

20th CHRIS MEETING

Niteroi, RJ, Brazil, 3-7 November 2008

Paper for Consideration by CHRIS

OUTCOMES OF WEND-11

<i>Submitted by:</i>	IHB
<i>Executive Summary:</i>	This paper summarizes recent discussions and decisions taken at WEND-11 that may be relevant to the work of CHRIS.
<i>Related Documents:</i>	CHRIS Work Programme
<i>Related Projects:</i>	None

Introduction

1. The 11th meeting of the Committee on WEND (WEND/11) met in Tokyo from 2 to 5 September 2008. The meeting was attended by representatives from 29 Member States, both RENCs, several accredited Non-Governmental International Organizations (NGIOs). An ECDIS Stakeholders' Forum was held midway through the meeting.

Guidelines for the Implementation of the WEND Principles

2. The principal topic for discussion was a review of the WEND Principles – and in particular the need for guidance notes concerning the harmonization and quality of data in ENC. As a result, the Committee prepared and agreed a WEND Committee paper - *Guidelines for the Implementation of the WEND Principles*. The paper is included at Annex A to this report.

Data Chain Certification Concept

3. The WEND Committee considered a *Data Chain Certification Concept* presented by RTCA and invited the RTCA delegate to convene an informal correspondence group to further study its potential application to the chart and nautical publications data distribution chain and to report back to the IRCC. WEND/11 also recommended that CHRIS members be invited to participate in the Correspondence Group.

Coordination of the Production Small and Medium Scale ENCs

4. The Committee considered mechanisms to better coordinate the scheming and production of small and medium scale ENCs on a regional basis. WEND/11 considered and agreed that the model presented by the Baltic Sea Hydrographic Commission (see paper CHRIS20-06.1F) has merit as a model for harmonizing ENCs on a regional basis and agreed that CHRIS should consider this approach with a view to reflecting it in the Annex to S-65 as a generic model. WEND/11 also recommended that relevant RHCs and INT chart coordinators should coordinate the development of small/medium scale ENC schemes and CHRIS/HSSC should consider developing guidelines for the preparation and maintenance of small/medium scale ENC schemes and determine whether they should be included in S-65 or a new document similar to M-11. The IHB considers that such guidelines should be complemented by Terms of Reference and Rules of Procedures for INT chart coordinators (to

also address small/medium ENC schemes). The CSPCWG is the most appropriate existing WG to develop both the guidelines for the preparation and maintenance of small/medium scale ENC schemes and the Terms of Reference and Rules of Procedures for INT chart coordinators.

WEND Task Group

WEND/11 recommended that the IRCC consider establishing a Task Group similar to the WEND TG to undertake specific tasks related to the ongoing development and implementation of the WEND concept.

Action Required of CHRIS

The CHRIS is invited to:

- a. **Note** this report.
- b. **Agree** that CHRIS members be invited to participate in the Correspondence Group on Data Chain Certification.
- c. **Agree** that the Baltic Sea Hydrographic Commission (see paper CHRIS20-06.1F) model for harmonizing ENCs on a regional basis should be reflected in the Annex to S-65 as a generic model.
- d. **Agree** that the CSPCWG should develop guidelines for the preparation and maintenance of small/medium scale ENC schemes and reflect these in S-65 or through a new document similar to M-11.
- e. **Agree** that the CSPCWG should develop Terms of Reference and Rules of Procedure for INT chart coordinators (to also address small/medium ENC schemes) and reflect these in M-11 Part A.

11TH WEND COMMITTEE MEETING

Tokyo, 2-5 September 2008

GUIDELINES FOR THE IMPLEMENTATION OF THE WEND PRINCIPLES

The International Hydrographic Organization (IHO) is encouraging the transition from paper charts to electronic navigation through its support of a carriage requirement for ECDIS. It follows that the IHO should ensure that mariners are well served by adequate ENC services.

Noting that there are significant improvements required related to coverage, consistency, quality, updating and distribution of ENCs for many parts of the world and that this needs urgent attention, the Wend committee invites IHO Member States to apply the following guidelines for the implementation of the Wend principles (Technical Resolution K2.19).

