

**3rd Meeting of the Hydrographic Services and Standards Committee
IHB, Monaco, 8-10 November 2011**

Report of the ENC Updating Working Group (EUWG)

Submitted by:	Chairman, EUWG
Related Documents:	- Minutes of HSSC2, Rostock, Germany, 26-29 October 2010 - IHB circular letters 09/2011 and 30/2011 - IHB circular letter 41/2011
Related Projects:	/

Chair:	Yves Le Franc, France
Vice-Chair:	Richard Coombes, United Kingdom
Secretary:	/
Member States:	Australia, Canada, Denmark, Finland, France, Germany, Italy, Japan, Korea (Rep. of), Latvia, Netherlands, New Zealand, Norway, Portugal, Slovenia, South Africa, Spain, Ukraine, United Kingdom, USA.
Expert Contributor Organisations:	IC-ENC, Jeppesen Marine, PRIMAR

See Annex A for full details

Meetings Held During Reporting Period

The WG works by correspondence. A meeting was not considered necessary to complete the work.

Work Program

According to its TOR, the objective of EUWG for the period HSSC2 to HSSC3 is to review and update Appendix 1 to S-52 for subsequent inclusion in S-65.

- **Content of S-52 Appendix 1**

Appendix 1 is a complex document. The content has been examined to identify which topics are covered. Schematically, Appendix 1 covers:

- guidance for the production of up to date ENC data,
- guidance for the distribution of up to date ENC data,
- guidance for the processing of up to date ENC data into an ECDIS.

- **Review and transfer into S-65 and UOC 3.0.0**

Guidance for the production and the distribution of up to date ENC data have been reviewed by EUWG before to be transferred into S-65. The group identified some points which need to be highlighted or specified to improve the ENC updating process, from the production to the ECDIS. The new recommendations are strictly in accordance with current standards or IHO resolutions.

So, **a draft new edition of S-65** has been prepared to provide a better high level guide to the production, maintenance and distribution of ENCs. The document is presented in Annex C (changes to the current edition are highlighted with comments). **It is submitted to the HSSC.**

Some of the recommendations need clarifications to S-57. They have been addressed to TSMAD (EUWG letter 03/2011). Some of them have been integrated by the TSMAD in the draft UOC 3.0.0 when related to the encoding of the data.

- Draft new edition of S-52 Appendix 1

Once the above transfer “S-52 Appendix 1 to S-65” operated, it is proposed to only retain in Appendix 1 the paragraph 3.4 “ECDIS manufacturers”, which is guidance for the processing of up to date ENC data into an ECDIS, with a new introduction. The proposed new paragraph 3.4 is almost unchanged because most of its elements are precisely quoted in IEC 61174 and it was not in the intention of EUWG to review ECDIS requirements or to impact IEC 61174 by changing paragraph references. However, some changes have been made at clause 3.4.2 (a) to remove obsolete statements (e.g use of 3.5" high density diskette or ER via SafetyNET).

After having examined and compared the terminology used in paragraph 3.4 and in IEC 61174 and MSC 232(82), it appeared that S-32 (IHO Dictionary) is sufficient, noting that the main document of S-52 also refers to S-32 for terminology. Then, the glossary and other definitions in the appendix have been removed.

DIPWG has been liaised and gave a favourable opinion on the project of appendix 1 as an acceptable short term solution.

So, the **draft new edition of S-52, Appendix 1** is presented in Annex D. **It is submitted to the HSSC.**

Progress on HSSC Action Items

- **Action HSSC2/17** - IHB to survey Member States regarding application of the recently approved *Guidelines for Encoding T&P ENC Updates* (Annex B to S-65 Edition 1.2, October 2009¹) to establish the status of production of T&P ENC updates for each nation.

The survey has been done via CL 09/2011 and CL 30/2011. Latter replies have been received since CL 30/2011. Finally the result of the survey is:

There are 51 Member States publishing ENC's directly or through arrangements with other States.

