7th CSPCWG MEETING Simon's Town, South Africa 23-26 November 2010

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REPORT: (Note: The paragraph numbering is the same as in the agenda, although the order of taking the items was not exactly followed).

1. Welcome, Introductions and Administrative Arrangements

Docs:	CSPCWG6-01A	List of documents
	CSPCWG6-01B	List of meeting participants and WG members

On behalf of the SANHO, Captain Abri Kampfer, Hydrographer of the South African Navy, introduced Rear Admiral Robert Higgs, Flag Officer, Fleet, who extended a very warm welcome to the CSPCWG.

The participants introduced themselves, some of whom were attending their first WG meeting. A list of meeting participants is at ANNEX C. The Chairman commented that there was a good representation from other WGs, which is useful.

The Chairman had received apologies from Greece, Latvia, Netherlands, New Zealand and Ukraine. Also from Michel Huet, who was represented by Tony Pharaoh from the IHB.

The Chairman outlined his plans for the meeting and thanked SANHO for hosting CSPCWG7. 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 made a point of welcoming two industry representatives, from ESRI and Jeppesen, attending a CSPCWG meeting for the first time.

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.

<u>ACTION 1</u>: **Secretary** to produce draft report of CSPCWG7 by end of December 2010, for participants to approve.

2. Approval of Agenda

Docs: CSPCWG7-02A Agenda

The WG approved the agenda. The Chairman reserved the right to postpone discussion on some lower priority items if necessary to ensure more important items were sufficiently discussed. He noted a request from the INT1 subWG for an opportunity for some discussion about the NEs of INT1 currently in preparation. 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 CSPCWG5

Very good progress had been made with the 49 actions from CSPCWG6 (December 2009). The following points were noted:

CSPCWG6 Action 3 (AU to coordinate the use of pictures in S-4 and S-101): AU stated that this action would be on-going for about 18 months, within TSMAD (which had available a lot of pictures, but had so far focussed on text). AU would include progress in the TSMAD report to future CSPCWG meeting and the activity would be regarded as business as usual. The action was closed.

CSPCWG6 Action 4 (All WG members to provide any national documents on ENC scheming good practice to Chairman by end February 2010.): Although time-expired, Work Plan item B3 (Develop guidelines for preparation & maintenance of small / medium scale ENC schemes) has not been completed: see item 4.1 for further comment.

CSPCWG6 Actions 10 and 11 (Amendments to S-4 and INT1 resulting from discussions about the use of the term 'Foul' on charts) were superseded by on-going discussion about the use of the term 'Foul': CSPCWG Letter 17/2010 refers.

CSPCWG6 Action 25 (Secretary to draft specifications for depicting 'projected' dredged areas for S-4). The original draft specification had given rise to significant misgivings, and had therefore been withdrawn while other work was progressed. A substantially revised draft was discussed at agenda item 8.12.

CSPCWG6 Action 35 (SE to keep CSPCWG informed of outcomes from using ENC data from other nations to update charts). SE proposed that a report is given to the next CSPCWG meeting (CSPCWG8 2011) since there are plans for a review in the first half of 2011. The CSPCWG6 action was closed; the subject will be included as an agenda item at the next CSPCWG meeting.

CSPCWG6 Action 38 (IHB to consult IALA regarding inclusion of FIso and FQ lights. Also to review any changes required to S-12). IALA consider that the nomenclature of FFI adequately covers the use of rhythmic characters for this purpose and recommended that the IHO do not include FIso and FQ in the next generation ENC Product Specification (S-101). AU (from whom the original concern had derived) had been informed of IALA's view. No further work for CSPCWG.

CSPCWG6 Action 42 (INT1 subWG to prepare a complete list of useful terms for inclusion in S-4). This had been discussed at the INT1subWG meeting in June. A list is in preparation for next editions of INT1. The action was closed.

CSPCWG6 Actions 48 & 49 (All WG members to make early bids for travel budget) and (All WG members to advise Secretary of agenda items for CSPCWG7 throughout the year). These were considered to be useful reminders and similar new actions were proposed for the following year. Existing actions closed.

<u>New CSPCWG7 Action 2:</u> All WG members to make early bids for travel budget to CSPCWG8; advise Chairman if any difficulties.

<u>New CSPCWG7 Action 3:</u> All WG members to note agenda items for CSPCWG8 throughout the year (and forward to Secretary as they arise).

All CSPCWG6 actions were therefore closed.

4. Relationship with HSSC

4.1. Report from HSSC1.

Docs:CSPCWG7-04.1ACSPCWG report to HSSC2CSPCWG7-04.1BReport from HSSC2 – notes by CSPCWG Chairman

The Chairman drew attention to a few aspects from the CSPCWG report to HSSC2. He noted that CSPCWG has 27 members from across most active hydrographic offices, which gives good authority to the WG's deliberations.

