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CIRCULAR LETTER 11/2007
30 January 2007

10TH WEND MEETING, 11 & 14 SEPTEMBER 2006, MONACO

2ND ECDIS STAKEHOLDERS FORUM, 12-13 SEPTEMBER 2006, MONACO

References:

- a) CL62/2006 dated 18 September 2006 - IHO Data Protection Scheme S-63
- b) CL69/2006 dated 19 October 2006 - Progress Report on the Development of S-100 and S-101
- c) CL71/2006 dated 23 October 2006 - ENC Production, Availability and Coverage
- d) CL77/2006 dated 24 November 2006 - Submission to IMO regarding the requirement for the regular maintenance of ECDIS software
- e) IHO Publication M-3 – Resolutions of the IHO

Dear Hydrographer,

I. 10TH WEND MEETING

1. The 10th Worldwide Electronic Navigational Chart Database (WEND) Committee meeting took place at the IHB, Monaco, on 11 and 14 September 2006, under the Chairmanship of Captain Abri KAMPFER, South Africa. The sixty-one attendees representing twenty-eight Member States and four NGOs deliberated on numerous issues of importance relating to the production and distribution of Electronic Navigational Charts (ENC). The full proceedings are summarized in the minutes that can be found on the IHO website (www.iho.shom.fr > Committees > WEND). A list of actions arising from this meeting is provided in **Annex A**.

2. With the recent movement of IMO towards mandating the use of ECDIS, WEND devoted most of its efforts on addressing the need to have adequate coverage of ENCs in support of such a mandate. WEND recommended the IHB and the WEND Task Group working through the Regional Hydrographic Commissions, assess current coverage and take action to stimulate production in those areas where it currently does not exist. The WEND principles regarding the development of ENC schema and the production of ENC on a timeline supportive of IMO's mandatory carriage requirement initiatives, and the need for Member States to seek necessary assistance in attaining adequate coverage, were emphasized (re: CL in reference c).

3. The adoption of the IHO Data Protection Scheme (S-63) also generated some discussion. Although Member States approved in 2002 the adoption of S-63 as the standard to be used should encryption be desired, it has not been reflected in the Resolutions of the IHO or the WEND Principles. The submission of the IHB to make the necessary changes provided an opportunity for WEND to discuss several aspects of ENC encryption. In the end, WEND agreed to wording for the Resolutions of the IHO and the WEND Principles regarding S-63 for submission to Member States for approval (re: CL in reference a). The different implementation of S-63 by the RENC's has caused some

distribution problems; therefore, the RENC's were requested to report back on efforts to harmonize their distribution methods.

4. The often-used term "Official ENC" received significant attention. The discussions revolved around the fact that by definition an ENC has all the attributes that makes it "Official"; therefore, there cannot be an "Unofficial ENC". That the term "ENC" should be copyrighted was discussed as a possible solution to the misuse of the term. The criteria that make an electronic chart an ENC were discussed and agreed to in a WEND Resolution (Annex F to WEND10 Minutes). These criteria are:

- (a) The distribution of ENC must have a suitable method of authentication to confirm its source and integrity,
- (b) The governmental responsibility for ENC is the same as that applicable to other navigational products and services issued by or on the authority of the respective issuing government,
- (c) ENC must be made universally available in an IHO recognized non-proprietary format, and
- (d) The term ENC must not be qualified in any way to refer to any product that is not government authorized.

It is the IHB's view that the best way to capture the sentiments of WEND/10 participants, as stated above, is to encapsulate these criteria into a new IHO Technical Resolution. Member States are therefore requested to consider and approve the proposal for a new TR A3.13, as at Annex C, and to return the associated voting paper to the IHB not later than **15 April 2007**.

5. With regard to coverage, WEND endorsed a submission to the IHO Work Program that Regional Hydrographic Commissions monitor the status of ENC production and consistency and facilitate the completion of ENC in support of IMO's mandatory ECDIS carriage requirement.

6. The 11th WEND has tentatively been scheduled for April 2008 in Tokyo, Japan.

II. 2ND ECDIS STAKEHOLDERS FORUM

7. Capitalizing on the successful format of the 1st ECDIS Stakeholders' Forum (ESF), whereby the ESF was held in conjunction with a major IHO Committee meeting (18th CHRIS meeting), and taking note that the 1st ESF had numerous ENC availability and distribution concerns, the 2nd ESF convened in Monaco coincided with the 10th WEND Meeting. The two active RENCs, Primar-Stravanger and IC-ENC, also held meetings during this period, which further enhanced the exchange of information between the stakeholders. In total over 80 participants from ECDIS software/hardware manufactures, Maritime Safety Administrations, Hydrographic Offices, Shipping Lines, NGOs, and chart distributors gathered under the chairmanship of Mr. Horst Hecht, Germany to discuss issues associated with ENC and ECDIS. The full proceedings are summarized in the record of discussion that can be found on the IHO website (www.iho.shom.fr > Committees > WEND). A list of actions arising from this meeting is provided in **Annex B**.