50 Member States answered the CL 09/2011. Member States detailed replies are provided in Annex E.

The replies show that of Stated that responded:

- 44 Member States² publish temporary (T) and preliminary (P) notices to mariners (NM) for paper charts, and of those, 32 Member States also produce ENC (ER) equivalent updates (73%),
- of the 12 Member States who produce NM (T) and (P) for paper charts but who do not presently produce equivalent ENC updates, 9 expect to do so until the end of 2012. This will then result in at least 93% of ENC publishing States being in conformity with the recommendations in S-65 Annex B.

The Guidelines issued by EUWG is welcomed by Member States.

The outcome of the study indicates that the situation regarding temporary and preliminary ENC updates production is evolving most favourably.

It is recommended that IHB makes a new survey in 2013.

Problems Encountered

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Any Other Items of Note

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Conclusions and Recommended Actions

- The draft new edition of S-65 is submitted to the HSSC.
- The draft new edition of S-52, Appendix 1 is submitted to the HSSC.

¹ Since, the Guidelines has been transferred into UOC 3.0.0 (clause 2.6.2)

² For those Member States whose cartographic production is delegated to another State, the status of the production of the delegatee State has been considered.

- Although the situation regarding temporary and preliminary ENC updates production is evolving most favourably, it is recommended that IHB surveys Member States again in 2013.
- If HSSC 3 endorses the proposed new editions, it is recommended to formally address the new edition of S-52, Appendix 1 to IEC for information and comments before the submission to Member States for approval.
- If HSSC 3 endorses the proposed new editions then EUWG will have achieved its objectives as defined in its TOR. So, it is proposed to dissolve the EUWG after Member States will approve the new editions of S-65 and S-52, Appendix 1.

Justification and Impacts

It seems useless to maintain a specific WG on ENC updating when the IHO Member States have a lot of other subjects to deal with within HSSC.

Action Required of HSSC

The HSSC is invited to:

- Note the report,
- Endorse the draft new edition of S-65,
- Endorse the draft new edition of S52, Appendix 1,
- To invite IHB to surveys Member States again in 2013 regarding application of the recently approved Guidelines for Encoding T&P ENC Updates,
- To invite IHB to promote the new edition of S-65,
- To decide of the future of the working group.

Annex A

Membership of EUWG		
Member State	Name of Delegate	email
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EUWG Proposed Work Plan – HSSC3 to HSSC4

See report to HSSC2/Work programme

EUWG Tasks

- A. Address comments received on draft new editions of S-65 until Member States approval.
- B. Address comments received on draft new editions of S-52, Appendix 1 until Member States approval

Task	Work Item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-Completed	Contact Person	Affected Pubs/Standard	Remarks
A	Address comments received on draft new edition of S-65 until Member States approval.	H		11-2011	2012	O-ongoing	Yves Le Franc Richard Coombes	S-65	
B	Address comments received on draft new edition of S-52, Appendix 1 until Member States approval.	H		11-2011	2012	O	Yves Le Franc Richard Coombes	S-52	

Status of T&P ENC Updating Production

MEMBER STATES' COMMENTS IN RESPONSE TO CL 09/2011 (updated to August 2011)

Question 1: Do you produce Temporary (T) and Preliminary (P) Notices to Mariners (NMs) for paper Charts?

Note: T and P NMs for paper charts are described in IHO publication S-4 Part B-600 "Chart maintenance".

