

Report of the ENCWG

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| Submitted by: | Thomas Mellor, Chairman, |
| Related Documents: | S-52 S-57 S-58 S-64 S-65 S-66 |
| Chair: | Mr Thomas Mellor (UK) |
| Vice-Chair: | Mr Mikko Hovi (FI) |
| Secretary: | Mr Athony Pharaoh (IHB) |
| Member States: | Argentina, Brazil, Canada, Denmark, Chile, Equator, Egypt, Estonia, Finland, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Netherlands, New Zealand, Norway, Russia, Singapore, Slovenia, South Africa, Sweden, Turkey, Ukraine, United Kingdom, United States of America |
| Expert Contributor Organisations: | The International Centre for ENCs (IC-ENC), PRIMAR Stavanger, Caris, ESRI (USA), Furuno (Finland), GEOMOD (France), KRISO, KHRA, Hyundai e-Marine (ROK), Jeppesen Marine, IIC Technologies (Canada), Nipon Sogo (Japan), PC Marine (UK), NAVTOR AS (Norway), SevenCs (Germany), TKartor (Sweden), and Transas (Russia). |
| <i>see Annex A for full details</i> | |

Meetings Held During Reporting Period

Expert Contributor Meeting, IHB, Monaco (8 - 10 February 2016)

ENCWG1 Meeting, Tokyo, Japan (14 - 18 March 2016) (in conjunction with the S-100WG1 and DSPWG11)

1. Planned Meetings

ENCWG2 Meeting - Genoa, Italy (20 - 22 March 2017)

2. Work Program

Progress continues on the work items assigned by HSSC as follows:

S-65 ENCs: Production, Maintenance and Distribution Guidance edition 1.3

Work on the revision to S-65 carried out by the ENCWG identified a number of minor corrections necessary to bring the standard up to date for changes in the WEND principles. Edition 1.3 has been submitted to HSSC8 for approval.

S-66 Facts about Electronic Charts and Carriage Requirements edition 1.1

At HSSC 7 the ENCWG was tasked with the update and maintenance of S-66. In light of changes to key IMO circulars and other related documents the ENCWG have carried out an extensive review of S-66 and suggested a number of editorials, these are currently being incorporated into edition 1.1. It is expected this activity will be completed by the end of November 2016 and will need to be endorsed by HSSC Circular Letter.

S-58 ENC Validation Checks edition 6.0

Given the amount of change that has been necessary to bring S-58 in line with the ISO operators the work to produce edition 6.0 has taken longer than expected. The ENCWG have reviewed the draft and comments are currently being applied to the document, the new IHB TSSO is assisting with this activity. It is expected that this edition of S-58 will be ready end of November 2016 and will need to be endorsed by HSSC Circular Letter.

S-64 IHO Test Data Sets for ECDIS edition 3.0.2 and S-52 IHO Presentation Library edition 4.0.2

As reported to HSSC 7 there are a number of minor issues being identified in S-52 and S-64 by OEMs going through ECDIS type approval. To address these concerns an ENC sub WG meeting was arranged in Feb 2016. At the meeting the invited group of OEMS reviewed all the reported comments listed on the IHO webpage and either endorsed or rejected the proposed amendments. The results of the OEMs comments were presented to the ENCWG for ratification and currently the edits to the documents are being carried out. All the amendments identified fall into the clarifications category and as such when the documents are updated they will be circulated to the ENCWG for final approval prior to being published on the IHO web site.

3. Progress on HSSC Action Items

HSSC 7 tasked the ENCWG to consider future use of the ENC/ECDIS Data Presentation and Performance Check. At the ENCWG1 meeting the group agreed that a new check dataset would not be created for S-52 Presentation Library edition 4.0. Instead it was agreed that guidance would be written for Mariners to check ECDIS chart 1 to establish that their system could display the new symbols introduced in S-52 PresLib 4.0. The ENCWG approved these instructions and they have been posted on the IHO website; and all the OEMs registered to the IHO S-63 security scheme have been contacted to make them aware of the new instructions. A press release is also being developed to inform the wider community.

4. Problems Encountered

Unfortunately during the updating process of S-52 and S-64 a key expert contributor and longstanding member of the ENCWG has been forced to withdraw his support for all IHO activities. This unfortunate matter has highlighted

the high degree of reliance the ENCWG and wider IHO place on stakeholders to assist with standards development.

5. Any Other Items of Note

Retirement of S-52 Presentation Library edition 3.4

The ENCWG proposal brought to HSSC 7 to delay the withdrawal date of S-52 Presentation Library edition 3.4 until August 2017 was endorsed by CIRM and as such the recommendation was presented at IMO NCSR by the IHB. IMO acknowledge this activity and endorse the current course of action.

S-63 IHO ENC data protection scheme

During the year I have had a number of meetings with the DPSWG chair to discuss the possibility of the ENCWG taking over responsibility for the standard S-63 edition 1.2. There are many members of the DPSWG who also attend ENCWG meetings and to combine all the current ENC and ECDIS related standards under one WG would reduce the number of IHO meetings expert contributors would have to attend.

