

**WEND COMMITTEE PROPOSALS TO THE
2ND EXTRAORDINARY INTERNATIONAL HYDROGRAPHIC CONFERENCE
Monaco, 20-23 March 2000**

Dear Sir,

Following the 5th WEND Meeting held at the IHB on 16-17 March 2000, the WEND Committee recommended to the 2nd EIHC to take several decisions to enhance the implementation of the WEND concept. These proposals were included in the WEND Chairman's Report to the Conference (see attached CONF.EX2/WP.2 – "Development of the WEND System and Future Role of RENCs", at Appendix 1). The Conference decided that the action recommended should be approved by Member States by Circular Letter.

Member States are therefore requested to approve the following:

1. WEND Resolution

The WEND Committee felt that while the WEND Principles, as adopted through Circular Letter 27/1994 of 16 June 1994, give guidance to the establishment of Regional Electronic Navigational Chart Centres (RENCs) and the inter-relationship of the RENCs, it is important that the IHO enhances the WEND concept by adopting a formal Resolution that would promote the implementation of the WEND System.

The WEND Resolution as recommended by the WEND Committee is as follows:

It is recommended that Member States:

- a) create the appropriate climate for regional and international co-operation in the capture and management of digital hydrographic data, acknowledging the ownership of the data,*
- b) give high priority to the production of data that are validated and conform to the ENC Product Specification,*
- c) promote the production of ENCs and the use of ECDIS,*
- d) establish mechanisms for the national, regional and international distribution of ENCs in accordance with the WEND Principles.*

2. Encryption

ENCs are expensive to produce and distribute and it has become necessary for distributors and users to enter financial contracts for the service. For this purpose, encryption schemes are used. Through this it is possible to deny the users the necessary updates, should they fail to comply with the contractual obligations made with the supplier of the ENC. While the interests of the distributor are important for the continuance of the service, the safety of the mariner should not be compromised in any way. The WEND Committee considered, therefore, that this should be reflected through an additional paragraph to be included in the section of the WEND Principles dealing with distribution.

The following is the recommended addition to the WEND Principles as proposed by the WEND Committee.

WEND Principles

5.4 When an encryption mechanism is employed to protect data, a failure of contractual obligations by the user should not result in a complete termination of the service. This is to assure that the safety of the vessel is not compromised.

3. Harmonization between RENCs

The WEND System requires close co-operation between different RENCs. The policies of RENCs must therefore be harmonized. This is an important task of the WEND Committee. The WEND Committee felt that the present wording of paragraph 1.2 of the WEND Committee's Terms of Reference is too specific and should be expanded to include all aspects of harmonization.

The following is the amendment to the Terms of Reference of the WEND Committee as proposed by the WEND Committee.

WEND Committee Terms of Reference

1.2 To harmonise the policies of Regional ENC Co-ordinating Centres (RENC) with respect to matters related to administration, legality, finances, technical processes, etc.

In addition, the WEND Committee felt that the harmonization aspect should also be reflected in the WEND Principles. The following additional paragraph 2.6 of the WEND Principles, as adopted originally through Circular Letter 27/1994, was therefore proposed.

WEND Principles

2.6 The Member States should strive for harmonization between RENC's in respect of data standards and service practices in order to ensure the provision of consistent ENC services to users. Wherever appropriate, this should be achieved by adoption of IHO Standards.

The present paragraphs 2.6, 2.7 and 2.8 would be renumbered respectively 2.7, 2.8 and 2.9.

4. Promotion of ENC production

The WEND Committee felt that regional IHO bodies should intensify their efforts to promote the production of ENCs in their region. This should not be left to individual Member States to do. In addition the Committee expressed their view that a better overview about the needs and priorities of ENC production is necessary to identify the existing gaps and discuss possibilities how to fill them. The Regional Hydrographic Commissions, where they exist, should form RENC Committees to promote ENC production and the formation of a RENC. Where International Chart Committees exist or are appropriate they should be utilized and given new "Terms of Reference" to be able to undertake these tasks.

In this respect the WEND Committee recommended that the IHO should request:

- a) *Regional Hydrographic Commissions or, where they exist or where they are appropriate, International Chart Committees to address the needs for and promotion of ENC production in their regions.*
- b) *Regional Hydrographic Commissions to report annually to the WEND Committee about the progress made on the establishment of the WEND system. This should be accompanied by reports from all Member States about the needs and priorities of ENC production, and the progress which has been achieved.*

Member States are requested to vote on the above WEND Committee proposals **by 30 June 2000**, using the Voting Paper provided in Appendix 2 to this Circular Letter.