Responses to Question 1:

YES (36)	NO (7)
Argentina, Australia, Belgium, Brazil, Chile, China, Colombia, Croatia, Denmark, Ecuador, Estonia, Germany, Finland, France, Iceland, India, Japan, Korea (Rep. of), Latvia, Malaysia, Mexico, Netherlands, New Zealand, Norway, Papua New Guinea, Peru, Philippines, Poland, Portugal, Romania, Singapore, South Africa, Spain, Suriname, Sweden, Thailand, Turkey, Ukraine, UK, Uruguay and Venezuela.	Bahrain, Canada, Greece, Ireland, Italy, Morocco, Russian Federation, Slovenia and USA.
Member States comments	
<p>Bahrain: Hydrographic Survey Directorate (HSD) has not got the authority to issue NtMs. This reside with General Organization for Sea Ports (GOP). HSD issues Chart Corrections. MENAS is issuing T&P Ntms on behalf of GOP.</p> <p>Italy: We do not produce T&P NMs for our paper charts ; however in the Italian NMs Booklet there is the section C1 "Nautical Information" where the mariners can find the same information as T&P NMs. Every notice is pertinent to different paper charts covering the same geographic area.</p> <p>Philippines: Yes, we produce both Temporary and Preliminary as Temporary (T) NMs for paper charts. Preliminary (P) NMs will be published soon.</p>	
EUWG Chairman's comments	
<p><i>In the counting of responses, Italy has eventually been counted as YES noting the above comment. Ireland and Morocco have also been counted as YES, considering the production status of the relevant delegatee States. This has resulted in 39 YES and 4 NO, as reflected in section 1 of this circular letter.</i></p>	

Question 2: If you answer "Yes" to question 1, do you promulgate the equivalent of the T and P NMs for paper charts via ENC updates (via ER application profile)?

Responses to Question 2:

YES (29)	NO (8)
Argentina, Australia, Belgium, Brazil, Chile, China, Ecuador, Estonia, Germany, Finland, France, Croatia, Latvia, Mexico, Netherlands,	China, Colombia, Denmark, Iceland, India, Italy, Japan, Korea (Rep. of), New Zealand, Malaysia, Norway and Romania.

YES (29)	NO (8)
Papua New Guinea, Peru, Philippines, Poland, Portugal, Singapore, South Africa, Spain, Suriname, Sweden, Thailand, Turkey, Ukraine, UK, Uruguay and Venezuela.	
Member States comments	
<p>Australia: Australia has provided a full update service equivalent to T&P NMs for paper charts via ENC Updates since Jan 2011 in accordance with the EUWG guidance published in IHO Publication S-65. All outstanding T&P equivalent Updates have been applied retrospectively to our entire ENC portfolio.</p>	
<p>Bahrain: No</p>	
<p>HSD is presently regaining its capability to produce ENCs and hence hasn't reach that stage yet. UKHO has issued ENCs on behalf of HSD.</p>	
<p>Belgium: The T&P NMs for paper charts which contain important navigational information will be equivalent promulgated.</p>	
<p>Brazil: Work is in progress to make available all the T&P NMs as ENC updates via ER application profiles.</p>	
<p>Chile: To date, the T NMs issued by SHOA do normally not have any deadline. This situation is under study.</p>	
<p>Colombia: ENC updates under the ER profile are not made for issuing Temporary Warnings. Only when the ENC is concerned by the Permanent NMs, an update of the ENC is generated on the basis cell. We do not take into account the Temporary NMs, given the short delay and the type of allocation of such NMs.</p>	
<p>Denmark: The most important T and P NMs are updated via ER ENC updates but these updates are based on individual considerations in regards to safety of navigation.</p>	
<p>Ecuador: Implementation of this updating has started this year.</p>	
<p>France: Implemented since February 2010, in accordance with Annex B to S-65.</p>	
<p>India: Fortnightly ENC updates are released in compliance with S-65 Product Guidelines and S-63 encryption standards by incorporating the permanent notices only. Other T and P NMs information made available to the mariner online as an NM publication by INHO.</p>	
<p>Ireland: Paper charts and ENC's for Irish waters are produced by UKHO.</p>	
<p>Italy: Though we don't produce T&P NMs for paper charts, we publish P NMs for ENCs (via ER application profile) only when the information is related to new/change Traffic separation schemes. We follow the recommendations reported in the IHO S-57 Encoding Bulletin E25_April 2009.</p>	
<p>Korea (Rep of): Generally does not apply, that the editors think is important to reflect.</p>	
<p>Malaysia: Malaysia currently do not promulgate any of T and P NMs via ENC updates because it is only informing the mariners more on Maritime Safety Information (MSI) activities.</p>	
<p>Mexico: Only in the Preliminary Notices, for example in harbors being planned. In the Paper Charts should be updated the aids being used and those being not used. In the Temporary Notices, we do not modify the information of the chart.</p>	
<p>Netherlands: P & T notices will be included if necessary, but is considered case by case.</p>	
<p>Norway: The ER-production for T&P is not fully operational. For the time being we are performing some tests that are expected to continue for 3-4 months. An internal production set up is finalized.</p>	
<p>Papua New Guinea: Australia as our Charting Authority receives our normal T&P for Chart</p>	

YES (29)	NO (8)
<p>Maintenance.</p> <p>Peru: When T&P updates equivalent to the paper charts exist, they are encoded with the correspondent attributes, in which the validity delays for the NMs are mentioned.</p> <p>Philippines: Data/Information concerning ENC Updates for Philippine waters are sent to UKHO for updating of Philippine ENCs.</p> <p>Poland: Yes, we do. We derive them from paper NMs or directly from source data, if necessary.</p> <p>Suriname: Temporary NMs are not updated in charts; only the Preliminary NMs. T NM information is issued through radio broadcast and internet. Suriname will produce it's first ENC in 2011, and will include T NM and P NM depending on the period the NM is published for.</p> <p>Sweden: Since 2009 Swedish ENCs are including T&P updates corresponding to T&P NMs. If the information in a T&P NM is NOT possible to show in ENC the text "Not shown in ENC" is printed in the bottom of the NM. Our experience is that the mariners still have difficulties to find the Text information in the ECDIS due to poor ECDIS training and, in many systems, to complicated mechanisms.</p> <p>Thailand: HDRTN promulgates NMs and P NMs via ENC updates. T NMs are not included in an ER file.</p> <p>Turkey: TN-ONHO issues ENC updates equivalent to T&P NMs for paper charts which are to be cancelled with further ENC updates.</p> <p>UK: Promulgation of the ENC Updates are synchronised to agree with those of the equivalent paper chart.</p> <p>Uruguay: ENC updates for the Temporary and Preliminary Updates are presently made, including them in the ordinary updates.</p>	
<p>EUWG Chairman's comments</p> <p><i>In the counting of responses, Ireland and Morocco have been counted as YES, considering the production status of the relevant delegatee States. This has resulted in 31 YES and 8 NO, as reflected in section 1 of this circular letter.</i></p>	

Question 3: If you answer "No" to question 2, please indicate when you plan to produce T and P updates for ENC via ER application profiles as recommended in Annex B to S-65?

Responses to Question 3:

Member State	Year
<i>Bahrain (answer "No" to question 1)</i>	2011
China	2012
Colombia	/
Denmark	Not defined
Iceland	2012
India	Will be considered at the end of 2012
Italy	2012

