to circulate it to WEND Members for comments / approval.*

## **6. REPORT ON STATUS: ECDIS AND ENC STANDARDS / SPECIFICATIONS**

Docs: WEND8-6A Status of IHO Publications on ECDIS (IHB)

**Secretary** presented Document WEND8-6A.

**France** noted that tests provided in S-64 are not sufficient to qualify software and some attributes, such as traffic separation schemes, are not contained in the tests.

**Secretary** stated the test are consistent with IEC standards but are not exhaustive. Recommendations for further tests can be addressed to TSMAD.

**Germany** stated that it is as important to convey changes to IEC in order to affect type certification.

**Norway** stated that this also reflects on IMO performance standards that have wide ranging consequences and IHO should make its submission on a well thought out and developed strategy.

**ACTION:**

*France to communicate to IHB proposed additional features for incorporation into IEC 61174 / S-64. IHB to refer them to CHRIS for further development.*

## 7. REPORTS ON PROGRESS AND PLANS AT NATIONAL AND REGIONAL LEVELS

Docs: WEND8-7A *Compendium of RHC Chairs' Reports (IHB)*  
 WEND8-7B *Compendium of National Reports (IHB)*  
 WEND8-7C *Primar Stavanger Status Report*  
 WEND8-7D *IC-ENC Status Report*  
 WEND8-7E *Virtual RENC in the Mediterranean and Black Sea Region – Status Report (Italy)*  
 WEND8-7G *Status Report by Japan Hydrographic Association*

**The Secretary** brought to the attention of the committee documents 7A and 7B compiled from inputs of RHCs and MS.

**Sweden** reported on behalf of the **Nordic and North Sea HC** that ENC covering shipping routes in the region are nearing completion. The efforts of the WEND Task Group Secretary on developing small scale ENC schema was appreciated.

**France** on behalf of the **Mediterranean & Black Sea HC** reported:

- A small scale ENC schema, developed by Spain, was adopted by MS of the region,
- Most MS of the region have aligned with a RENC for harmonization and quality control,
- The Virtual RENC will be discussed later by Italy,
- Only 25% of MS responded to the ENC Assistance Questionnaire,
- The ENC Production portion of MEDCHARTNET may have copyright issues that need to be addressed.

**Korea** on behalf of the **East Asia HC** noted their report included discussions of joint ENC production in Malacca and Singapore Straits and the intention to hold an ECDIS symposium in January 2005.

**Finland** on behalf of the **Baltic Sea HC** noted that ENC production was progressing well. Also the last Nordic HC meeting highlighted the need to develop a high level talking paper for presentation to decision makers with limited understanding of the value and necessity of hydrography. The completion and distribution of the ENC Consistency and Quality Study should be given high priority.

**The Secretary** noted that the recommendation for the development of a high level talking paper should be an action item for the IHB and the encouragement for the completion of the ENC Consistency and Quality Study should be transmitted to CHRIS for action.

### ACTIONS:

*IHB to prepare a briefing paper on the benefits of using ENC / ECDIS, targeted to high level government officials, for use by HOs as necessary.*

*WEND Secretary to convey to CHRIS the importance of the completion of the ENC Consistency and Quality Study.*

**Portugal** on behalf of the **East Atlantic HC** provided a written report noting that it did not include input from Tunisia and Morocco.

**U.S.** on behalf of the **Meso-American and Caribbean HC** reported on the progress of the Gulf of Honduras Project that is seeking funding from the Global Environmental Facility to build hydrographic capacity in Honduras, Guatemala and Belize over the next five years. The Electronic Chart Working Group (ECWG) of MACHC is facilitating ENC production in the region with cruise ship lines expressing interest in funding the production for certain ports. The next MACHC meeting is scheduled for 30 August 2004 in Cartagena, Colombia.

**International Council of Cruise Liners (ICCL)** confirmed that Cruise Lines would be willing to assist in the production of large scale charts for certain ports.

**The Secretary** verified that the small scale ENC production schema proposed by the WEND Task Group was harmonized with the MACHC proposal.

**India** on behalf of the **Northern Indian Ocean HC** noted that India was the producer nation for many of the small scale INT charts in the region and that mechanisms for expediting the production of ENC in the region would be a topic of discussion at the next NIOHC meeting, 24-25 March 2004. There were concerns over ENC production outside areas of national jurisdiction that needed to be resolved at this meeting. Additionally, the small scale schema proposed by the WEND Task Group would also be addressed at this meeting.

**UK** stated that they had entered into an agreement to assist Sri Lanka with ENC production.

**Iran** on behalf of the **ROPME Sea Area HC** encouraged the IHO MS to approve the admission of those countries whose application for membership is pending. Noted that Saudi Arabia will produce ENCs of their major ports. He stated a concern that only ECDIS and not ENC has regulatory emphasis in SOLAS V. Proposed that ENC production be an explicit obligation of a coastal state under SOLAS V.

**Germany** agreed with the need to clarify the obligation of coastal states to include the production of ENC

**ACTIONS:**

***IHO MS to expedite process of approving pending applications for IHO Membership.***

***IHB to communicate to IMO/NAV that coastal States should be urged to produce official ENCs, as part of Hydrographic Services required by Regulation 9 of SOLAS V.***

**Norway** stressed that it was crucial that the IHO maintain close coordination with IMO. Stated that Norway would introduce a proposal to IMO/MSC to make ECDIS mandatory.

**ICCL** expressed concern that the shipping industry would not support making ECDIS mandatory due to the lack of ENC coverage and the cost of implementing ECDIS and its associated ENCs.

**IHB President** noted that the IHO relationship with IMO is very close, active and cooperative.



**Australia** on behalf of the **Southwest Pacific HC** stated that Australia is the only ENC producer in the region with New Zealand awaiting funding to begin their production. A proposal for small scale ENC production will be discussed at the next commission meeting in November 2004.

**Chair** moving to national reports:

**South Africa's** priority for producing ENC cells are major harbours and their approaches and overview charts for South African Waters. On completion, will follow same principle for Namibian waters. Have completed two harbour and one overview to date. Will also co-operate with Mozambique on their production.

**Sweden** is experiencing excellent cooperation through HELCOM and expects complete coverage by 2005

**Germany** has almost complete coverage attained with focus now on large scale which should be attained by the end of the year. Small scale charts are best selling.

**U.S.** has removed a caveat on provisional nature of its ENCs. It will have 300 ENCs covering 40 main ports completed this year. NOAA is required to provide quality assurance for distributors and Value Added Retailers (VAR).

**France** has most main routes and harbors covered with focus on bilateral agreements for digitizing data.

**Indonesia** has finished two projects – Balang in the Singapore Straits and nine cells in internal waters.

**Primar-Stravanger** is one of two operational RENCs with significant increase in chart coverage and subscriptions. It has eleven member countries, over 1500 ENCs and several hundred ships.

**IC-ENC** has ten members, 568 ENCs and 3 VARs. Provides independent quality assurance. Problems still exist in ENC coverage, ENC consistency, lack of an integrated catalogue, lack of one-stop-shopping. Solution is for producers to join a RENC and RENCs must operate in a consistent manner.

**Virtual RENC** is not operational as we have not begun to distribute charts, but are populating our database from our ten members. MEDCHARTNET capacity building project linked to the Virtual RENC. Issues of copyright may slow progress. The MEDHARTNET/Virtual RENC will provide production, maintenance and validation of ENCs.

**India** is conducting training and validation of source data in the region.

**Japanese Hydrographic Association (JHA)** is responsible for production and distribution of Japanese ENCs. Has four CDs containing small scale charts and eleven CDs containing large scale charts. Have sold 4,500 CDs to end users. Currently each CD is sold as a total package but they are adopting procedures that will allow the sale of single charts/cells by providing keys to individually encrypted cells. The JHA does not provide additional quality

assurance over that provided by the Japanese Coast Guard Hydrographic and Oceanographic Department.