IMO e-navigation S-Mode

To ensure all IHO member states get an opportunity to feed into the development of S-mode I have been in contact with AMSA who are leading on this activity. The IMO will not actually consider S-Mode until the 2018 & 2019 biennium. However, it is the intention of AMSA to develop a mature draft, which will be fed into IMO in 2018 with the aim of being adopted as an MSC guideline in 2019. As a result of this involvement in September 2016 I sent the first draft of the guidance to ENCWG members for comment.

ENCWG Vice-Chair

The position of ENCWG Vice-Chair has been filled by Mr Mikko Hovi of Finland.

ENCWG Members

I would like to take this opportunity to formally recognise all the hard work and effort dedication two members of the ENCWG have contributed to the development of IHO standards over the years. Eivind Mong (formerly of Jeppesen) and Richard Fowle (IC-ENC) are parting company with the IHO and ENCWG for a while, but we would always welcome them back if and when the circumstances allow.

6. Action Required of HSSC

HSSC are invited to endorse the report and agree to ratify the guidance standard S-65 and the ENC validation Standard via HSSC letters

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ENCWG WORK PLAN 2016-17**Tasks**

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| A | Maintain S-52 “Specifications for Chart Content and Display Aspects of ECDIS” and its associated “Presentation Library” (IHO Task 2.3.2) |
| B | Maintain S-57 “IHO Transfer Standard for Digital Hydrographic Data” (IHO Task 2.2.2) |
| C | Maintain S-58 “Recommended ENC validation checks” (IHO Task 2.2.2) |
| D | Maintain S-61 “Product Specification for Raster Navigational Charts” (IHO Task 2.2.2) |
| E | Maintain S-64 “IHO Test Data Sets for ECDIS” (IHO Task 2.2.2) |
| F | Maintain S-65 “ENC Production, Maintenance and Distribution Guidance” (IHO Task 2.2.2) |
| G | Assess the impact of other IHO standards on S-52 display specifications |
| H | Liaise with the NIPWG and the NCWG (IHO Task 2.3.2) |
| I | Maintain the ENC production and portrayal sections of the IHO website (IHO Task 2.2.2 & 2.3.2) |
| J | Conduct the 2015 and 2017 meetings of ENCWG and its sub-group(s) and project team(s) (IHO Task 2.2.1) |
| K | Maintain S-66 “Facts about electronic charts and carriage requirements – See Annex B – S-66 Project Team Work Plan (IHO Task 2.2.2.10) |

Work items

| Work item | Title | Priority H-high M-medium L-low | Next milestone | Start Date | End Date | Status P-planned O-ongoing C-completed S-Superseded | Contact Person(s) | Related Pubs / Standard | Remarks |
|-----------|--|---|--|------------|-----------|---|------------------------|-------------------------|---------|
| A.1 | Resolve any problems or errors identified in the current editions of S-52 and its Presentation Library | H | | 2009 | Permanent | O | Thomas Mellor | S-52 | |
| B.1 | Resolve any problems or errors identified in the current edition of S-57 | H | | 2011 | Permanent | O | Thomas Mellor | S-57 | |
| C.1 | Monitor the implementation of the new edition of S-58 and keep the recommended checks up to date | H | | 2003 | Permanent | O | Richard Fowle (UKHO) | | |
| C.2 | Resolve any problems or errors identified in the current edition of S-58 | H | Edition 5.1.0 released in 2016 | 2003 | Permanent | O | Richard Fowle (UKHO) | | |
| C.3 | 1. Restructure S-58 to provide a more logical means of data validation. 2. Investigate how the new version of S-58 can be used to implement a minimum validation standard for all ENCs. | H | Edition 5.0.0 June 2014 Subject to completion of C.2 | 2012 | 2016 | C | Richard Fowle (IC-ENC) | | |

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|-----------|---|---|----------------|------------|-----------|---|----------------------------------|-------------------------|-----------------------------|
| E.1 | Resolve any problems or errors identified in the current edition of S-64 | H | | | 2017 | | | | |
| F.1 | Monitor and assess proposals for amending S-65 | L | | | Permanent | O | | | |
| G.1 | Liaise with IEC TC80 to ensure that future changes to S-52 and to the Presentation Library are compatible with Ed. 4 of IEC 61174 | H | | 2015 | 2016 | P | Thomas Mellor (UKHO) | S-52, IEC 61174 | |
| H.1 | Liaise with the NIPWG and the NCWG | H | | | | | | | |
| I.1 | Maintain the ENC production and portrayal sections of the IHO website, and support FAQ and Encoding Bulletins | H | | 2003 | Permanent | O | Jeff Wootton (AHS) IHB (ADDT) | | Include posting EBs and PBs |

Meetings (Task J)

| Date | Location | Activity |
|--------------------|-----------------|-----------------|
| 2-6 Feb 2015 | Ottawa, Canada | ENCWG-1 |
| 14 – 18 March 2016 | Tokyo, Japan | ENCWG-2 |

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