8. As expected there were extensive discussions on availability and distribution. Stakeholders offered several examples where inadequate coverage provided strong disincentives for the mariner to adopt navigation with ECDIS, opting instead for navigation on paper charts using Electronic Charting Systems (ECS) for situational awareness. The Stakeholders implored the Hydrographic Offices, the IHO and IMO to redouble their efforts in achieving adequate coverage of ENCs in support of international shipping. Even where coverage is adequate, pricing can be an issue. Examples were provided that demonstrated the high cost of maintaining an ENC portfolio for a long haul international ship. Both C-Map Norway and Marine Press offer innovative suggestions for reducing the total cost of ENCs to the mariner without changing the price of an ENC. Finally, consistency between adjoining cells was highlighted as, at best, disconcerting to the mariner. The IHO efforts, as instituted by CHRIS, towards ensuring consistency were presented but it was noted that some changes require the recompiling of ENC data and would take time to work through the work program of various Hydrographic Offices.

9. Although CHRIS had gone to great lengths to deconflict S-57 ed3.1 and its included ENC Product Specification from its current efforts of developing a new encoding standard for digital geospatial data known as S-100, several stakeholders expressed concern over the potential disruption of ENC production or availability caused by S-100. Although, it was explained that there would be no impact, the ESF requested CHRIS address this issue at its next meeting in September 2006. (Note: CHRIS did address this concern and issued a statement that there would be no impact on ENC production or availability due to the development of S-100 – re: CL in reference b).

10. The 3rd ECDIS Stakeholders Forum has been planned to take place in conjunction with the 19th CHRIS meeting and Europort 2007, Rotterdam, Netherlands, on the week commencing 5 November 2007.

III. IHO DATA PROTECTION SCHEME S-63 AND WEND PRINCIPLES

11. CL in reference a) requested Member States to approve a new IHO Technical Resolution 3.12, i.e.

(a) It is resolved that the IHO Data Protection Scheme, as described in Publication S-63, is the IHO recommended security scheme for ENCs.

(b) It is further resolved that the IHB, as the IHO Secretariat, will act as Scheme Administrator for S-63.

As well as the following revised wording for WEND Principle 2.11 (as part of TR K2.19):
“Member States should work together so that the IHO Data Protection Scheme (S-63) is used for ENC distribution to end users, to ensure data integrity, to safeguard national copyright in ENC data, to protect the mariner from falsified products, and to ensure traceability.”

12. The IHB is grateful to the following 39 Member States that responded: Algeria, Argentina, Australia, Belgium, Brazil, Chile, Croatia, Denmark, Ecuador, Egypt, Estonia, Finland, France, Germany, Greece, Iceland, Italy, Japan, Korea (Rep. of), Latvia, Morocco, Netherlands, New Zealand, Norway, Pakistan, Papua New Guinea, Peru, Poland, Portugal, Serbia & Montenegro, Singapore, Slovenia, South Africa, Spain, Sweden, Tunisia, Turkey, United Kingdom and USA (NOS). All 39 Member States supported the new TR 3.12 and 38 Member States the revised WEND Principle 2.11, which are therefore both approved (37 positive responses were required). USA (NOS) suggested a slightly different wording for WEND Principle 2.11, already discussed at the 10th WEND meeting and which had not received sufficient support.

13. IHO Publication M-3 “Resolutions of the IHO” is being amended accordingly.

14. Actions from the 10th WEND meeting and the 2nd ECDIS Stakeholders Forum, many of them for the IHB, are being attended to.

On behalf of the Directing Committee
Yours sincerely,



Rear Admiral Kenneth BARBOR
Director

Annex A- Action Items arising from the 10th WEND Meeting
Annex B - Follow-on Actions from the 2nd ECDIS Stakeholders Forum
Annex C - Voting Form – New TR A3.13 – ENC distribution and use of the term ENC