1. Responsibilities of Coastal States

1.1. A mandatory carriage requirement for ECDIS means a consequential obligation on Coastal States to ensure the provision of ENCs.

1.2. If the coastal State is the issuing authority (in terms of SOLAS V 2.2) then responsibility for the ENCs should lie with it regardless of whether the production and maintenance is undertaken with the assistance of commercial contractors or another Member State.

1.3. Where agreement is given to another Member State to produce and issue ENCs on behalf of a Coastal State the producing / issuing Member State should carry the responsibility for the ENC.

1.4. States providing source data to another State for the compilation of ENCs should advise that producer State of update information in a timely manner.

1.5. Member States should take into consideration the complexity and resource requirements of the ENC production and maintenance task in relation to their own capabilities and options when deciding how to best ensure the provision of ENCs for their waters.

1.6. Subject to appropriate agreement, it is acceptable for a Member State or a group of Member States to produce ENCs as an interim measure to fill gaps in existing coastal States' coverage to promote contiguous coverage. Such ENCs should be withdrawn when adequate coverage is made available by the coastal State.

1.7. The S-57 standard requires that there is no overlap of ENC data within usage bands. ECDIS systems will operate unpredictably in areas where overlapping ENC data is present; for this reason overlapping ENC data is not acceptable in end-user services. Where overlapping coverage exists the producing States should recognize their responsibility and take the necessary steps to resolve the situation. In situations where overlapping data cannot be resolved through negotiation, the ENC producer(s) can anticipate that an end user service provider may need to take action itself to eliminate the overlap or discontinue services until the issue is satisfactorily addressed. Any such action to eliminate overlap should be communicated in advance to the affected ENC producer(s) and be based on guidelines that emphasize navigation safety, such as the following:

1. Scale of the data compiled in the ENC,
2. Currency of data in the ENC - i.e. most recent surveys, shoalest soundings, wrecks, rocks, and obstructions,
3. Avoidance of dividing navigationally significant features between producers. For example, Traffic Separation Schemes should be handled by one producer or the other.

1.8. Exceptionally, a Member State may create additional ENCs to facilitate unified coverage where such production is undertaken specifically to address issues inhibiting provision of ENC coverage for the safety of

navigation in accordance with the long term aims of the WEND Principles. A Member State undertaking such production should have very valid reasons for its actions and, beforehand, should have made reasonable efforts to negotiate with and come to some agreement with the State that has jurisdiction over the area in question. RHCs should place a high priority on filling ENC gaps.

1.9. In order to ensure uniform quality and consistency of the WEND, Member States should cooperate in accordance with clause 1.3 of the WEND Principles.

1.10. To ensure that the WEND database is maintained to the highest quality standard Member States that identify an error or any other deficiency in an issued ENC, or that receive information indicating such a deficiency, must bring this to the attention of the ENC producer so that the problem can be resolved at the earliest opportunity. Member States should act to ensure that appropriate actions are taken so that the safety of navigation is not compromised.

2. Reference Standards and Implementation

2.1. Harmonization means the uniform implementation of S-57 and other applicable standards, according to common IHO implementation rules as described in S-58, S-65 and the S-57 Encoding Bulletins.

2.2. Member States not wishing to join a RENC should make appropriate arrangements to ensure that their ENCs meet WEND requirements for consistency and quality and are widely distributed.

3. Capacity Building and Cooperation

3.1. Assistance to coastal States may cover aspects such as development of an ENC production capability, ENC quality and the role of RENCs in ENC validation and distribution.

3.2. It is essential that coastal States have established cartographic capability and infrastructure prior to undertaking ENC production and maintenance tasks themselves so as to ensure that the ENCs within the WEND database meet the high quality standards necessary to fulfil SOLAS requirements.

3.3. IHO Member States should consider ENC related projects as high priority capacity building initiatives.

4. Integrated services

4.1. Member States and RENCs should cooperate to ensure that ENCs are harmonised to the same quality standards thereby facilitating integrated services.

4.2. Member States only need to consider the use of S-63 if they intend to deliver a service to end users. Data Servers (i.e. service providers) and equipment manufacturers are responsible for implementing S-63 and form part of the 'S-63 trusted circle' (i.e. are entrusted to protect the ENCs and the encryption process).