On behalf of the Directing Committee
Yours sincerely,

Rear Admiral Neil GUY
Director

Appendix 1: WEND Chairman's Report to the 2nd EIHC (CONF.EX2/WP.2)
Appendix 2: Voting Paper

Working Paper No. 2

DEVELOPMENT OF THE WEND SYSTEM AND FUTURE ROLE OF RENCs

Activities

WEND meetings are held annually in different parts of the world to accomplish three goals:

- 1) to understand regional problems
- 2) to promote the production of Electronic Navigational Charts (ENCs)
- 3) to facilitate the establishment of Regional Electronic Chart Centres (RENCs).

Meetings have been held in New Orleans (USA), Tokyo (Japan), Goa (India), Sydney (Australia) and now in Monaco. Representatives from at least 20 IHO Member States usually attend the Meetings.

The outcome of the 4th WEND Meeting in Sydney was reported to Member States through Circular Letter 37/1999.

WEND maintains close contact with other related IHO Committees and Working Groups, in particular, the activities of the IHO CHRIS Committee and its associated working groups (e.g., TSMAD and Colours and Symbols Maintenance Working Group). In addition, there are the various international contacts that the IHB has with IMO, IALA, IEC and ISO that may be related to WEND activities and developments. In particular, refinements and additions to standards and specifications relating to ECDIS, ENC, RNC and RCDS are considered.

Probably the most important aspect for annual WEND consideration is the progress made in the production of ENCs and the development of distribution mechanisms through RENCs following the WEND Principles.

Problems Related to the Establishment of the WEND System.

Some progress has been achieved regarding the ENC production. However, on a global level the situation is still unsatisfactory. Additional efforts are necessary to cover congested areas and harbour approaches in various parts of the world. This problem can only be solved if additional capacity for the ENC production is accomplished.

The establishment of RENCs has been very slow. Currently, only one RENC has been formed (PRIMAR). This situation has led to a reassessment of what may be required to provide world-wide ENC coverage and services.

A number of problems that may have hindered the development of distribution mechanisms through RENCs have been identified. They include:

- a) The reluctance of regional States to agree on a *modus operandi*. This could be as a result of national priorities, lack of hydrographic infrastructures, inability to produce consistent or uniform data.
- b) The problems related to quality assurance.
- c) Necessary security systems to protect the data.
- d) ENC updating services.
- e) The cost of establishing and operating a RENC.

Solutions

In the light of the WEND considerations, the following actions for solving the problems are recommended:

- a) The Conference should encourage Member States to give higher priority to the production of ENC data, and the provision of adequate ENC services.
- b) The Conference should emphasize the importance of establishing the WEND system by adopting the following WEND Resolution. (see Annex A).
- c) The Conference should adopt the WEND principles (see Annex B) which have been amended with regard to harmonization between RENCs (para 2.6) and encryption mechanisms. (para. 5.4).
- d) The Conference should endorse the amended Terms of Reference of WEND (Annex C).
- e) The Conference should request that Regional Hydrographic Commissions or, where they exist or where they are appropriate, International Chart Committees should address the needs for and promotion of ENC production in their regions.
- f) The Conference should request that Regional Hydrographic Commissions report annually to the WEND Committee about the progress made on the establishment of the WEND system. This should be accompanied by reports of all Member States about the needs and priorities of ENC production, and the progress which has been achieved.
- g) Additional endeavours to improve the capacity to establish ENC services may also include the participation of private industry. The meeting of HOs and industry which took place on Saturday, 18 March could be taken as a starting point for further cooperation with private industry.

WEND RESOLUTION

It is recommended that Member States:

- a) create the appropriate climate for regional and international co-operation in the capture and management of digital hydrographic data, acknowledging the ownership of the data.
- b) give high priority to the production of data that are validated and conform to the ENC Product Specification.
- c) promote the production of ENCs and the use of ECDIS.
- d) establish mechanisms for the national, regional and international distribution of ENCs in accordance with the WEND Principles.

WEND PRINCIPLES

1. Ownership and Responsibility

- 1.1 A Member State has responsibility for the preparation and provision of digital data and its subsequent updating for waters of national jurisdiction.
- 1.2 The Member State responsible for originating the data should validate it.
- 1.3 A Member State responsible for any subsequent integration of a country's data into a regional, or larger, data base is responsible for validating the results of that integration.
- 1.4 Responsibilities for providing digital data outside areas of national jurisdiction should be established.
- 1.5 The INT chart system is a useful basis for areal selection.
- 1.6 Legal liability must be recognized by participants.