ACTIONS FROM THE 10TH WEND MEETING

1. Using the DnV study as a basis, **WEND TG** to:
 - i) Identify the main shipping routes for all SOLAS vessels (including HSC)
 - ii) Determine where gaps in ENC coverage exist for all navigational purposes (scale ranges)Upon completion, a report is to be submitted for consideration by WEND.
2. **IHB** to draft a CL proposing a new TR A3.12 (ENC Encryption), and the revision of TR K2.19 (WEND Principles).
3. Based on the resolution agreed to at WEND10 (see Annex F), **IHB** to draft a CL regarding clarifications on ENC distribution, government responsibility, availability, and use of the term “official” with ENC.
4. **IHB** to investigate if there should be an IHO trademark associated with ENCs.
5. **IHB** to draft a letter to relevant RHCs (those regions with insufficient ENC coverage) regarding the importance of achieving ENC coverage. Specifically:
 - devise a small-scale ENC schema
 - develop an ENC production plan to achieve adequate coverage of priority routes
6. **RENCs** to report back to WEND on how to harmonize the various means of ENC distribution that exist between the two RENCs.
7. **RENCs** to report back to WEND on issues raised in the paper: “Some Reflections on the Current Status of ENC Distribution” (WEND10-7C).
8. **IHB** to include the work items agreed by WEND10 (see Annex G) into the draft IHO Work Programme 2008-2012.
9. **IHB** to seek CHRIS endorsement and draft a proposal for IHC17 on the “Principles and Set of Procedures for Making Changes to IHO Standards” (see Annex H to CHRIS15 minutes forwarded with IHO CL 58/2003 – also attached to WEND10 minutes as Annex H).

ESF2 FOLLOW-ON ACTIONS BY IHO

1. **IHB** to include in the Minutes of ESF2 a written description of the ENC World Catalogue design/process.
2. **WEND TG** to identify which are the key shipping routes for ENC coverage.
3. **IHB** to look into alternative ways to obtain funding, such as bilateral/multilateral arrangements between HOs.
4. **IHB** to provide information as needed to those Member State governments who may be unaware of the importance/urgency of completing ENC production/coverage.
5. **IHB** to invite CHRIS to provide guidance to HOs on the use of SCAMIN to provide a a clear display.
6. **IHB** to invite CHRIS to determine appropriate ways to warn users of possible inconsistencies, e.g. in highlighting borders between adjacent ENC cells, until universal consistency is achieved.
7. The two **RENCs** to conduct a study of the level of ENC use onboard SOLAS vessels and report back to WEND on the findings.
8. Noting that lowering the cost to the end user does not require a change in ENC pricing by HOs, **licensing bodies** to examine alternative licensing conditions and arrangements with a goal toward more flexibility and report back to WEND.
9. **Licensing bodies** to review and report back to WEND their current information requirements for maintaining privacy.
10. **IHB** to invite CHRIS to update the IHO Information Paper on S-57 Ed.4, taking into account the current development of S-100.
11. **IHB** to seek CHRIS endorsement and draft a proposal for IHC17 on the “Principles and Set of Procedures for Making Changes to IHO Standards” (see Annex H to CHRIS15 minutes forwarded with IHO CL 58/2003 – also attached to WEND10 minutes as Annex H).
12. **IHB** to invite CHRIS to conduct a study of the impact of S-101 (future ENC Product Spec) on all ECDIS Stakeholders.
13. **IHB** to invite IEC to confirm that the customization of S-63 (i.e., S-63X) will not be restricted or cause a problem in ECDIS.
14. **IHB** to invite IEC to communicate with IMO regarding the need to develop a mechanism to deal with software changes to required SOLAS equipment.
15. **IHB** to inform CHRIS that WEND supports continued operation of the OEF, for the time being.
16. **IHB** to conduct, possibly via the OEF, a survey in advance of the next ESF to obtain topics for discussion.
17. **IHB** to promote the next ESF via publications and public media, in an effort to increase stakeholders participation.
18. **IHB** to expand the invitation list for the next ECDIS Stakeholders Forum (ESF3) to include more end-user representatives.

ENC DISTRIBUTION AND USE OF THE TERM ENC

**Proposal:
New IHO Technical Resolution A3.13**

VOTING FORM

*(to be returned to the IHB by 15 April 2007
E-mail: info@ihb.mc - Fax: +377 93 10 81 40)*

Member State:

As a follow-on of a resolution adopted by the 10th WEND meeting (see paragraph 4 of CL 11/2007),

Do you approve the inclusion of a new Technical Resolution A3.13, relating to ENC distribution and the use of the term ENC, in IHO Publication M-3 *Resolutions of the International Hydrographic Organization*, with the following wording:

"A3.13 ENC DISTRIBUTION AND USE OF THE TERM ENC

- (e) The distribution of ENC must have a suitable method of authentication to confirm its source and integrity,
- (f) The governmental responsibility for ENC is the same as that applicable to other navigational products and services issued by or on the authority of the respective issuing government,
- (g) ENC must be made universally available in an IHO recognized non-proprietary format, and
- (h) The term ENC must not be qualified in any way to refer to any product that is not government authorized."

YES

NO

Comments :

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Name/Signature: Date: