

**4th IHO-HSSC Meeting
Taunton, UK, 25-28 September 2012**

**Report of CSPCWG to HSSC4
Chart Standardization and Paper Chart Working Group**

Submitted by:	Chairman, CSPCWG
Related Documents:	IHO Circular Letter 59/2012 (4th Meeting of the HSSC)
Related Projects:	not applicable

Chair:	Peter Jones, UK
Vice Chair:	Jeff Wootton, Australia
Secretary:	Andrew Heath-Coleman, UK
Member States:	Australia, Brazil, Canada, Chile, Colombia, Denmark, Finland, France, Germany, Greece, India, Indonesia, Iran, Italy, Japan, Korea (Rep of), Latvia, Netherlands, New Zealand, Norway, Pakistan, Russia, South Africa, Spain, Sweden, Turkey, Ukraine, UK, USA (=29).
Expert Contributor	M Huet, IHB
Organisations:	ESRI, Jeppesen Marine

See Annex A for full details of membership

1. Meetings

- 1.1 CSPCWG8, 29 November – 2 December 2011, held in Turku, Finland.
- 1.2 Planned CSPCWG9, 13-16 November 2012, to be held in Seoul, Republic of Korea.

2. Election of Officers

As required by its terms of reference, CSPCWG will need to appoint its chair and vice-chair at its first meeting after IH Conference. This will occur at CSPCWG9, November 2012, in Seoul.

3. Work Programme

The programme is based on the priorities assigned within the detailed Work Plan (Annex B refers). Since HSSC3, the principal activities have been:

- 3.1 S-4 Chart Specifications of the IHO and Regulations for International (INT) Charts:

3.1.1 Following the publication of Edition 4.2.0, August 2011, reported to HSSC3, the French language version has been published thanks to the work of FR/SHOM. IHO CL43/2012, 17 April 2012 refers.

3.1.2 Work has progressed on a further revision, Edition 4.3.0, to be published shortly (IHO CL67/2012, 05 July 2012 refers). This is principally to include new and revised symbols and specifications, including:

- A new clause on the purpose and content of charts (a clarification approved at HSSC3 – Action HSSC3/11 refers)
- Explicit guidance to avoid printing nautical ‘plans’ on the back (reverse side) of paper charts
- Updating of Source and ZOC diagrams
- The charting of historic wrecks, alongside obstructions at berths, disused lighthouses, diving prohibited areas, remotely sensed shoal areas, development dredging, orange and amber lights, recording stations.

3.1.3 Section B-300 (Topography) is currently under active revision.

3.2 S-4 supplementary publications INT 1, INT 2 & INT 3:

3.2.1 There are three official language versions of INT1 *Symbols, Abbreviations and Terms used on Charts* - IHO CL29/2012, 05 March 2012 refers:

- Edition 4 of the Spanish language version was published, October 2011, by ES/IHM.
- Edition 5 of the French language version was published, early 2012, by FR/SHOM.
- (Edition 7 of the English language version was published, January 2011, by DE/BSH.)

3.2.2 There are no current plans for a new edition of INT2 *Borders, Graduations, Grids and Linear Scales* (Edition 4, 2007).

3.2.3 Edition 5 of INT3 *Use of Symbols and Abbreviations* was published, December 2011, by UK/UKHO - IHO CL08/2012, 30 January 2012 refers.

3.3 S-11 Part A Guidance for the Preparation and Maintenance of International Chart Schemes

Edition 2.0.5 was published, May 2012, by UK/UKHO to update the annexes - IHO CL56/2012, 29 May 2012 refers:

- A. potential printer nations; and
- B. use of chart paper sizes.

3.4 S-49 Standardization of Mariners' Routeing Guides

There are no plans at present to update S-49.

3.5 Chart specifications, symbols and abbreviations

The following new and revised symbols and specifications are currently under consideration:

- The charting of marine farms area limits, safety zones around FPSO, maintained and dredged areas, depicting areas of new surveys after disasters (eg tsunami, earthquakes, hurricanes)
- Further clarifications on the charting of lights on multicoloured charts.

3.6 Data Quality Working Group questionnaire to mariners

DQWG referred the results of their extensive questionnaire on chart data quality indicators and symbols to CSPCWG for further analysis. Secretary has undertaken this work and reached some provisional judgements which are being considered by CSPCWG. In particular, focussing on whether all existing paper chart quality indicators are necessary and appropriately communicating 'uncertainty'.

4. Progress on HSSC Action Items

HSSC Action 3/11: CSPCWG Chair to include a definition of the purpose and content of a chart, as submitted in HSSC3-05.5B, in S-4 at its next revision.

- This is to be included in S-4 Edition 4.3.0 shortly (3.1.2 above refers).

5. Problems Encountered

- 5.1 Ongoing resource stretch at participating HOs.
- 5.2 Progress of the work item *developing guidelines for the preparation & maintenance of small / medium scale ENC schemes* (Work Plan item B3 at Annex B). In order to progress this item after much delay, an approach for assistance and advice has been made to the recently established NSEHWG (North Sea ENC Harmonization Working Group, under NSHC). It is envisaged that this group will have the requisite knowledge and skills to progress this work, at least to draft stage, within their work programme.

6. Any Other Items of Note

- 6.1 The volume of detailed input to CSPCWG's work is extensive and thanks are recorded to all contributor MS' representatives. CSPCWG benefits from a high level of active participation from its membership - typically, 20 or more MS contribute in the WG's deliberations. 17 MS, 2 industry representatives and IHB/Professional Assistant CSPCWG8 in Finland, November 2011.
- 6.2 Further, a good level of MS' response is received from the wider IHO membership in reply to IHO Circular Letters generated from CSPCWG work.
- 6.3 Additionally, valuable advice is provided by DIPWG, DQWG and TSMAD Chairs on request, enhancing the collaboration between the WGs. AU's representative and vice-chair (Jeff Wootton) is invaluable in providing perspectives and liaison across CSPCWG, DIPWG, HDWG and TSMAD and in advising on the technical consequences of decisions for each.
- 6.4 Chairman and Secretary continue to provide responses to a variety of miscellaneous enquirers. This includes providing advice to ICCWG/RCG coordinators and to individual MS on charting matters and the application of IHO specifications and standards.

7. Conclusions and Recommended Actions

- 7.1 HSSC4 is invited to endorse the continued activity of CSPCWG under its current Terms of Reference.
- 7.2 HSSC4 is invited to approve CSPCWG's Work Plan as submitted at Annex B. This Work Plan was formally reviewed in detail at CSPCWG8, December

2011 and has been updated in the version at Annex B. Following any direction or guidance from HSSC4, this will be subject to further review and revision at CSPCWG9, November 2012.

8. Justification and Impacts

8.1 Justification for the continued activity of CSPCWG is to fulfil the remit of its Terms of Reference which includes:

- Improving the standardization and currency of paper nautical charts (in accordance with SOLAS V (2002, regulation 9));
- Improving the guidance provided to nautical chart compilers, whatever the product's format, including support for 'Capacity Building';
- Improving the interface and, where feasible, commonality of presentation between paper and digital chart products, whilst acknowledging their inherent differences.

8.2 The principal impact is the resource commitments of participating HOs.

9. Action Required of HSSC

The HSSC is invited to:

- Note this report;
- Endorse the continued activity of CSPCWG;
- Approve the Work Plan at Annex B.

Annexes:

- A. Membership of CSPCWG (at 17 July 2012)
- B. CSPCWG Work Plan

ANNEX A

MEMBERSHIP OF CSPCWG
(latest update 17 July 2012)

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CSPCWG Work Plan

August 2012

(updated following CSPCWG8 & changes to IHO Programme numbers and descriptions at IHC XVIII)

- *Objectives, Tasks and Work Items are pursued in accordance with IHO Work Programme 2013-2017, Programme 2 (Hydrographic Services and Standards):*
 - *Element 2.3. Nautical Cartography:*
 - *Task 2.3.1 Conduct annual meetings of relevant HSSC WGs dealing with nautical cartography, Chart Standardization and Paper Chart Working Group*
 - *Task 2.3.2 Maintain and extend the relevant IHO standards, specifications and publications, INT Chart Series*
- *The focus is on maintaining and enhancing the cartographic standards in paper charts to suit the needs of the modern mariner in support of safe navigation and protection of the marine environment, whilst drawing together, wherever possible, common issues of paper/electronic charting.*
- *As a Plan it will and should evolve; accordingly, contributions from WG members and others are welcomed at any time.*

CSPCWG Tasks

- A Revise, develop and maintain Publication S-4 'Chart Specifications of the IHO & Regulations of the IHO for INT Charts' (IHO T2.3.2 refers)
- B Revise, develop and maintain Publication S-11 Part A 'Guidance for the Preparation and Maintenance of INT Chart schemes' (IHO T2.3.2 refers)
- D Development of new (and revised) symbology (IHO T2.3.1 and 2.3.2 refer)
- E Maintenance of S-4 supplementary publications INT 1, 2 & 3 (IHO T2.3.2 refers)
- F Revise, develop and maintain S-49 'Recommendations concerning Mariners' Routeing Guides' (IHO T2.3.2 refers)

Tasks and numbers from IHC XVIII Conf.18/Rep/01

No	Work item	Priority H-high M-medium L-low	Next Milestone	Start Date	End Date	Status P-Planned O-Ongoing C-Completed	Contact Person(s)	Affected Pubs/Standard	Remarks
A.5.1	Revise S-4 Part B Section 300-330	H	IHO CL for M/S approval	2010	2013	O	Sec CSPCWG	S-4 / B-300	WG Ltr 9/12
A.5.2	Revise S-4 Part B Section 340-390	M	IHO CL for M/S approval	2011	2013	O	Sec CSPCWG	S-4 / B-300	WG Ltr 9/12
A.6	Revise S-4 Part B Section 500	L	WG Ltr	2012	2013	O	Sec CSPCWG	S-4 / B-500	Draft in prep
A.10	Remote sensed shoal depth guidance	M	Publish S-4 Ed 4.3.0 August 2012	2011	2012	O	Sec CSPCWG	S-4	IHO CL 67/12
A.11	Clarify guidance on dredged/maintained areas	M	WG Ltr	2011	2013	O	Sec CSPCWG	S-4, INT1?	CSPCWG8-08.9A & Action 15. In discussion with Aus HO
B.3	Develop guidelines for preparation & maintenance of small / medium scale ENC schemes.	H	NSEHWG work plan item	2009	2013	O	Chair CSPCWG	S-11 / S-65 ?	Passed to NSEHWG for assistance.
D.23	'Development' dredged depths	M	Publish S-4 Ed 4.3.0 August 2012	2009	2012	O	Sec CSPCWG	S-4	IHO CL 67/12
D.26	Diving prohibited	M	Publish S-4 Ed 4.3.0 August 2012	2011	2012	O	Sec CSPCWG	S-4, INT 1	IHO CL 67/12
D 27	Revise guidance on Marine Farm limits	H	IHO CL for M/S approval	2011	2013	O	Sec CSPCWG	S-4, INT1	WG Ltr 6/12
D 28	Revise guidance on FPSO safety zones	M	IHO CL for M/S approval	2011	2013	O	Sec CSPCWG	S-4	WG Ltr 6/12
D 29	Clarify guidance on safe vertical clearances	M	IHO CL for M/S approval	2011	2013	O	Sec CSPCWG	S-4	WG Ltr 9/12
D 30	Guidance for post-disaster highlighting of new surveys	M	IHO CL for M/S approval	2011	2013	O	Sec CSPCWG	S-4	WG Ltr 6/12

D 31	Analysis of DQWG user questionnaire on quality indicators & symbols	M	WG members' responses to Ltr 7/12	2012	2013	O	Chair CSPCWG	S-4, INT 1	WG Ltr 7/12
E.1	Maintain official INT 1s		Next editions when planned				DE: S Spohn FR: O Parvillers ES: A Guitart	INT 1	English version 2011 (Ed 7) French version 2012 (Ed 5) Spanish version 2011 (Ed 4)
E.4	Symbols for vacant entries in INT 1	L	Review when A5.2 completed	2013		P	Sec CSPCWG	INT 1, S-4 part B	INT1 subWG next meeting
E.6	Maintain INT 3			2011	2011	C	Sec CSPCWG	INT 3	New edition 08/12/11
E7	Renumbered, see A11								
E8	Reorganize INT1 to exclude composite symbols	L	Next round of NEs of INT1			P	INT1 subWG	INT1	CSPCWG8-11.1A & Action 29

CSPCWG Meetings (IHO T2.3.1 refers)

Date	Location	Activity
03-05 Nov 04	IHB, Monaco	CSPCWG 1
19-21 Oct 05	IHB, Monaco	CSPCWG 2
22-24 Nov 06	IHB, Monaco	CSPCWG 3
13-15 Nov 07	IHB, Monaco	CSPCWG 4
18-21 Nov 08	Sydney, Australia	CSPCWG 5
01-03 Dec 09	IHB, Monaco	CSPCWG 6
23-26 Nov 10	Simon's Town, S Africa	CSPCWG 7
29 Nov–02 Dec 11	Turku, Finland	CSPCWG 8
13-16 Nov 12	Seoul, Rep of Korea	CSPGWG 9

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