**United Kingdom** has produced 428 ENC's covering mainly the waters of the North Sea, the UK, the Suez Canal and the Red Sea; parts of the Gulf, West Africa and the Indian Ocean; and some of the islands in the Mediterranean and Caribbean. The UKHO is a Value Added Reseller of IC-ENC and has established an ENC service that combines ENC's from different countries, sourced from IC-ENC, and supplied to customers on a single CD-ROM with a weekly updating service. The UKHO is willing to assist other countries with training and the production, quality assurance, updating and distribution of ENC's.

## **8. RELATIONSHIP WITH INDUSTRY**

Docs: WEND8-8A *Report of 2003 Industry Workshop and Stakeholder Organizations (IHB)*

**Chair** stated that in the past observers were not part of WEND but conditions are changing and it may be time to propose a change to the Rules of Procedure for WEND.

**Germany** noted that since WEND formulates the principles by which we provide services to mariners, it is fitting that we allow observers representing these end users attend WEND meeting in order to understand their point of view.

**Norway** noted that the Strategic Planning Working Group (SPWG) is working on procedures for accrediting observers but they would require adoption by MS at the Extraordinary International Hydrographic Conference (EIHC) in April 2005. The concept of having observers at WEND has faced strong opposition in the past, but Norway can support such a change if adopted by MS.

**Secretary** noted that the wording relevant to CHRIS is "Member State representative of the committee as a whole may invite observers to the meeting."

**Chair** proposed the following wording *"The committee may invite accredited international Non-Governmental Organizations (NGO) and professional associations to participate as observers."*

This was accepted.

### ***ACTION:***

***IHB to circulate to MS an additional item to the WEND Rules of Procedure, as above, to allow NGO participating as observers in WEND meetings.***

## **9. OTHER ECS DATA, EQUIPMENT AND STANDARDS**

**Secretary** reported that an ISO standard for ECS data has been approved and that the promoters of these data are attempting to gain "Official" approval of these data. For ECS equipment there are efforts in RTCM to set up test approval criteria.

**UK** stated they have supported IEC for the development of test standards

**Norway** expressed concern over the movement of private producers to gain acceptance of IMO and IHO must not support this action.

**UK** noted that this movement highlights the imperative to get official data to the users.

**Portugal** stated that only official data was safe.

**Chair** noted the developments in the ECS market and encouraged MS to expeditiously bring ENC's to efficacy.

## 10. ANY OTHER BUSINESS

### 10.1 Use of RCDS Mode of ECDIS

Docs: *WEND8-10.1A* *Submission by Australia to MSC/78 - Proposal to consider permitting ships to use the RCDS mode of ECDIS, without the requirement to carry paper charts (forwarded with WEND Letter 1/2004)*

*WEND8-10.1B* *HO's responses to WEND 1/2004 on RCDS proposal by Australia*

**Australia** stated that the proposal to IMO from the Australian delegation was due to concern over the slow adoption of ECDIS due to lack of ENC's. The Australian Maritime Safety Authority (AMSA) was shocked by the status of ENC production and reports of ECDIS usage, as presented at the Singapore ECDIS Conference. The Australian Hydrographic Office supports this proposal due to the slow schedule of ENC production with little relief in sight and believes this is an implementation issue rather than a technical issue.

**UK** supports this proposal where appropriate noting each individual nation may regulate its implementation. UK also fully supports the proposed submission by Norway to mandate ENC's and ECDIS where available.

**U.S.** supports the Australian proposal.

**France** does not support the proposal due to the significant differences between ENC's and RNC's.

**Norway** strongly disagrees with the proposal although agrees with the aim and is formulating a proposal that will meet this aim of increased use of ECDIS.

**Netherlands, Portugal, Sweden, China, Italy, South Africa and New Zealand** expressed their opposition to the proposal and expressed concern over possible impact on ENC production.

**Chair** noted that the arguments have not changed and the more important issue is to ensure more prolific ENC availability. Requested the IHB to communicate the results of this discussion to MS and encourage HO's to understand their Maritime Safety Administrations' positions. The IHB will provide MS with the Norwegian proposal when available.

**ACTION:**

*IHB to issue a CL reflecting the views at the WEND Committee, providing MS with the Norwegian proposal to IMO when available, and soliciting MS' position on the Australian and Norwegian proposals, with a view to formulating IHO's position before IMO.*

**11. SUMMARY OF ACTION ITEMS IDENTIFIED DURING MEETING**

The following action items were identified and approved:

1. ENC Production Cookbook – IHB, in liaison with UKHO, to complete a draft ENC Production Cookbook, to be circulated to WEND Members by WEND Letter for comments / approval; final version to be posted on the IHO website.
2. ICS Bridge Procedure – IHB to communicate with ICS regarding updating of the ICS Bridge Procedure Manual.
3. Definition for Integrated Services – IHB to include, as a footnote to the WEND Principles, the definition agreed by WEND for “Integrated Services”, as follows:  
  
 "a variety of end-user services where each service is selling all its ENC data, regardless of source, to the end user within a single service proposition embracing format, data protection scheme and updating mechanism, packaged in a single exchange Set."
4. IHO World ENC Catalogue – IHB to continue maintaining an IHO World ENC Catalogue on the IHO website, with links to other catalogues (RENCs, MS, etc.).
5. WEND Resolution – IHB to draft a CL, based on the resolution by WEND (Doc. WEND8-4H), to speed up ENC production.
6. ENC Production Assistance - Based on the responses to the ENC Assistance Questionnaire, as contained in Annex A to Doc. WEND8-4F, IHB to propose matching those MS that can provide assistance with those MS needing assistance.
7. Definition for RENC – IHB to communicate the definition for RENC, agreed by WEND, to CHRIS for consideration and inclusion in S52 Appendix 3 “Glossary of ECDIS-related Terms”, as follows:  
  
 “RENCs are organizational entities where IHO Member States have established cooperation amongst each other to guarantee a world-wide consistent level of high quality data, and for bringing about coordinated services with official ENCs and updates to them."
8. Guidance for Submission of Proposals to WEND Meetings – IHB to adapt the CHRIS document (Annex B to Doc. WEND8-5A) to WEND needs, then to circulate it to WEND Members for comments / approval.

9. S-64 ECDIS Test Data – France to communicate to IHB proposed additional features for incorporation into IEC 61174 / S64. IHB to refer them to CHRIS for further development.
10. High Level Paper on ENC / ECDIS – IHB to prepare a briefing paper on the benefits of using ENC / ECDIS, targeted to high level government officials, for use by HOs as necessary.
11. ENC Consistency – IHB to circulate to MS, when finalized, the TSMAD / C&SMWG recommendations on ENC encoding for improved ENC consistency; also to post them on the IHO website.
12. Pending IHO Membership – IHO MS to expedite process of approving pending applications for IHO Membership.
13. SOLAS ENC Production Requirements – IHB to communicate to IMO/NAV that coastal States should be urged to produce official ENCs, as part of Hydrographic Services required by Regulation 9 of SOLAS V.
14. Observers to WEND – IHB to circulate to MS an additional item to the WEND Rules of Procedure to allow NGO participating as observers in WEND meetings, as follows:  
  
“The Committee may invite accredited international NGOs and professional associations to participate as observers to Committee meetings.”
15. RCDS Mode of ECDIS – IHB to issue a CL reflecting the views at the WEND Committee, providing MS with the Norwegian proposal to IMO when available, and soliciting MS’ position on the Australian and Norwegian proposals, with a view to formulating IHO’s position before IMO.

## 12. DATE AND PLACE OF NEXT MEETING

**The Chair/India** offered Mumbai, India in February 2005 for the next meeting.

**Australia** inquired whether the meeting could be held in conjunction with the 3<sup>rd</sup> Extraordinary International Hydrographic Conference to conserve travel funds and time.

**IHB President** stated that the Bureau would accommodate the meeting either before or after the EIHC as desired by the Member States and if feasible with respect to lodging in Monaco.

**The Chair** acknowledged the general consensus for having the next meeting in conjunction with the EIHC.

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**Annex A****LIST OF ACRONYMS**

|                    |  |
|--------------------|--|
| <b>AMSA</b>        | Australian Maritime Safety Authority                                 |
| <b>CHRIS</b>       | Committee on Hydrographic Requirements for Information Systems (IHO) |
| <b>CL</b>          | Circular Letter (IHO)  |
| <b>C&amp;SMWG</b>  | Colours and Symbols Maintenance Working Group (IHO)                  |
| <b>DNV</b>         | Det Norske Veritas (Norway)  |
| <b>ECDIS</b>       | Electronic Chart Display and Information System                      |
| <b>ECS</b>         | Electronic Chart System  |
| <b>ECWG</b>        | Electronic Chart Working Group (MACHC)                               |
| <b>EIHC</b>        | Extraordinary International Hydrographic Conference (IHO)            |
| <b>ENC</b>         | Electronic Navigational Chart  |
| <b>HELCOM</b>      | Helsinki Commission (Baltic Sea)                                     |
| <b>HO</b>          | Hydrographic Office  |
| <b>ICCL</b>        | International Council of Cruise Liners                               |
| <b>IC-ENC</b>      | International Centre for ENCs  |
| <b>ICS</b>         | International Chamber of Shipping                                    |
| <b>IEC</b>         | International Electrotechnical Commission                            |
| <b>IHB</b>         | International Hydrographic Bureau (IHO)                              |
| <b>IHO</b>         | International Hydrographic Organization                              |
| <b>IMO</b>         | International Maritime Organization                                  |
| <b>INT</b>         | International (Chart - IHO)  |
| <b>ISO</b>         | International Organization for Standards                             |
| <b>JHA</b>         | Japan Hydrographic Association                                       |
| <b>MACHC</b>       | Meso-American and Caribbean Sea Hydrographic Commission (IHO)        |
| <b>MBSHC</b>       | Mediterranean and Black Seas Hydrographic Commission (IHO)           |
| <b>MEDCHARTNET</b> | Mediterranean Charting Network (EU)                                  |
| <b>MS</b>          | Member State   |
| <b>NAV</b>         | Sub-committee on Navigation (IMO)                                    |
| <b>NGO</b>         | Non-Governmental Organization  |
| <b>NIOHC</b>       | North Indian Ocean Hydrographic Commission (IHO)                     |
| <b>NOAA</b>        | National Oceanic and Atmospheric Administration (USA)                |
| <b>RCDS</b>        | Raster Chart Display System  |
| <b>RENC</b>        | Regional ENC Coordinating Centre (IHO)                               |
| <b>RHC</b>         | Regional Hydrographic Commission (IHO)                               |
| <b>RNC</b>         | Raster Navigational Chart  |
| <b>RTCM</b>        | Radio Technical Committee on Maritime Services (USA)                 |
| <b>S-52</b>        | IHO Specifications for Chart Content and Display Aspects of ECDIS    |
| <b>S-57</b>        | IHO Transfer Standard for Digital Hydrographic Data                  |
| <b>SENC</b>        | System ENC   |
| <b>SHN</b>         | Servicio de Hidrografía Naval (Argentina)                            |
| <b>SOLAS</b>       | Safety of Life at Sea Convention (IMO)                               |
| <b>SPWG</b>        | Strategic Planning Working Group (IHO)                               |
| <b>TG</b>          | Task Group   |

|               |   |
|---------------|---|
| <b>TOR</b>    | Terms of Reference                                      |
| <b>TSMAD</b>  | Transfer Standard Maintenance and Applications WG (IHO) |
| <b>UKHO</b>   | United Kingdom Hydrographic Office                      |
| <b>VAR</b>    | Value-Added Reseller (IC-ENC)                           |
| <b>V-RENC</b> | Virtual RENC  |
| <b>WAAT</b>   | West Africa Action Team                                 |
| <b>WEND</b>   | Worldwide Electronic Navigational Chart Data Base (IHO) |

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**LIST OF DOCUMENTS**

|                   |  |
|-------------------|--|
| WEND8-1A rev.4    | List of documents  |
| WEND8-1B rev.4    | List of participants   |
| WEND-MEM          | Membership of WEND   |
| WEND8-2A rev.2    | Agenda   |
| WEND8-3A          | Summary report of the 7 <sup>th</sup> WEND Committee Meeting   |
| WEND8-3B          | List of actions arising from the 7 <sup>th</sup> WEND Meeting  |
| WEND-TOR          | Terms of reference for the WEND Committee  |
| WEND-PRI          | WEND principles (as amended)   |
| WEND8-4A          | Summary of WEND Task Group Activities (WEND TG Chair)  |
| WEND8-4B rev.2    | Definition of “Integrated Services” (WEND TG)  |
| WEND8-4C          | Proposals for a World ENC Coverage Catalogue (IHB)   |
| WEND8-4D          | Issues arising from 2003 ECDIS Conference, Singapore (WEND TG)   |
| WEND8-4E          | Proposed Way Ahead for ENC Coverage: Proposed Production Plan for Small Scale ENC's (WEND TG and IHB)  |
| WEND8-4F          | ENC Assistance Questionnaire and Actions (IHB)   |
| WEND8-4G          | The Role of the RENC (WEND TG)   |
| WEND8-4H          | Proposal for a WEND Resolution (WEND TG)   |
| WEND8-5A rev.1    | CHRIS Input to WEND/8 (CHRIS Chair)  |
| WEND8-6A          | Status of IHO publications on ECDIS (IHB)  |
| WEND8-7A          | Compendium of RHC Chairs' Reports (IHB)  |
| WEND8-7B rev.2    | Compendium of National Reports (IHB)   |
| WEND8-7C          | Primar-Stavanger Status Report   |
| WEND8-7D          | IC-ENC Status Report   |
| WEND8-7E          | Virtual RENC in the Mediterranean and Black Sea Region – Status Report (Italy)   |
| WEND8-7G          | Status Report by Japan Hydrographic Association  |
| WEND8-8A          | Report of 2003 Industry Workshop and Stakeholder Organizations (IHB)   |
| WEND8-10.1A       | Submission by Australia to MSC/78 - Proposal to consider permitting ships to use the RCDS mode of ECDIS, without the requirement to carry paper charts (forwarded with WEND Letter 1/2004) |
| WEND8-10.1B rev.1 | HO's response to WEND 1/2004 on RCDS proposal by Australia (IHB)   |

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## Annex C

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<sup>3</sup> Japan Hydrographic Association

<sup>4</sup> Japan Hydrographic and Oceanographic Department

## AGENDA

1. Opening and administrative arrangements  
 Docs:    *WEND8-1A        List of documents*  
             *WEND8-1B        List of Participants*  
             *WEND-MEM        Membership of WEND*
  
2. Approval of agenda  
 Docs:    *WEND8-2A        Agenda*
  
3. Matters arising from minutes of the 7<sup>th</sup> WEND Meeting  
 Docs:    *WEND8-3A        Minutes of the 7<sup>th</sup> WEND Meeting*  
             *WEND8-3B        List of Actions arising from the 7<sup>th</sup> WEND Meeting*  
             *WEND-TOR        Terms of Reference for the WEND Committee*  
             *WEND-PRI        WEND Principles (as amended)*
  
4. Reports by the WEND Task Group  
 Docs:    *WEND8-4A        Summary of Task Group Activities*  
             *WEND8-4B        Definition of “Integrated Services”*  
             *WEND8-4C        Proposals for a World ENC Coverage Catalogue (IHB)*  
             *WEND8-4D        Issues arising from 2003 ECDIS Conference, Singapore*  
             *WEND8-4E        Proposed Way Ahead for ENC Coverage: Proposed Production Plan for Small Scale ENCs (WEND TG and IHB)*  
             *WEND8-4F        ENC Assistance Questionnaire and Actions (IHB)*  
             *WEND8-4G        The Role of the RENC*  
             *WEND8-4H        Proposal for a WEND Resolution*
  