Member State	Year
Japan	2012
Korea (Rep. of)	2012
Malaysia	2012
New Zealand	2012
Norway	2011
Romania	2011
<i>Ukraine (answer "Yes" to question 2)</i>	2011
<i>USA (answer "No" to question 1)</i>	N/A
Member States comments	
<p>Colombia: ENC cells are presently being issued with Permanent NMs; after some time, these NMs are uploaded in the cells. If the NM is relevant so much that it has an implication on the integrity of the mariner or the environment, an update is undertaken and immediately divulgated.</p> <p>We do not specify any particular year for the implementation of ER profiles in the case of Temporary NM. For the moment, we do not count on software and training enabling us to generate ER profiles for an ENC.</p> <p>To meet the demand of Temporary NMs, these latter (T) are subject to a follow up and analysis so that if the ENC is not functional anymore because of the type of temporary application, the type of application and the corrective measures to be taken will be published in our web page and in the means used to disseminate information to the mariners, till the corresponding update is generated.</p> <p>Denmark: Denmark has two members in the working group. Due to lack of resources we are waiting for the implementation of a new production system before T and P NMs will be issued via ENC's</p> <p>Iceland: It is expected to start updates for ENC via ER in beginning of year 2012.</p> <p>Ireland: Paper charts and ENC's for Irish waters are produced by UKHO.</p> <p>Italy: We are changing our work flow and we are using new software. As a consequence we will create a geographic database that will help us to maintain the data, but we need a training period to check and to improve the new work flow and to practise with new software.</p> <p>Malaysia: <u>The plan to produce T and P updates for ENC via ER file will be in 2012.</u></p> <p>Mexico: There is a need to define clearly the attributes of the buoys, beacons, reconstruction of the oil platforms which are in and out of service for some periods of time, as they generate problems while validating the ENC's.</p> <p>New Zealand: Due to resource constraints and building our technical capability we will not be in a position to produce T&P updates for ENC until Q4 2012 at the earliest.</p> <p>Norway: Fully operational production by July.</p> <p>Russian Federation: The subject is under study.</p> <p>USA: NOAA does not intend to produce T&P updates to ENC's for the foreseeable future.</p>	

Question 4: Do you think that the *Guidelines for Encoding T&P ENC Updates* (Annex B to S-65) provide sufficient guidance on how to encode T and P NMs via ENC updates?

YES

Australia, Bahrain, Belgium, Brazil, Chile, Colombia, Croatia, Denmark, Ecuador, Estonia, Germany, Finland, France, Greece, Italy, Korea (Rep. of Korea), Latvia, Malaysia, Netherlands, Norway, New Zealand, Philippines, Poland, Portugal, Romania, Russian Federation, Singapore, Slovenia, South Africa, Spain, Suriname, Turkey, Ukraine, UK, Uruguay and Venezuela.

Member States comments - Improvements which could be made

Australia: Further advice and improvements on the current guidance can only be obtained with experience. Any such advice should be forwarded to EUWG for consideration.

Chile: It is important that a Spanish edition be made available for use by Latin American countries.

Colombia: Maybe a connotation of recommendation should not be given to it, but instead try to convert it into rules to be followed for the update and issuance of NM for ENC.

Even if the rules for the application of NM in the paper charts - "Part B-600" - are known, these cannot be applied specifically to the ENC matters.

UK: The advice for attributing soundings shoaler than the surrounding dredged area with EXPSOU=2 is now out of date. UK has devised a national policy for these instances (UKHO ref. ENC Clarification No.39).

With the over use of CTNAREs, the use of New Object for T&P NMs would dramatically reduce the total of "whole cell" CTNAREs. Subject of a paper to TSMAD22 (April 2011).

Latvia: Yes for now, but improvements should be made when new issues arises, as more countries start to encode T&P NMs, more questions or different situations will arise to be solved differently than described now.

Malaysia:

The publication is very helpful to guide Malaysia on this matter.

Mexico: As publication S-65 is very general, it is necessary to determine those attributes which must be included as T&P NMs for ENC validation.

Norway: As a superior guidance.

New Zealand: The Guidelines for Encoding T&P ENC Updates (Annex B to S-65) provides a good framework for (T) an (P) ENC updates.

Philippines: Yes for now, to address the immediate concerns and not to complicate the situation. Later, improvements would be made when new and critical issues arise.

Sweden: The layout could be improved to facilitate quick search, perhaps in the form of a lookup table. Following information should be added :

- Information about how to deal with T&P NMs which is not possible to show in ENC.
- Recommendations on how to inform the mariners about the national policy concerning T&P information.

NO OPINION

Argentina, China, India, Ireland, Iceland, Japan, Morocco, Papua New Guinea, Thailand, USA