2. Cooperation and Coordination

- 2.1 In the interests of safety at sea and to respond to the increasing demand for ENC, Member States are encouraged to work together in establishing and maintaining a WEND system as soon as possible, to share in common experience and reduce expenditure, and to ensure the greatest possible standardization and reliability.
- 2.2 Terms of Cooperation Arrangement for the Northern Europe RENC may be useful in arranging transactions between other RENCs and national HOs.
- 2.3 HOs are strongly recommended to provide data to HO data base organizations (RENCs) pursuing data bases within the WEND concept.
- 2.4 Member States are encouraged to work together on data capture or management.
- 2.5 Neighbouring Member States are encouraged to cooperate in boundary areas.
- 2.6 The Member States should strive for harmonization between RENCs in respect of data standards and service practices in order to ensure the provision of consistent ENC services to users. Wherever appropriate, this should be achieved by adoption of IHO Standards.
- 2.7 Advantage should be taken and shared of all experience gained.
- 2.8 Member States planning to incorporate data that must be obtained from another Member State into an integrated data base should inform those countries well in advance.
- 2.9 The development of overlapping data sets from different sources should be avoided if possible.

3. Languages

3.1 The need to have data associated with different languages should be considered.

4. Standards and Quality Management

4.1 A recognized standard of quality management (e.g. ISO 9000) should be employed to ensure a high quality of the ENC services.

4.2 There should be compliance with all relevant IHO and IMO standards and criteria (including IHO S-57, IHO S-52, or their replacements).

5. Distribution

5.1 Distribution of products may be separate from the data base management.

5.2 Methods to be adopted should ensure that data bear a stamp or seal of approval of the issuing HO.

5.3 Member States should work together in safeguarding national copyright in ENC data to protect the mariner from falsified products.

5.4 When an encryption mechanism is employed to protect data, a failure of contractual obligations by the user should not result in a complete termination of the service. This is to assure that the safety of the vessel is not compromised.

6. Updating

6.1 Technically and economically effective solutions for updating should be established.

6.2 National HOs providing source data are responsible for advising the issuing HO of update information in a timely manner.

6.3 The issuing HO is responsible for providing timely updates to the ENC for the mariner.

6.4 Updating information to regional or greater area ENC datasets should be available worldwide.

7. Reimbursement and Financial Arrangements

7.1 HOs should not give commercial companies better conditions than they offer to other HOs.

7.2 Reimbursement, including financial arrangements, payment in kind etc. for providing data, should be a matter for bilateral agreement between the parties involved.

8. Assistance and Training

8.1 Member States' HOs are strongly recommended to provide, upon request, training and advice to HOs which require it to start developing their own national data base.

TERMS OF REFERENCE FOR THE WEND COMMITTEE

Objective: To promote the establishment of a World-wide Electronic Navigational Chart Database (WEND) suitable for the needs of international shipping

1. Terms of Reference

- 1.1 To provide a forum for the coordination of the activities of Member States in achieving the objective.
- 1.2 To harmonize the policies of regional ENC Coordinating Centres (RENC) with respect to matters related to administration, legality, finances, technical processes, etc.
- 1.3 To take account of the Terms of Reference of, and consult with, other IHO bodies as appropriate, particularly CHRIS.
- 1.4 To report to Member States annually through Circular Letter and make a report to the ordinary sessions of the International Hydrographic Conference.

2. Rules of Procedure

- 2.1 The Committee is composed of representatives duly authorized by Member States and an IHB Director will attend WEND Meetings.
 - 2.2 Meetings shall be held once a year. The venue and date will be announced at least three months in advance.
 - 2.3 The Committee Members will elect the Chairman and the Vice-Chairman of the Committee at its first meeting following each ordinary session of the International Hydrographic Conference.
 - 2.4 Recommendations of the Committee will be submitted to the IHO Member States for adoption through the Directing Committee.
 - 2.5 The IHB will serve as the Secretariat for the WEND Committee.
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VOTING PAPER
(to be returned to the IHB, duly completed, by 30 June 2000)

The Directing Committee
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Principality of Monaco
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E-mail: info@ihb.mc

Member State:

Date of reply:

1) WEND Resolution

Do you support the WEND Resolution as contained in this CL (page 1)?

YES NO

2) Encryption

Do you support the addition of a new paragraph 5.4 to the WEND Principles as given in this CL (page 2)?

YES NO

3) Harmonization between RENCs

a) Do you support the proposed amendment to WEND ToR 1.2 as given in this CL (page 2)?

YES NO

b) Do you support the addition of a new paragraph 2.6 to the WEND Principles as given in this CL (page 2)?

YES NO

4) Promotion of ENC production (See page 3 of this CL)

a) Do you agree that needs for and promotion of ENC production should be addressed through regional bodies?

YES NO

b) Do you agree that Regional Hydrographic Commissions should report annually to WEND?

YES NO

Comments:.....

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