5. Review of activities of other IHO committees dealing with ECDIS, pertinent to WEND  
 Docs:    *WEND8-5A        CHRIS Input to WEND/8 (CHRIS Chair)*
  
6. Report on status: ECDIS and ENC standards/specifications  
 Docs:    *WEND8-6A        Status of IHO Publications on ECDIS (IHB)*
  
7. Reports on progress and plans at national and regional levels  
 Docs:    *WEND8-7A        Compendium of RHC Chairs’ Reports (IHB)*  
             *WEND8-7B        Compendium of National Reports (IHB)*  
             *WEND8-7C        Primar Stavanger Status Report*  
             *WEND8-7D        IC-ENC Status Report*  
             *WEND8-7E        Virtual RENC in the Mediterranean and Black Sea Region – Status Report (Italy)*  
             *WEND8-7G        Status Report by Japan Hydrographic Association*
  
8. Relationship with Industry  
 Docs:    *WEND8-8A        Report of 2003 Industry Workshop and Stakeholder Organizations (IHB)*

9. Other ECS Data, Equipment and Standards
  10. Any other Business
  - 10.1 Use of RCDS Mode of ECDIS
  - Docs: WEND8-10.1A *Submission by Australia to MSC/78 - Proposal to consider permitting ships to use the RCDS mode of ECDIS, without the requirement to carry paper charts (forwarded with WEND Letter 1/2004)*
  - WEND8-10.1B *HO's response to WEND 1/2004 on RCDS proposal by Australia*
  11. Summary of Action Items identified during meeting
  12. Date and place of next meeting.
-

## WEND RESOLUTION

The WEND Committee, at its 8<sup>th</sup> session,

- *Considering* the insufficient coverage with official ENC's in several regions,
- *Being concerned* about inconsistencies of official ENC's both within some regions and amongst different regions, potentially causing confusion with the mariner,
- *Noting* that current official ENC services often are patchy, heterogeneous and not sufficiently user friendly,
- *Noting* that the present problems with availability and user-friendliness of ENC services may adversely affect the acceptance of ENC's by the mariner for the use of ECDIS in navigation,
- *Being also concerned* that the slow uptake of official ENC's by the marketplace may jeopardise the goals to improve safety and efficiency of navigation pursued by IMO and IHO with introducing ECDIS as a navigation system satisfying the carriage requirement of SOLAS V/Reg 19 when used with official ENC's,
- *Recognising* the obligation of Coastal States under SOLAS V/Reg. 9 to provide hydrographic services and to produce nautical charts which results, in conjunction with Reg. 19, in a corresponding obligation to produce official ENC's,

Resolves,

(a) Where MS are not yet fully involved in ENC production:

1. IHO Members States are encouraged to work together in the Regional Hydrographic Commissions (RHCs) to speed up ENC production, e.g. through *bilateral or multilateral assistance programmes, or seek cooperation* with any member HO offering training and/or production capacities on conditions to be mutually agreed,
2. RHCs should develop, where not yet existent, ENC production schemes and time schedules for the ENC production *for small scale coverage and prioritised routes and ports*, and should report the details to IHB as soon as possible;

(b) Where MS have already developed ENC's, but are not yet affiliated to an existing RENC:

1. IHO Member States are requested, where they have ENC's already produced but not released for public use yet, to make them available in compliance with SOLAS V, Reg. 9 and 19, and to facilitate inclusion with integrated services,

2. *RHCs* are asked in their region to *achieve a maximum degree of quality assurance and user-friendliness of services* in compliance with the WEND Principles, and to cooperate to this purpose with each other or with other HOs, e.g. by forming an own RENC, or by seeking the services of existing RENCs, and to inform IHB as soon as possible of the measures they have implemented, or are planning to implement.
-