

10th IHO-CSPCWG Meeting

10th Chart Standardization and Paper Chart WG Conference Wellington, New Zealand, 21-24 January 2014

CONTENTS:

1. Report

2. Annexes:

- A Agenda
- B List of Conference documents (Note: actual documents are available on IHO website (http://www.iho.int/mtg_docs/com_wg/CSPCWG/CSPCWG10/CSPCWG10docs.htm))
- C List of Participants in CSPCWG10
- D CSPCWG10 Actions
- E CSPCWG Work Plan (updated at CSPCWG10)
- F List of Acronyms and Abbreviations used at CSPCWG10

REPORT:

Note: Paragraph numbering follows the agenda, although the order of taking the items was not exactly followed.

1. Welcome, Introductions and Administrative Arrangements

*Docs: CSPCWG10-01A rev2 List of documents (ANNEX B)
CSPCWG10-01B rev1 List of meeting participants and WG members (ANNEX C)*

Andrea MacDonald, of the New Zealand Hydrographic Service, extended a warm welcome to the CSPCWG and wished us a successful meeting.

The participants introduced themselves, some of whom were attending their first WG meeting. A list of meeting participants is at ANNEX C.

The Chairman (Peter Jones) explained that this would be his last meeting, as he was retiring in March 2014. The Vice Chairman (Jeff Wootton) would stand up from then (in accordance with Terms of Reference 4d) and an election for a new Vice Chairman would take place at the end of this meeting. Michel Huet (IHB) thanked the WG, on behalf of the IHB, and especially Peter Jones and Andrew Heath-Coleman (Secretary) for their work over the past 10 years. Michel informed the meeting that he is also retiring in June, so this would be his last meeting.

Apologies had been received from the hydrographic office representatives of Brazil, Canada, Greece, Italy, Japan, Latvia and South Africa.

The Chairman outlined his plans for the meeting and thanked NZ for hosting CSPCWG10. He also thanked members for attending, acknowledging the cost and therefore the need to make good use of the opportunities to make progress. He mentioned that there have been several changes to individual national representatives during the year and advised WG members to update their personal email lists accordingly, from the membership list on the IHO website, which is updated whenever changes occur.

He advised that he would seek consensus from discussions, with one vote per MS should a vote be required. He stated that the record of the meeting would focus on main points, proposals and actions; full detailed minutes would not be taken.

10th IHO-CSPCWG Meeting

2. Approval of Agenda

Docs: CSPCWG10-02A rev3 Agenda (ANNEX C)

The WG approved the agenda. The Chairman explained that the agenda order did not reflect any priority and he reserved the right to postpone discussion on some lower priority items if necessary to ensure more important items were sufficiently discussed. He also advised that the record of last year's meeting had been subjected to comment at the time it was produced and could therefore be taken as read. The meeting accepted this.

3. Status of Actions from CSPCWG9

Docs: CSPCWG10-03A Status of actions from CSPCWG9

Very good progress had been made with the 59 actions from CSPCWG9 (November 2012), as detailed by the paper. Most had been completed, although on-going consequences still apply, as noted in the paper (eg reference by IHO Circular Letter to MS for approval; further discussion at CSPCWG10). The following points were noted:

CSPCWG9 Actions 1-3 These three actions will be replaced by equivalent actions from WG10.

CSPCWG9 Action 4. J Wootton (Vice Chairman, AU) advised that the combined DIPWG/TSMAD members had agreed that the 'intended purpose' of buoys should be displayed in ECDIS (although the real-world situation would be included in the attribute list available via pick report). No further action for CSPCWG.

CSPCWG9 Action 5. M Huet (IHB) advised that he had not contacted Microsoft, but that the word 'hydrographic' was now in their dictionary, so no further action was required.

CSPCWG9 Actions 6, 13, 18, 19, 25-29, 31, 33, 36, 37, 39, 43, 50: Although the immediate actions had been completed, it was necessary to have further discussion by CSPCWG and agenda items had been allocated accordingly.

CSPCWG9 Action 14: M Huet advised that S-12 is now the responsibility of SNPWG. This means that CSPCWG should advise SNPWG of any decisions that may affect S-12.

CSPCWG9 Action 22: J Wootton advised that the discussion about regulatory versus navigation restrictions is on-going. Accordingly, this action is to be kept open.

CSPCWG9 Action 23: This action closed pro tem, until outcome of Action 22 is known.

CSPCWG9 Action 24, 30 and 42: These actions are now the subject of CL70/2013, awaiting MS approval.

CSPCWG9 Action 32: Nothing further had been received from KR on the subject of 'Wing in Ground' (WIG) services and no representative from Korea was at the meeting to comment. The action was closed.

CSPCWG9 Action 58: J Wootton advised that he was waiting for a suitable example (ie the 'producer code register'). Accordingly, this action is to be kept open.

New (CSPCWG10) actions arising:

ACTION 1: Secretary to produce draft report of CSPCWG10 by end of February 2014, for participants to approve.

10th IHO-CSPCWG Meeting

ACTION 2: All WG members to make early bids for travel budget to CSPCWG11 (Rostock); advise Chairman if any difficulties.

ACTION 3: All WG members to note agenda items for CSPCWG11 throughout the year (and forward to Secretary as they arise). Explanatory Notes may be sent before the meeting calling letter.

4. Relationship with HSSC and subordinate groups

4.1. Notes from HSSC5 (Chairman)

*Docs: CSPCWG10-04.1A Report and recommendations of CSPCWG
CSPCWG10-04.1B Report from HSSC5 - Notes by CSPCWG
Chairman*

The Chairman briefed on those elements of HSSC5 meeting of particular relevance to CSPCWG, in accordance with the report.

Re 6.8, M Huet commented that IHB had exhibited at the recent ICA Conference exhibition in Dresden (August 2013). He confirmed that IHO has a memorandum of understanding with ICA.

Re 9.2, M Huet stated that a CL would be issued shortly about the need for MS to commit resources to the delivery of WG targets.

The Chairman delivered a PowerPoint presentation (produced by Chairman HSSC) on the proposed restructuring of the HSSC WGs. He mentioned that the original impetus for the proposed restructuring came from the need to deal with the overloading of TSMAD. Looking forward, the proposals included an intention to merge SNPWG and CSPCWG. The potential to convene 'back-to-back' meetings and for time-limited projects to call on experts from different WGs were also mentioned. A summary of the proposal is at http://www.iho.int/mtg_docs/com_wg/HSSC/HSSC5/Presentations/HSSC5-04.2_Chair_Group_Restructuring_HSSC_WGs.pdf

Some reservations were expressed by WG members about the advisability of joining CSPCWG and SNPWG. Opinions included:

- that CSPCWG is effective in its present format and this would be put at risk if there is significant change;
- questioning the availability of experts with a wide enough breadth of knowledge to effectively staff such a WG, especially officers – and whether MS would commit such valuable individuals even if they could be found;
- that there would be better synergy between CSPCWG and a future S-101 WG;
- better to tackle the needs of reorganizing the load on TSMAD before addressing a complete reorganization of WGs.

ACTION 4: All WG members to brief their senior staff on CSPCWG views when CL inviting comments and participation in the proposed WG reorganization is issued.

4.2. Report from DIPWG (Vice Chairman)

Docs: CSPCWG10-04.2A Report to CSPCWG10 on DIPWG activities

The Vice Chairman briefed on the activities of DIPWG of particular relevance to CSPCWG, in accordance with the report.

The Chairman noted that S-4 provides the bedrock for ENC display as well as paper

10th IHO-CSPCWG Meeting

charts. He stated that a proposal to HSSC5 from the Chairman of DIPWG for the CSPCWG INT1 subWG to take on the maintenance of the US version of INT1 (US Chart 1) had been rejected by HSSC. US Chart 1 remains a national publication, not an IHO standard. Nevertheless, US was commended for its pioneering work.

4.3. Report from TSMAD (Vice Chairman)

Docs: CSPCWG10-04.3A Report to CSPCWG10 on TSMADWG activities

The Vice Chairman briefed on the activities of TSMAD of particular relevance to CSPCWG, in accordance with the report. He also showed a paper demonstrating how TSMAD is implementing the need for V-AIS symbols in ENC, using NEWOBJ and combining text and existing symbols. However, he acknowledged that there remains a problem that the user can choose to switch off text, in which case the legend 'V-AIS' disappears, leaving the symbols appearing as physical AtoN.

M Huet commented that this report demonstrates the huge and varying tasks undertaken by TSMAD and the need to restructure this WG.

4.4. Report from HDWG (Vice Chairman)

Docs: CSPCWG10-04.4A Report to CSPCWG10 on HDWG activities

The Vice Chairman briefed on the activities of HDWG of particular relevance to CSPCWG, in accordance with the report. He commented that a WG restructure proposal to merge HDWG and CSPCWG had been rejected; the Hydrographic Dictionary crosses all hydrographic disciplines. He speculated that the IHO Geospatial Registry Control Board would be better placed to take on this role in the future. He stated that the HDWG plan to re-evaluate all existing terms in the dictionary in the future, with the intention of removing some not considered relevant to hydrography.

Noting the proposed changes to the terms 'Aquaculture' and 'Phase of Light' had been endorsed by HSSC5, the meeting considered that S-4 should be amended to reflect these changes at the earliest opportunity after they have been approved by MS.

ACTION 5: Secretary to amend S-4 for revised definitions of aquaculture and phase of light once approved by MS (as clarification at next opportunity).

4.5. Report from DQWG (Chairman)

Docs: CSPCWG10-04.5A Report to CSPCWG10 on DQWG activities

The Chairman briefed on the activities of DQWG of particular relevance to CSPCWG, in accordance with the report. He commented that the proposed combining and weighting of disparate data quality indicators would not be a trivial exercise. J Wootton stated that the HICUP subWG had already submitted an INF paper on the subject to TSMAD27 and would be reporting in more detail to DQWG8 (March 2014).

5. Terms of Reference

Docs: CSPCWG10-05A CSPCWG TOR

The Chairman pointed out that paragraph 2 of TOR would need amending when the revision of S-4 B-500 is published. M Huet added that S-4 B-160 would also need revision.

ACTION 6: IHB to amend CSPCWG TOR paragraph 2 when revision of S-4 is complete, by keeping the first two sentences only.

10th IHO-CSPCWG Meeting

ACTION 7: Sec to propose to the WG a clarification to S-4 B-160 when revision of S-4 is complete.

6. CSPCWG Procedures

Docs: CSPCWG10-06A CSPCWG Procedures

Amendments will be required to the WG's Procedures at paragraph 3.1 (frequency of meetings) and paragraph 4.1 (current major revision of S-4) when the revision of S-4 B-500 is published.

ACTION 8: Secretary to amend paragraphs 3.1 and 4.1 of WG Procedures when revision of S-4 is complete.

7. CSPCWG Work Plan

7.1. Summary of progress (Sec)

Docs: CSPCWG10-07A Work Plan updated for HSSC5

The Secretary briefed on progress with the Work Plan. Over half the items were completed in 2013 and reported to HSSC5 (and have already been removed from the Work Plan on the IHO website). Most of the remaining items are planned for completion during 2014. M Huet commended the WG on the progress made.

It was noted that Task F should be changed to '*Maintain and extend...*' for consistency and that 'annual' should be removed from Task G (as the TOR do not require an annual meeting).

ACTION 9: Secretary to amend Work Plan Task F to '*maintain and extend...*' and Task G to delete 'annual'. [After-meeting note: Completed; see Annex E]]

8. Chart content:

8.1. Maintained / Dredged Areas (AU, UK)

*Docs: CSPCWG10-08.1A Maintained / Dredged areas
CSPCWG10-08.1B Maintained / Dredged areas*

While there is no evidence that the mariner is confused by the present different symbols and legends used relating to dredged and maintained areas, there is evidence that cartographers and port authorities are. The difference between INT1 I21 and I23 is not clear and the meeting decided it would be better to remove I23. If the depth in an area is maintained, then I21 should be used, with an appropriate legend and / or note if necessary to clarify the maintenance regime. If necessary, a date of the latest survey should be added (I22). The term used in INT1 should be '*channel or area with minimum depth*', as it does not matter to the mariner how it is achieved (eg by dredging), although the words 'dredged' or 'maintained' may be retained on charts if preferred by the local authority.

ACTION 10: Secretary to draft revised S-4 specifications for 'dredged / maintained areas' for WG approval.

ACTION 11: INT1 subWG to retire I23 and amend terms for I21 and I22.

8.2. Maximum draught / minimum depth (AU)

Docs: CSPCWG10-08.2A Minimum Depth and Maximum Authorized Draught

J Wootton gave a presentation on the application of colour to minimum depth and

10th IHO-CSPCWG Meeting

maximum authorized draught, in accordance with the paper. However, the meeting did not consider that the use of different colours was sufficient to differentiate the two concepts; it decided that the colours agreed in responses to CSPCWG Letter 7/13 should stand. However, it also considered that the use of the symbols < > to indicate maximum authorized draught is not intuitive and should be abandoned. Various alternatives were suggested, although most were considered too big to be usable in many of the situations present on, for example, FI charts (where this concept is frequently used).

ACTION 12: FI, DE, AU, Sec to devise new symbol for 'maximum authorized draught'.

ACTION 13: Secretary to consider whether any additional exceptions to B-141/142 are required.

ACTION 14: Chairman and IHB to consider CSPCWG Letter to enquire how widespread the concept of maximum draught is.

8.3. Maintained Depth, Dredged and Unsurveyed areas in the source diagram (IT)

Docs: CSPCWG10-08.3A Maintained Depth, Dredged and Unsurveyed areas in the source diagram

The Chairman presented IT's paper. The meeting agreed that it is acceptable, although not necessary, to letter unsurveyed, maintained and dredged areas on traditional Sources diagrams. However, it was decided that the guidance should be included at B-296.2, rather than B-297, as the latter only deals with ZOC diagrams. The meeting also decided that it is unnecessary to include MD, DA and UNS as INT abbreviations. These abbreviations were originally included on AU ZOC diagrams and always included in a key; however, AU no longer use these abbreviations and it is unlikely that any other HO does.

ACTION 15: Secretary to draft amendment to B-296.2 to allow (ie use 'may') indication of dredged / maintained / unsurveyed areas in Sources diagrams.

8.4. Light vessels (UK)

Docs: CSPCWG10-08.4A Light vessels

The meeting decided that the proposed light vessel symbol, with the 'X' removed is sufficiently prominent because it will always have a light description and flare, and usually other things such as name and a radio aid. S-4 should indicate that the colour 'may' be added, but that if IALA characteristics are required (eg topmark), then the light float should be used.

It also decided that it should be shown in INT1 at Q32 (heading amended to 'Light vessels and minor light floats'). P6 should be retired (the superbouy symbol is still available at Q26 if a LANBY needs to be charted).

ACTION 16: Secretary to revise light vessel symbol (remove 'X') and progress to MS approval.

ACTION 17: INT1 subWG to retire P6; add new Light Vessel at Q32 (and amend heading to 'Light vessels and minor light floats').

8.5. Submerged posts and piles (US-NOAA)

Docs: None submitted

This item was withdrawn.

10th IHO-CSPCWG Meeting

8.6. Dangerous cargo berth (NL)

Docs: CSPCWG10-08.6A Proposed symbol for dangerous cargo berth

The meeting agreed that the proposed symbol should be used for a dangerous cargo berth (although it should utilize existing symbols in its make-up). It should be located at INT1 F19.3. By extension, the current term at N12.7 should be extended to include dangerous cargo.

ACTION 18: Secretary to draft S-4 specification for dangerous cargo berth.

ACTION 19: INT1 subWG to add symbol for dangerous cargo berth at F19.3.

8.7. Wind farms under construction (UK)

Docs: CSPCWG10-08.7A Wind farms (including under construction)

The Chairman described the problems UK was experiencing with the establishment of very large wind farms in UK waters, with construction sometimes taking several years. He explained the interim solution that UK used to show wind farms under construction, with example charts displayed. The meeting agreed that this solution is appropriate. It also considered that it is unnecessary to chart the associated air obstruction lights which should be covered by a legend or note. It invited UK to consider strengthening its wind turbine symbol to make it more prominent.

ACTION 20: Secretary to draft S-4 specification for wind farms under construction.

8.8. Quarantine Area (or Zone) line symbol (AU)

Docs: CSPCWG10-08.8A Quarantine Zone Boundary Line Symbol

J Wootton briefed on the symbol used for a quarantine anchorage area in the Torres Strait. The meeting accepted that the symbol was logical and intuitive, but did not consider it necessary to adopt as an INT symbol at this stage, as no other such areas are currently known to exist.

8.9. Sweeping underwater kite (UK)

Docs: CSPCWG10-08.9A Sweeping underwater kite

The meeting considered that the 'underwater kite' turbine could be adequately charted using an obstruction symbol and legend, as at L24.

8.10. Covered berths (FI)

Docs: CSPCWG10-08.10A Covered berths

M Hovi (FI) briefed on the method FI had used for charting a covered berth, ie extending the building tint across the quay and water area, while retaining the blue tint in the water. The meeting agreed this solution worked well, although accepted it could not be used if an HO used open line style without tint for built-up areas.

ACTION 21: Secretary to draft S-4 specification for covered berth.

8.11. Interrupted and ultra-quick lights (Secretary)

Docs: CSPCWG10-08.11A Interrupted and ultra-quick lights

Although IALA has abandoned the use of 'Ultra Quick' and 'Interrupted' to describe lights, the meeting considered that lights that flash too quickly to count would be likely to still exist, so the abbreviations UQ and IUQ should be retained. However, the abbreviations IQ and IVQ were confusing and should be made obsolete, using groups in preference.

10th IHO-CSPCWG Meeting

ACTION 22: Secretary to amend S-4 to remove references to IQ and IVQ and advise SNPWG (for updating S-12) and MS (via CL on publication of next edition of S-4).

ACTION 23: INT1 subWG to remove IQ and IVQ.

8.12. Tension buoys (US-NGA)

Docs: None submitted

This item was withdrawn.

8.13. Anomalous soundings, reported depths and obstructions (IT)

Docs: CSPCWG10-08.13A Anomalous soundings, reported depths and obstructions

The meeting considered IT's paper on anomalous soundings. All present stated that they would not use a danger line to highlight soundings as shown in the examples in the paper. In these cases, the soundings were considered adequate on their own, as a mariner would be carefully checking all soundings within the depth area significant for the vessel's draught. Also, such soundings should not be shown as obstructions in ENC (which would happen if encircled by a danger line). However, it was noted that an over-dense sounding selection could mask important depths.

Other options for highlighting important depths were noted, such as naming a feature or using supplementary contours (as, for example, a 17m contour used in the Kadet Renden entrance to the Baltic Sea).

8.14. Radio activated lights and fog signals (CA)

Docs: None submitted

R Heeley (US- NOAA) briefed on developments of radio-activated fog signals in US waters and also his understanding of the status of radio-activated lights and fog signals in Canadian waters. He stated that US have made a proposal to the US Coastguard on how they should be charted, but this has not progressed further. He was aware that CA had added 'Man (see Note)' to the description in some cases. The meeting decided that there is insufficient information available yet to determine a good solution for charting and asked US and CA to keep monitoring the situation. The meeting agreed that it is unlikely that the use of 'Man' as a chart abbreviation would be clear to a user.

ACTION 24: CA and US (NOAA) to keep WG informed of any developments with radio-activated aids to navigation or proposals for charting.

9. S-4

9.1. Draft B-100.5: further development (CA)

Docs: None submitted

In CA's absence and no paper, this item was withdrawn.

9.2. B-424: Doubtful dangers review (Chairman)

Docs: CSPCWG10-09.2A Existence Doubtful (ED)

B Timmerman (NL) stated that ED is still useful, for example when a new survey does not find a shoal depth but is unable to conclusively disprove it. The meeting decided that ED and Rep are still useful and should be retained, but the definitions need to be clarified. The Chairman had already written to the Chairman of HDWG with suggestion for changing the definition, so CSPCWG would take no further action

10th IHO-CSPCWG Meeting

pending HDWG action.

ACTION 25: J Wootton to follow-up Chairman's letter to Chairman HDWG about ED.

9.3. B-600: comments by NZ (Chairman)

9.3.1. B-631.6 Use of asterisk for original information

The meeting agreed that the use of the asterisk within Notices to Mariners was valid and recommended all HOs to use it. No change required.

9.3.2. B-632.6 Block size

The meeting considered that the recommendations about keeping NM blocks small are still valid. No change required. However, J Wootton commented that AU had recently realised how NM blocks can build up on a chart, making it difficult for the user. Others acknowledged the same problem. The Secretary pointed out B-641.5 ('Pattern copies') and was asked to consider whether this aspect of the use of pattern copies could be made more explicit.

ACTION 26: Secretary to consider whether B-641.3 should be expanded (on pattern copies, to cover multiple NM blocks).

9.3.3. B-633.6 Sample note (including use of such notes)

Docs: CSPCWG10-09.3A B-600 Questions

ACTION 27: Secretary to complete the example of a note which could be used instead of a (T) NM at B-633.6 (as a clarification).

9.4. NMs for AIS AtoN (UK)

Docs: CSPCWG10-09.4A AIS transmitters: problems caused by proliferation

The meeting had a wide-ranging discussion about the use and proliferation of AIS, both virtual and on physical AtoN. It recognized that in areas where many AtoNs are being fitted with AIS, it may be impractical to chart all by a radio circle; in such cases a chart note seems the better solution. A legend, eg 'Channel marked by virtual AIS' may also be necessary where virtual AIS are deployed to mark channels. It was also noted that the term 'synthetic' is no longer to be used.

ACTION 28: Secretary to draft addition to B-489 on how to deal with the proliferation of AIS. (Also note re non-recognition of term 'synthetic').

9.5. NM data formats (US – NGA)

Docs: None submitted

J Barone (US-NGA) briefed on NGA's practice of 'web-scraping' to obtain NM data. Because such data is in many different formats, some software is being trialled to convert data to Excel.

9.6. Use of seals of non-IHO members on INT charts (Chairman) [refer also to HSSC4 paper [IHB Views on Stakeholders' Comments](#) item 36 and CSPCWG8-09.8A]

Docs: CSPCWG10-09.6A Use of seals of non-IHO members on INT charts

The Chairman explained the advice he had given on behalf of the CSPCWG on the subject of seals of non-member states being applied to INT charts. He asked for

10th IHO-CSPCWG Meeting

endorsement of the position he had taken. M Huet stated that the INT chart system is an IHO concept. He therefore felt that only MS and IHO seals should be shown on an INT chart. It was also noted that some port authorities and national safety organizations had been asking for seals to be added to charts. The meeting decided that clearer guidance is necessary, but that first the subject should be referred to HSSC.

ACTION 29: Chairman to submit paper to HSSC6 re use of non-IHO member seals on INT charts.

9.7. Ratings of charts / source / etc (US-NGA)

Docs: CSPCWG10-09.7A Dataset Rating for Confidence Assessment

J Barone briefed on NGA's work on rating datasets for user confidence, using three indications: 'Fit-for-purpose', 'Subject matter expert assessment' and 'User review'. She explained that this work is in its infancy and would take several years to implement. J Wootton recommended that the paper should be referred to MSDIWG and DQWG.

ACTION 30: J Barone to refer 'Dataset Rating for Confidence Assessment' paper to MSDIWG and DQWG.

9.8. Colour-layering recommendations (CA)

Docs: None submitted

In CA's absence and no paper, this item was deferred until the next meeting.

9.9. Racon response frequencies (AU)

Docs: CSPCWG10-09.9A Racon response frequencies

J Wootton introduced this paper, which he had undertaken on behalf of TSMAD. The statement in S-4 that Racon wavelengths should not be charted, because of clutter, does not apply to ENC (where the information can be included in the attributes, even though this is not mandatory). The meeting agreed that S-4 should be amended as requested, as a clarification.

ACTION 31: Secretary to amend S-4 as requested in CSPCWG10-09.9A, to reflect that inclusion of Racon wavelengths in ENC is allowed.

9.10. Elevation, height and altitude (Chairman)

Docs: CSPCWG10-09.10A Definitions of elevation, height and altitude

The Chairman briefly outlined the history behind the on-going debate about the proposed changes to the definitions of height, elevation and altitude in the Hydrographic Dictionary (as outlined in the paper). HSSC had endorsed HDWG's decision to ask CSPCWG and TSMAD to resolve their differences, after which whatever is agreed would be subjected to HDWG, HSSC and finally MS approval processes. J Wootton explained the TSMAD point of view and the requirement of the geospatial registry that no two words can have the same definition; however, this does not reflect the 'real world' in which elevation and height are often synonymous (depending on context).

ACTION 32: J Wootton to represent the differing positions expressed about definitions of Elevation and Height to TSMAD.

10. Other CSPCWG publications

10th IHO-CSPCWG Meeting

10.1. S-11 Part A: Guidance for the Preparation and Maintenance of International Chart Schemes and Catalogue of International (INT) Charts (Chairman)

Three main subjects were discussed:

10.1.1 CSPCWG Work Plan item B.3 on ENC scheming guidelines is being progressed by the Chairman of the North Sea ENC Harmonization WG (Paul Barrett, UK). His draft was originally intended to be an additional section for S-11 or a stand-alone standard. However, it was found to duplicate a lot of the principles contained in Part A, so the draft is now amalgamated with Part A to produce one draft document incorporating guidelines for paper chart and ENC scheming, noting differences in application where appropriate. The draft is currently being reviewed by NSEHWG and will subsequently be offered for examination by BSHC (BSICCWG and other regional ICCWG coordinators), and WENDWG before submission to CSPCWG members.

10.1.2 The BSICCWG has asked for more numbers for INT charts in the Baltic Region E but there is no further scope for moving numbers from Region D. CSPCWG Chairman had advised the BSICCWG to use 5-digit numbers, in preference to pre-fixes or suffixes.

10.1.3 I Tellefsen (NO) gave a short presentation on the progress of the Arctic region ARHC. AICCWG (Region N) has been formed, but was still lacking members from Russia and Denmark before it could begin to decide on a strategy for designing an INT chart scheme for the region.

Additionally, she showed an example of a chart of the region with extensive glacier fields and proposed that the specification for such areas should allow for blue topographic contours to be used. It was noted that CSPCWG had recently considered the depiction of glaciers in its review of S-4 B-300 (leading to B-353.8). The Chairman invited NO to develop a draft proposal for amending S-4.

ACTION 33: NO to develop a proposal for adding topographic contours to glacier depiction and provide to Secretary.

10.2. S-49: Standardization of Mariners' Routeing Guides

It was noted that this publication may be passed to SNPWG, although the WG considered that Routeing Guides should be considered to be more a chart than a publication (noting the possibility of designating as an INT chart). However, this may be overtaken by the restructuring proposals for HSSC's WGs.

11. INT 1 / 2 / 3

11.1. Report from Secretary of INT1 subWG (Sec)

Docs: CSPCWG10-11.1A Report of INT1 subWG

The Secretary presented the report of the INT1 subWG. This group comprises the Secretary and representatives of Spain, France and Germany. It met in July 2013, mainly to consider changes required for the next editions of INT1 and to develop a scoping study for a possible reorganization of INT1 (WG9 Action 31).

The meeting thanked the INT1 subWG for their work. In response to specific questions, the meeting approved:

- the use of a magenta flare for Emergency Wreck Marking Buoys;
- that the options for charting illumination should be limited to the symbol of the international abbreviation 'illum';

10th IHO-CSPCWG Meeting

- two additional paragraphs for the subWG's 'principles', dealing with lines in INT1 and the positioning of obsolescent symbols.

ACTION 34: Secretary to amend S-4 to reduce options for illuminated to the symbol or the INT abbreviation.

11.2. Possible re-organization of INT1 (Sec)

Docs: CSPCWG10-11.2A Reorganization of INT1

The Secretary introduced the scoping paper on a possible reorganization of INT1 that the INT1 subWG had produced in response to WG9 Action 31. The meeting agreed that the most pressing change required was the introduction of a new section on data quality indicators. Various options for placement of such a section were considered, with the decision being that it should be an all new 'Section V'. J Wootton offered to seek permission for AU to produce an initial draft. [After meeting note: this has been approved].

The meeting decided that the other recommendations removing some unnecessary combination symbols, self-evident legends and general rationalization (especially sections K and L) should not be progressed at this time, due to limited resources available and no evidence that the user wanted any such changes. The intention should remain on the work plan without a planned date, but with a reference to this paper to avoid re-doing the initial work at some future time.

ACTION 35: AU to develop initial draft of new 'data quality' section V for INT1.

11.3. Annotation of "Maintained depth" in INT1 (AU)

Docs: CSPCWG10-11.3A Annotation of "Maintained depth" in INT1

AU requested that INT1 versions should be made consistent in the style of letter (capital or lower case) used at I23 for 'Maintained depth'. However, this will no longer be relevant if MS approve the retirement of I23.

12. Lessons learned from Marine Incidents

12.1. USS Guardian (US-NGA)

J Barone gave a presentation on the USS Guardian grounding in January 2013 and the consequent investigations. No copy of the presentation was retained, but a similar presentation is available in the SNPWG meeting page on the IHO website at http://www.iho.int/mtg_docs/com_wg/SNPWG/SNPWG16/SNPWG16-21_NGA_Response_on_USS_GuardianGrounding.pdf.

B Hulse (DK) provided a short update on a pending court case in the Danish Supreme Court about a copyright issue. There followed a short discussion about the copyrighting of IHO documents and attention was drawn to the detail in the copyright statement at the front of each IHO publication. It was also stated that the date of the copyright should be updated each time a new version of a publication is published.

13. Strategic direction

13.1. Future of paper charts (AU/CA/SE)

For various reasons, WG9 Action 53 on AU/CA/SE to produce a discussion paper on the future of paper charts had not been progressed. Instead, the Chairman produced a short PowerPoint presentation on the subject, posing many questions to stimulate discussion.

10th IHO-CSPCWG Meeting

J Wootton gave details of the change of emphasis in AU when scheming charts of new developments: ENC schemed first with the paper chart (if required) a secondary matter and maybe at a smaller scale.

Other points made included that:

- Even after 2018 many vessels (in UK estimated 74%) will not require ECDIS;
- Many ENC producers are still building their capability to produce adequate quality ENC ;
- Many mariners are still not adequately trained in using ECDIS;
- Future mariners will be very familiar with IT systems from a young age (and not so familiar with paper) and should find ENC navigation easy to assimilate. (Although what their opinion will be of the current ENC capabilities and presentation is another matter!)

J Wootton offered to use the PowerPoint presentation as a starting point to develop the issues in a paper for next CSPCWG at latest, or earlier by correspondence. He agreed to do this in conjunction with CA, SE and UK.

ACTION 36: AU, in conjunction with CA, SE and UK to develop further consideration on the future of paper charts and present a paper to CSPCWG11 at latest.

13.2. Future direction of CSPCWG (Chairman)

This is subject to the proposed reorganization of HSSC WGs – see under 4.1.

14. Review of Actions and Work Plan

14.1. Actions

A draft list of actions noted by the Secretary was briefly reviewed. J Ryan (NZ) forwarded the draft list to meeting participants immediately after the end of the meeting. Annex D to this report supersedes that early draft.

14.2. Work Plan

The Chairman stated that the Secretary and current Chairman (P Jones) would update the work plan, with its priorities and expected timescales on return to UK and issue with this Record of the meeting. Annex E refers.

ACTION 37: Chairman and Secretary to draft a revised Work Plan and forward to participants for approval. [After-meeting note: Plan at Annex E approved by participants]

15. INF papers, reports and Any Other Business

15.1. Counterfeit navigational products (UK)

Docs: CSPCWG10-INF1 Counterfeit navigational products

Paper for information only. No comments made.

15.2. Use of QR codes on Admiralty products (UK)

Docs: CSPCWG10-INF2 Use of QR codes on Admiralty products

The meeting agreed that the use of QR codes or other technology to facilitate the user's access to data is a good thing. It was suggested that some guidance about their use should be added to S-4, probably at B-243.

10th IHO-CSPCWG Meeting

ACTION 38: Secretary to draft S-4 guidance on the use of QR codes (or other technology).

15.3. Notes from sea experience by UKHO staff (UK)

Docs: CSPCWG10-INF3: Notes from sea experience by UKHO compilers

The Chairman drew attention to useful information gleaned by UK staff during sea experience. J Wootton commented how useful this sort of information is and undertook to present the paper at DIPWG/TSMAD meeting.

ACTION 39: AU to present CSPCWG10-INF3 on sea experience to DIPWG/TSMAD.

15.4. Ice product specification (DE)

Docs: CSPCWG10-INF4: Development of the S-100 based Ice Information Product

S Spohn (DE) presented the paper detailing DE's work on an Ice Product Specification in the S-100 suite (S-411). Some concern was expressed about how symbols and colours on this (and other non-navigation overlays) might impact the clarity of the underlying ENC. J Wootton undertook to draw this to the attention of the Chairman of DIPWG.

ACTION 40: AU to forward CSPCWG10-INF4 on Ice product specification and discuss with Chairman DIPWG.

15.5. Satellite-derived bathymetry (UK)

Docs: CSPCWG10-INF5: Satellite-derived bathymetry

Various WG members shared experiences of using (or rejecting) Satellite Bathymetric Data (SDB) for charts. M Huet commented that SDB is likely to be used in remote areas when a full hydrographic survey is unlikely or impossible.

15.6. Cautionary note on Preliminary (P) and Temporary (T) Notices to Mariners (NMs) (FR)

Docs: CSPCWG10-INF6: Cautionary note on Preliminary (P) and Temporary (T) Notices to Mariners

S Guillou (FR) asked the meeting whether adding a legend such as 'For safe navigation, see also P & T NMs' near the NM list in the bottom left hand corner of the chart would be useful. The meeting considered briefly the practice for ENC (all T&P NMs included via updates), the reference to associated publications including annual, permanent, temporary and preliminary NM often noted elsewhere on the chart and the different updating methods used by mariners. The meeting concluded that it may be useful but stopped short of recommending it. A possible location for some guidance in S-4 could be B-252.3 or B-630 (with cross references as necessary).

ACTION 41: Secretary to draft S-4 guidance about adding P&T NM reminder legend to charts.

15.7. INT3 in Spanish (IHB)

Docs: CSPCWG10-INF7: INT3 in Spanish

Small graphics illustrating the Mexican 'Use of symbols and abbreviations' chart were circulated. The need for a non-English language version of what is essentially a graphical guide was questioned. Also, it was decided that any such chart must be of a fictitious area (the MX chart is not) and should be based on the official INT3. The

10th IHO-CSPCWG Meeting

meeting concluded that there is no need for French and Spanish official versions of INT3. In response to the recommendations in the paper, the meeting concluded that:

1. The CSPCWG should formally approve new editions of INT2 and INT3 (by correspondence), as it does for INT1 via its INT1 sub-WG. As these are national products on behalf of IHO, and are not for the chart user, it was considered that it is neither practical nor necessary to submit to HSSC in accordance with IHO Resolution 2/2007.
2. Other language versions of INT3 are considered to be unnecessary.
3. The MX proposal was not considered suitable for an IHO INT3. However, it would be possible for MS to produce own versions of INT3 if required, on a similar basis to INT1. Secretary was asked to draft some additional words in B-153.
4. The role of the INT1 subWG should not be extended to encompass INT2 and INT3, because ensuring consistency between language versions is not an issue for the latter publications.

ACTION 42: Secretary to draft S-4 guidance about national versions of INT2 and INT3 and consider any necessary amendment to CSPCWG Procedures.

15.8. Items to bring to attention of HSSC

The use of seals on charts produced by non-IHO members (agenda item 9.6 and action 29 refers).

15.9. Status of CSPCWG officers (M Huet)

The current Chairman (P Jones) will retire 31 March 2014. From that date, J Wootton (AU), as current Vice Chairman, will take over as Chairman. There being no other candidate, C Thorne (UK) agreed to serve as Vice Chairman from that date. A Heath-Coleman will continue to serve as Secretary as long as he has the support of UKHO to do this.

[After meeting note: UKHO has given approval for A Heath-Coleman to continue as CSPCWG Secretary, but at a reduced capacity.]

15.10. Any Other Business

M Huet thanked the Chairman for his 10 years of excellent service as chairman of this working group and presented a gift from the participants.

The Chairman thanked M Huet for his work as IHB representative since the WG was formed (and before that, the Chart Standardization Committee) and for his wise counsel and advice.

16. Date, duration and venue of next meeting

As previously arranged at the kind invitation of BSH (DE), the next meeting is planned for Rostock, Germany, in April 2015, if required.

The Chairman thanked LINZ for hosting the meeting. He also thanked all the participants for their attendance and excellent input.

The meeting closed at 1230 on Friday 24 January.

ACTION 43: Chairman to confirm the requirement for a meeting with the WG and, if required, to arrange the details of CSPCWG11 meeting with DE.

10th IHO-CSPCWG Meeting

Annex A to CSPCWG10 Record

Copy of CSPCWG10-02A rev3

Agenda for 10th CSPCWG MEETING Wellington, New Zealand 21-24 January 2014

Please assemble at 0900, for 0915 start. Close by approximately 1700.

1. Welcome, Introductions and Administrative Arrangements

Docs: CSPCWG10-01A *List of documents*
CSPCWG10-01B *List of meeting participants and WG members*

2. Approval of Agenda

Docs: CSPCWG10-02A *Agenda*

3. Status of Actions from CSPCWG8

Docs: CSPCWG10-03A *Status of actions from CSPCWG9*

4. Relationship with HSSC and subordinate groups

4.1. Notes from HSSC5 (Chairman)

Docs: CSPCWG10-04.1A *Report and recommendations of CSPCWG*
CSPCWG10-04.1B *Report from HSSC5 - Notes by CSPCWG
Chairman*

4.2. Report from DIPWG (Vice Chairman)

Docs: CSPCWG10-04.2A *Report to CSPCWG10 on DIPWG activities*

4.3. Report from TSMAD (Vice Chairman)

Docs: CSPCWG10-04.3A *Report to CSPCWG10 on TSMADWG
activities*

4.4. Report from HDWG (Vice Chairman)

Docs: CSPCWG10-04.4A *Report to CSPCWG10 on HDWG activities*

4.5. Report from DQWG (Chairman)

Docs: CSPCWG10-04.5A *Report to CSPCWG10 on DQWG activities*

5. Terms of Reference

Docs: CSPCWG10-05A *CSPCWG TOR*

6. CSPCWG procedures

Docs: CSPCWG10-06A *CSPCWG Procedures*

7. CSPCWG work plan

7.1. Summary of progress (Secretary)

Docs: CSPCWG10-07A *Work Plan updated for HSSC5*

8. Chart content:

8.1. Maintained / Dredged Areas (AU, UK)

Docs: CSPCWG10-08.1A *Maintained/Dredged areas*
CSPCWG10-08.1B *Maintained/Dredged areas*

8.2. Maximum draught/minimum depth (AU)

Docs: CSPCWG10-08.2A *Minimum Depth and Maximum Authorised
Draught*

8.3. Maintained Depth, Dredged and Unsurveyed areas in the source diagram (IT)

Docs: CSPCWG10-08.3A *Maintained Depth, Dredged and Unsurveyed
areas in the source diagram*

10th IHO-CSPCWG Meeting

- 8.4. Light vessels **(UK)**
Docs: CSPCWG10-08.4A Light vessels
 - 8.5. Submerged posts and piles **(US-NOAA)**
Docs: None submitted
 - 8.6. Dangerous cargo berth **(NL)**
Docs: CSPCWG10-08.6A Proposed symbol for dangerous cargo berth
 - 8.7. Wind farms under construction **(UK)**
Docs: CSPCWG10-08.7A Wind farms (including under construction)
 - 8.8. Quarantine Area (or Zone) line symbol **(AU)**
Docs: CSPCWG10-08.8A Quarantine Zone Boundary Line Symbol
 - 8.9. Sweeping underwater kite **(UK)**
Docs: CSPCWG10-08.9A Sweeping underwater kite
 - 8.10. Covered berths **(FI)**
Docs: CSPCWG10-08.10A Covered berths
 - 8.11. Interrupted and ultra-quick lights **(Secretary)**
Docs: CSPCWG10-08.11A Interrupted and ultra-quick lights
 - 8.12. Tension buoys **(US-NGA)**
Docs: None submitted
 - 8.13. Anomalous soundings, reported depths and obstructions **(IT)**
Docs: CSPCWG10-08.13A Anomalous soundings, reported depths and obstructions
 - 8.14. Radio activated lights and fog signals **(CA)**
Docs: None submitted
9. S-4
- 9.1. Draft B-100.5: further development **(CA)**
Docs: None submitted
 - 9.2. B-424: Doubtful dangers review **(Chairman)**
Docs: CSPCWG10-09.2A Existence Doubtful (ED)
 - 9.3. B-600: comments by NZ **(Chairman)**
 - 9.3.1. B-631.6 Use of asterisk for original information
 - 9.3.2. B-632.6 Block size
 - 9.3.3. B-633.6 Sample note (including use of such notes)
Docs: CSPCWG10-09.3A B-600 Questions
 - 9.4. NMs for AIS AtoN **(UK)**
Docs: CSPCWG10-09.4A AIS transmitters: problems caused by proliferation
 - 9.5. NM data formats **(US – NGA)**
Docs: None submitted
 - 9.6. Use of seals of non-IHO members on INT charts **(Chairman)** [refer also to HSSC4 [IHB Views on Stakeholders' Comments](#) item 36 and CSPCWG8-09.8A]
Docs: CSPCWG10-09.6A Use of seals of non-IHO members on INT charts
 - 9.7. Ratings of charts / source / etc **(US-NGA)**
Docs: CSPCWG10-09.7A Dataset Rating for Confidence Assessment
 - 9.8. Colour-layering recommendations **(CA)**
Docs: None submitted
 - 9.9. Racon response frequencies **(AU)**
Docs: CSPCWG10-09.9A Racon response frequencies
 - 9.10. Elevation, height and altitude **(Chairman)**
Docs: CSPCWG10-09.10A Definitions of elevation, height and altitude

10. Other CSPCWG publications

10th IHO-CSPCWG Meeting

- 10.1. S-11 Part A: Guidance for the Preparation and Maintenance of International Chart Schemes and Catalogue of International (INT) Charts **(Chairman)**
- 10.2. S-49: Standardization of Mariners' Routeing Guides

11. INT 1 / 2 / 3

- 11.1. Report from Secretary of INT1 subWG **(Secretary)**
Docs: CSPCWG10-11.1A Report of INT1 subWG
- 11.2. Possible re-organization of INT1 **(Secretary)**
Docs: CSPCWG10-11.2A Reorganization of INT1
- 11.3. Annotation of "Maintained depth" in INT1 **(AU)**
Docs: CSPCWG10-11.3A Annotation of "Maintained depth" in INT1

12. Lessons learned from Marine Incidents

- 12.1. USS Guardian **(US-NGA)**

13. Strategic direction

- 13.1. Future of paper charts **(AU/CA/SE)**
- 13.2. Future direction of CSPCWG **(Chairman)**

14. Review of Actions and Work Plan

- 14.1. Actions
- 14.2. New items for Work Plan
- 14.3. Priorities
- 14.4. Timescales for tasks

15. INF papers, reports and Any Other Business

- 15.1. INF1: Counterfeit navigational products **(UK)**
- 15.2. INF2: Use of QR codes on Admiralty products **(UK)**
- 15.3. INF3: Notes from sea experience by UKHO staff **(UK)**
- 15.4. INF4: Ice product specification **(DE)**
- 15.5. INF5: Satellite-derived bathymetry **(UK)**
- 15.6. INF6: Cautionary note on Preliminary (P) and Temporary (T) Notices to Mariners (NMs) **(FR)**
- 15.7. INF7: INT3 in Spanish **(IHB)**
- 15.8. Items to bring to attention of HSSC
- 15.9. Status of CSPCWG officers **(M Huet)**

16. Date, duration and venue of next meeting

- 16.1. Rostock 2015 **(DE)**

10th IHO-CSPCWG Meeting

Annex B to CSPCWG10 Record

Copy of CSPCWG10-01A rev2

10th CSPWG MEETING Wellington, New Zealand, 21-24 January, 2014

Documents list

CSPCWG10-01A rev2	List of documents
CSPCWG10-01B rev1	List of meeting participants and WG members
CSPCWG10-02A rev3	Agenda
CSPCWG10-03A	Status of actions from CSPCWG9
CSPCWG10-04.1A	Report and recommendations of CSPCWG
CSPCWG10-04.1B	Report from HSSC5 - Notes by CSPCWG Chairman
CSPCWG10-04.2A	Report to CSPCWG10 on DIPWG activities
CSPCWG10.04.3A	Report to CSPCWG10 on TSMAD activities
CSPCWG10-04.4A	Report to CSPCWG10 on HDWG activities
CSPCWG10-04.5A	Report to CSPCWG10 on DQWG activities
CSPCWG10-05A	CSPCWG TOR
CSPCWG10-06A	CSPCWG Procedures
CSPCWG10-07A	Work Plan updated for HSSC5 (with later updates)
CSPCWG10-08.1A	Maintained/dredged areas
CSPCWG10-08.1B	Maintained/dredged areas (further contribution)
CSPCWG10-08.2A	Minimum Depth and Maximum Authorised Draught
CSPCWG10-08.3A	Maintained Depth, Dredged and Unsurveyed areas in the source diagram
CSPCWG10-08.4A	Light vessels
CSPCWG10-08.6A	Proposed symbol for dangerous cargo berth
CSPCWG10-08.7A	Wind farms (including under construction)
CSPCWG10-08.8A	Quarantine Zone Boundary Line Symbol
CSPCWG10-08.9A	Sweeping underwater kite
CSPCWG10-08.10A	Covered berths
CSPCWG10-08.11A	Interrupted and ultra-quick lights
CSPCWG10-08.13A	Anomalous soundings, reported depths and obstructions
CSPCWG10-09.2A	Existence Doubtful (ED)
CSPCWG10-09.3A	B-600 Questions
CSPCWG10-09.4A	AIS transmitters: problems caused by proliferation
CSPCWG10-09.6A	Use of seals of non-IHO members on INT charts
CSPCWG10-09.7A	Dataset Rating for Confidence Assessment
CSPCWG10-09.9A	Racon response frequencies
CSPCWG10-09.10A	Definitions of elevation, height and altitude
CSPCWG10-11.1A	Report of INT1 subWG
CSPCWG10-11.2A	Reorganization of INT1
CSPCWG10-11.3A	Annotation of "Maintained depth" in INT1

10th IHO-CSPCWG Meeting

CSPCWG10-INF1:	Counterfeit navigational products
CSPCWG10-INF2:	Use of QR codes on Admiralty products
CSPCWG10-INF3:	Notes from sea experience by UKHO compilers
CSPCWG10-INF4:	Development of the S-100 based Ice Information Product
CSPCWG10-INF5:	Satellite-derived bathymetry
CSPCWG10-INF6:	Cautionary note on Preliminary (P) and Temporary (T) Notices to Mariners
CSPCWG10-INF7:	INT3 in Spanish

10th IHO-CSPCWG Meeting

Annex C to CSPCWG10 Record

10th CSPWG MEETING
Wellington, New Zealand, 21-24 January, 2014

PARTICIPANTS AT CSPCWG10

Member State	Name	Email
Australia	Mr Jeff WOOTTON (Vice-Chairman)	jeff.wootton@defence.gov.au
Denmark	Mrs Berit HOLSE (representing Ms Nina GRAASBØL-SCHMIDT)	bes@kms.dk
Finland	Mr Mikko HOVI	Mikko.Hovi@liikennevirasto.fi
France	Mr Stéphane GUILLOU	stephane.quillou@shom.fr
Germany	Ms Sylvia SPOHN	sylvia.spohn@bsh.de
Netherlands	Mr Ben TIMMERMAN	B.Timmerman@mindef.nl
New Zealand	Miss Jennifer RYAN (Host) Ms Alison Cantrill (Guest)	jryan@linz.govt.nz ACantrill@linz.govt.nz
Norway	Mrs Inger TELLEFSEN	inger.tellefsen@kartverket.no
Spain	Cdr Álvaro GUITART	ihmesp@fn.mde.es
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IHB	Mr Michel HUET	adcs@iho.int
Industry Observers		
ESRI	Ms Patricia (Trish) Sheatsley	PSheatsley@esri.com
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19 persons. 12 Member States

10th IHO-CSPCWG Meeting

Annex D to CSPCWG10 Record

10th CSPWG MEETING Wellington, New Zealand, 21-24 January, 2014

RETAINED ACTIONS from CSPCWG9

No	WG9 Agenda item	WG9 Action	Delegate	Status
22	8.5	WG9 22: AU to continue discussion on dividing regulatory from navigation restrictions (for S-101), keeping Secretary informed,	AU	
58	14.6	WG9 58: AU to produce a sample INT1 register for next meeting. AU to produce a sample INT1 register for next meeting.	AU	

ACTIONS from CSPCWG10

No	WG10 Agenda item	WG10 Action	Delegate	Status
1.	3	Secretary to produce draft report of CSPCWG10 by end of February 2014, for participants to approve.	Secretary	
2.	3	All WG members to make early bids for travel budget to CSPCWG11; advise Chairman if any difficulties.	All WG members	
3.	3	All WG members to note agenda items for CSPCWG11 throughout the year (and forward to Secretary as they arise). Explanatory Notes may be sent before meeting calling letter.	All WG members	
4.	4.1	All WG members to brief their senior staff on CSPCWG views when CL inviting comments and participation in the proposed WG reorganization is issued.	All WG members	
5.	4.4	Secretary to amend S-4 for revised definitions of aquaculture and phase of light once approved by MS (as clarification at next opportunity).	Secretary	
6.	5	IHB to amend CSPCWG TOR paragraph 2 when revision of S-4 is complete, by keeping the first two sentences only.	IHB	
7.	5	Secretary to propose to the WG a clarification to S-4 B-160 when revision of S-4 is complete.	Secretary	
8.	6	Secretary to amend paragraphs 3.1 and 4.1 of WG Procedures when revision of S-4 is complete.	Secretary	
9.	7	Secretary to amend Work Plan Task F to 'maintain and extend...' and Task G to delete 'annual'.	Secretary	Completed (see Annex E)

10th IHO-CSPCWG Meeting

No	WG10 Agenda item	WG10 Action	Delegate	Status
10.	8.1	Secretary to draft revised S-4 specifications for 'dredged / maintained areas' for WG approval.	Secretary	
11.	8.1	INT1 subWG to retire I23 and amend terms for I21 and I22.	INT1 subWG	
12.	8.2	Devise new symbol for 'maximum authorized draught'.	FI, DE, AU, Secretary	
13.	8.2	Secretary to consider whether any additional exceptions to B-141/142 are required.	Secretary	
14.	8.2	Consider CSPCWG Letter to enquire how widespread the concept of maximum draught is.	Chairman, IHB	
15.	8.3	Secretary to draft amendment to B-296.2 to allow (ie use may) indication of dredged / maintained / unsurveyed areas in Sources diagrams	Secretary	
16.	8.4	Secretary to revise light vessel symbol (remove 'X') and progress to MS approval.	Secretary	
17.	8.4	INT1 subWG to retire P6; add new Light Vessel at Q32 (and amend heading to 'Light Vessels and minor light floats').	INT1 subWG	
18.	8.6	Secretary to draft S-4 specification for dangerous cargo berth.	Secretary	
19.	8.6	INT1 subWG to add symbol for dangerous cargo berth at F19.3.	INT1 subWG	
20.	8.7	Secretary to draft S-4 specification for wind farms under construction.	Secretary	
21.	8.10	Secretary to draft S-4 specification for covered berth.	Secretary	
22.	8.11	Secretary to amend S-4 to remove references to IQ and IVQ and advise SNPWG (for updating S-12) and MS (via CL on publication of next edition of S-4) .	Secretary	
23.	8.11	INT1 subWG to remove IQ and IVQ.	INT1 subWG	
24.	8.14	CA and US (NOAA) to keep WG informed of any developments with radio-activated aids to navigation or proposals for charting.	CA, US(NOAA)	
25.	9.2	J Wootton to follow-up Chairman's letter to Chairman HDWG about ED. (No further action for CSPCWG.)	AU	
26.	9.3.2	Secretary to consider whether B-641.3 should be expanded (on pattern copies, to cover multiple NM blocks).	Secretary	
27.	9.3.3	Secretary to complete the example of a note which could be used instead of a (T) NM at B-633.6 (as a clarification).	Secretary	

10th IHO-CSPCWG Meeting

No	WG10 Agenda item	WG10 Action	Delegate	Status
28.	9.4	Secretary to draft addition to B-489 on how to deal with the proliferation of AIS. (Also note re non-recognition of term 'synthetic').	Secretary	
29.	9.6	Chairman to submit paper to HSSC6 re use of non-IHO member seals on INT charts.	Chairman	
30.	9.7	J Barone to refer 'Dataset Rating for Confidence Assessment' paper to MSDIWG and DQWG.	US(NGA)	
31.	9.9	Secretary to amend S-4 as requested in CSPCWG10-09.9A, to reflect that inclusion of Racon wavelengths in ENC is allowed.	Secretary	
32.	9.10	J Wootton to represent the differing positions expressed about definitions of Elevation and Height to TSMAD	Chairman	
33.	10.1	NO to develop a proposal for adding topographic contours to glacier depiction and provide to Secretary.	NO	
34.	11.1	Secretary to amend S-4 to reduce options for illuminated to the symbol or the INT abbreviation.	Secretary	
35.	11.2	AU to develop initial draft of new 'data quality' section V for INT1.	AU	
36.	13.1	Develop further consideration on the future of paper charts and present a paper to CSPCWG11 at latest.	AU, CA, SE, UK	
37.	14.2	Chairman and Secretary to draft a revised Work Plan and forward to participants for approval.	Chairman, Secretary	Completed (see Annex E)
38.	15.2	Secretary to draft S-4 guidance on the use of QR codes (or other technology).	Secretary	
39.	15.3	AU to present paper to DIPWG/TSMAD	AU	
40.	15.4	AU to forward CSPCWG10-INF4 on Ice product specification and discuss with Chairman DIPWG.	AU	
41.	15.6	Secretary to draft S-4 guidance about adding P&T NM reminder legend to charts.	Secretary	
42.	15.7	Secretary to draft S-4 guidance about national versions of INT2 and INT3 and consider any necessary amendment to CSPCWG Procedures.	Secretary	
43.	16	Chairman to confirm the requirement for a meeting with the WG and, if required, to arrange the details of CSPCWG11 meeting with DE.	Chairman, DE	

10th CSPWG MEETING
Wellington, New Zealand, 21-24 January, 2014

CSPCWG Work Plan updated to 18 February 2014
(following CSPCWG10)

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

CSPCWG Tasks

- A Maintain and extend Publication S-4 'Chart Specifications of the IHO & Regulations of the IHO for INT Charts' (IHO Task 2.3.2 refers)
- B Maintain and extend Publication S-11 Part A 'Guidance for the Preparation and Maintenance of INT Chart schemes' (IHO Task 2.3.2 refers)
- D Development of new (and revised) symbology (IHO Task 2.3.2 refers)
- E Maintenance of S-4 supplementary publications INT 1, 2 & 3 (IHO Task 2.3.2 refers)
- F Maintain and extend Publication S-49 'Recommendations concerning Mariners' Routeing Guides' (IHO Task 2.3.2 refers)
- G Conduct meetings of CSPCWG (IHO Task 2.3.1 refers)

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

10th IHO-CSPCWG Meeting

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.6	Revise S-4 Part B Section 500	M	M/S approval. responses to CL73/13 due 20/03/14	2012	2014	O	Sec CSPCWG	S-4 / B-500	CL73/2013
A.11	Clarify guidance on dredged/maintained areas	M	WG letter with draft specification	2011	2015*	O	Sec CSPCWG	S-4, INT1	CSPCWG9 Action 43 CSPCWG10 Action 10
A13	Provide guidance on charting maximum authorized draught	M	WG letter with draft specification and symbol	2012	2015*	O	Sec CSPCWG	S-4, INT1	Draft guidance approved by WG but on hold pending development of symbol, D34 refers.
A14	Provide guidance on updating large scale charts first	M	M/S approval – responses to CL58/13 due 31/01/14	2012	2014	O	Sec CSPCWG	S-4 / B-100.5	CSPCWG9 Action 46 and CL58/2013
A16	Initiate consideration of the 'future of the paper chart'	M	Discussion paper by AU / CA / SE/ UK CSPCWG reps	2014		O	Chair CSPCWG	tbd	CSPCWG10 Action 36
A17	Provide guidance on charting wind farms under construction at sea	M		2014	2015	O	Sec CSPCWG	S-4 B-445	CSPCWG10 Action 20
A18	Provide guidance on charting covered berths	M		2014	2015	O	Sec CSPCWG	S-4 B-300	CSPCWG10 Action 21

10th IHO-CSPCWG Meeting

A19	Provide additional guidance on charting AIS where on most AtoN in region	M		2014	2015	O	Sec CSPCWG	S-4 B-489	CSPCWG10 Action 28
A20	Provide guidance on use of QR codes	M		2014	2015	O	Sec CSPCWG	S-4 B-200?	CSPCWG10 Action 38
A21	Provide guidance on adding reminder about T & P NMs on charts	M		2014	2015	O	Sec CSPCWG	S-4 B-200?	CSPCWG10 Action 41
B.3	Develop guidelines for preparation & maintenance of small / medium scale ENC schemes.	H	2 nd draft by NSEHWG	2009	2014	O	Vice Chair CSPCWG	S-11A	Draft by NSEHWG; keep WENDWG engaged
D32.1	Lights issues: Major lights, Direction lights, Highlighting	M	M/S approval. responses to CL58/13 due 31/01/14	2012	2014	O	Sec CSPCWG	S-4 / B-470	CSPCWG9 Actions: 10, 12, 17 CL58/2013
D32.2	Interrupted lights	M	Draft to WG	2012	2015*	O	Sec CSPCWG	S-4 / B-470	CSPCWG9 Action 13 CSPCWG10 Action 22,23
D32.4	Reinstate (simplified) symbol for light vessels	M	CL for MS approval	2012	2015*	O	Sec CSPCWG	S-4 / B-474, INT1	CSPCWG9 Action 18; CSPCWG10 Action 16
D34	Devise new symbol for 'Maximum authorized draught'	M	Draft to WG	2014	2015	P	Sec CSPCWG	S-4 / B-400	CSPCWG10 Action 12; see also A13.
D35	Dangerous cargo berth	M	Draft to WG	2014	2015	P	Sec CSPCWG	S4 / B-300	CSPCWG10 Action 18

10th IHO-CSPCWG Meeting

E.1	Maintain official INT 1s		Planning for next editions by INT1 sub-WG (following Cadiz meeting July 2013)	2013	2015?	O	DE: S Spohn FR: S Guillou 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				P	Sec CSPCWG	INT 1, S-4 part B	Consider subsuming into E8 Not subsumed
E8	Reorganize INT1 to exclude composite symbols	L				P	INT1 sub-WG	INT1	Not to be progressed at present; use CSPCWG10-11.2A when progressed.
E9	Develop new section V for INT1 for 'data quality'	M	Draft to WG	2014	2016	O	Chair CSPCWG	INT1	CSPCWG10 Action 35

* Allowing for approval via HSSC (in accordance with Resolution 2/2007) before MS and publication.

G. CSPCWG Meetings (IHO T2.3.1 refers)

Date	Location	Meeting	Date	Location	Meeting
03-05 Nov 04	IHB, Monaco	CSPCWG 1	23-26 Nov 10	Simon's Town, S Africa	CSPCWG 7
19-21 Oct 05	IHB, Monaco	CSPCWG 2	29 Nov–02 Dec 11	Turku, Finland	CSPCWG 8
22-24 Nov 06	IHB, Monaco	CSPCWG 3	13-16 Nov 12	Seoul, Rep of Korea	CSPCWG 9
13-15 Nov 07	IHB, Monaco	CSPCWG 4	21-24 Jan 2014	Wellington, New Zealand	CSPCWG 10
18-21 Nov 08	Sydney, Australia	CSPCWG 5	2015	Rostock, Germany	CSPCWG 11
01-03 Dec 09	IHB, Monaco	CSPCWG 6			

Chairman: Peter Jones (UK) until 31/03/14

Chairman: Jeff Wootton (AU) from 01/04/14

Vice Chairman: Jeff Wootton (AU) until 31/03/14

Vice Chairman: Chris Thorne (UK) from 01/04/14

Secretary: Andrew Heath-Coleman (UK)

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10th IHO-CSPCWG Meeting

Annex F to CSPCWG10 Record

10th CSPWG MEETING
Wellington, New Zealand, 21-24 January, 2014

LIST OF ACRONYMS AND ABBREVIATIONS USED AT CSPCWG10

AIS	Automatic Identification System
AICCWG	Arctic International Charting Coordination WG
ARHC	Arctic Region Hydrographic Commission
AtoN	Aid to navigation
AU	Australia
BSHC	Baltic Sea Hydrographic Commission
BSICCWG	Baltic Sea International Charting Coordination WG
CA	Canada
CL	Circular Letter (of IHO)
CSPCWG	Chart Standardization and Paper Chart WG (of HSSC)
DA	Dredged area (on ZOC diagram)
DE	Germany
DIPWG	Digital Information Portrayal Working Group (of HSSC)
DK	Denmark
doc	CSPCWG10 document or paper associated with the meeting
DQWG	Data Quality Working Group(of HSSC)
ECDIS	Electronic Chart Display and Information System
ED	Existence Doubtful
EN	Explanatory note
ENC	Electronic Navigational Chart
ES	Spain
ESRI	Environmental Systems Research Institute
FI	Finland
FR	France
HDWG	Hydrographic Dictionary Working Group (of HSSC)
HICUP	Hierarchical Indicator of Composite Uncertainty Propagation
HO	Hydrographic Office
HSSC	Hydrographic Services and Standards Committee (of IHO)
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
ICA	International Cartographic Association
ICCWG	(Regional) International Charting Coordination WG
IHB	International Hydrographic Bureau
IHO	International Hydrographic Organization
INF	Information paper associated with the meeting
INT	International
INT1	Symbols, Abbreviations, Terms used on Charts
INT2	Borders, Graduations, Grids and Linear Scales
INT3	Use of Symbols and Abbreviations - standard reference chart
IQ	Interrupted Quick (light)
IT	Italy
IUQ	Interrupted Ultra Quick (light)

10th IHO-CSPCWG Meeting

IVQ	Interrupted Very Quick (light)
KR	Republic of Korea
LANBY	Large Automatic Navigational Buoy
LINZ	Land Information New Zealand
MD	Maintained depth (on ZOC diagram)
MS	Member State (of IHO)
MSDIWG	Marine Spatial Data Infrastructure Working Group (of HSSC)
MX	Mexico, Mexican
NGA	National Geospatial-Intelligence Agency (USA)
NL	Netherlands
NO	Norway
NOAA	National Oceanic and Atmospheric Administration (USA)
NM	Notice to Mariners
NSEHWG	North Sea ENC Harmonization Working Group
NZ	New Zealand
NEWOBJ	New object (S-57 attribute)
QR	Quick Response (codes)
Racon	Radio beacon
Rep	Reported
rev	Revision
S-4	Chart Specifications of the IHO and Regulations for International (INT) Charts
S-11	Guidance for the Preparation and Maintenance of International Chart Schemes and Catalogue of International (INT) Charts
S-12	Standardization of List of Lights and Fog Signals
S-49	Guidance for Mariners' Routing Guides
S-57	IHO Transfer Standard for Digital Hydrographic Data
S-100	IHO Geospatial Standard for Hydrographic data
S-101	ENC Product Specification
SDB	Satellite-derived bathymetry
SE	Sweden
Sec	Secretary (of CSPCWG)
SNPWG	Standardization of Nautical Products Working Group (of HSSC)
subWG	Sub-working group (of relevant HSSC WG)
TOR	Terms of Reference
TSMADWG	Transfer Standard Maintenance and Application Development Working Group (of HSSC)
UK	United Kingdom of Great Britain and Northern Ireland
uns	Unsurveyed (on ZOC diagram)
UQ	Ultra Quick (light)
US	United States of America
V-AIS	Virtual Automatic Identification System aid to navigation
WENDWG	World-wide ENC Database Working Group
WG	Working Group (of IHO)
WIG	Wing in Ground
ZOC	Zone of confidence (category of)