He also briefed the meeting on the HSSC2 conference (October 2010). The following were of particular relevance to CSPCWG:

- The CSPCWG report had been accepted and HSSC had endorsed the continuing work of the CSPCWG.
- CHRIS Action 20/24 has not yet been addressed. Little material was offered under CSPCWG6 Action 4 (Develop guidelines for preparation & maintenance of small / medium scale ENC schemes) except by IHB and AU. He requested therefore that the action should be renewed and encouraged WG members to seek out any national guidance and send it as soon as possible. He stated that he would also be contacting RCG Coordinators. He particularly seeks guidance on:
 - How it is decided that an ENC is required
 - Scale and coverage
 - Level of detail portrayed in each usage band.
- On V-AtoN, he advised that comments were made by HSSC members that the issues have not yet been substantively discussed by IMO. There was some concern that the available technology might cause an explosion in V-AtoN usage without proper controls. Nevertheless, as charts have to show the 'real-world' situation, rather than the 'approved' situation, it is necessary to have symbology ready in advance, rather than risk individual HOs being put in a situation of having to invent national symbols to deal with a real-world situation.
- He outlined the HSSC proposals for taking a more explicit role in the approval of standards (which will be promulgated to MS for approval by CL). For CSPCWG, a temporary exception has been agreed for the current revision of S-4.
- He strongly recommended WG members to be alert to HSSC papers which may impact on CSPCWG work, and to ensure such papers were properly staffed in their national HOs, to ensure their national representatives are sufficiently well briefed (HSSC3 is scheduled for the week commencing 31 October 2011 – week 44)..
- He also recommended WG members to be alert to IHO CLs which are related to CSPCWG work, to ensure their organization responds positively.
- WG plans also need approval by HSSC; the CSPCWG plan has been approved and we can continue with our normal types of work which will be endorsed at next HSSC. Any significant change of, or new work items would be submitted to HSSC for approval to proceed.

<u>ACTION 4</u>: All WG members to provide any national documents on ENC scheming good practice to Chairman by end February 2011.

FR asked if the guidelines for ENC scheming that had been supplied to Chairman by AU and IHB could be circulated to all WG members. AU and IHB agreed.

ACTION 5: Secretary to provide AU and IHB guidance on ENC scheming to all.

4.2. Report from DIPWG

Docs: CSPCWG6-04.2A Report to CSPCWG7 on DIPWG activities

J Wootton (AU) briefed the meeting on the activities of the DIPWG, noting that the liaison with CSPCWG is working well. He commented on an excellent paper by the DIPWG Chairman, arising out of CSPCWG work. Nothing required any action from CSPCWG. In answer to a question, he advised the latest thinking on simplified versus traditional symbols for ENC is likely to be the elimination of simplified symbols in favour of colour-enhanced traditional symbols.

4.3. Report from TSMADWG

Docs: CSPCWG6-04.3A Report to CSPCWG7 on TSMADWG activities

J Wootton (AU) briefed the meeting on the activities of the TSMADWG, highlighting those which were of relevance to CSPCWG, as on the submitted paper. There were no actions for CSPCWG arising from them. The Chairman confirmed that all the substantive TSMADWG proposals had been endorsed by HSSC2 and would be progressed by IHO CL.

Tony Pharaoh (IHB) mentioned an IALA meeting he had attended, in which it was revealed that IALA had been considering developing a different standard from that of IHO's S-100, which could cause future problems. However, they (and other bodies) are now likely to adopt and use the S-100 standard and registry.

4.4. Report from EUWG

Docs: HSSC2-05.10A Report to CSPCWG7 from EUWG

O Parvillers (FR) briefed the meeting on the activities of the EUWG. There were no actions for CSPCWG arising from them. Some discussion arose about the timing of paper chart and ENC updates, which differ from nation to nation, depending on whether the ENC update is derived from the paper chart NM, from a database, or from the original source. There was an exchange of experiences and practices, with a general acknowledgment that the mariner is likely to expect the ENC to be more up to date, if they differ. No solutions were offered, except to advise that HOs should abide by the general criteria for updates contained in S-4 B-600.

4.5. HDWG: point of contact

The Chairman drew attention to IHO CL32/2010, which had amended TR7/1929 on the Hydrographic Dictionary, including at paragraph 3:

'All IHO bodies developing publications containing glossaries and definitions should make reference to S-32 as much as possible and nominate one member of their WG to liaise with the WG on the Hydrographic Dictionary.'

He informed the WG that the Secretary would fulfil the role of the nominated member for CSPCWG, while acknowledging that J Wootton (AU) is an active member of the HDWG.

J Wootton mentioned that HDWG activities were mainly conducted via a Wiki forum, which could be monitored by anyone interested (although to participate it would be necessary to become a member). He commented that most of the work is done by 3 active members, who all have English as their first language; it would be useful to have some active members for whom English is not first language, especially French and Spanish speakers.

Index numbers are being dropped from S-32 on-line version. Only this version is being maintained. The Secretary confirmed that any S-32 index numbers in S-4 will be removed at the next opportunity.

O Parvillers mentioned that FR is translating S-4, and will also make proposals for French definitions to HDWG.

5. Terms of Reference (TOR)

Docs: CSPCWG7-05A CSPCWG TOR

A minor change to include reference to International Charting Coordination Working Groups (ICCWG) alongside RCGs was accepted. It was also noted that an amendment to the revised HSSC approval mechanism would be needed when approved by member States. This would be common to all HSSC WGs; however, there would additionally need to be a sentence about the temporary exemption for S-4.

The Chairman commented that RHC are well represented on CSPCWG, including the complete membership of the new Arctic RHC. He also reminded the meeting that there will be a requirement to elect new (or re-elect existing) CSPCWG officers after the next International Hydrographic Conference in April 2012.

<u>ACTION 6</u>: IHB to include editorial amendments to TOR on website (ensuring special provision for S-4 is maintained).

6. CSPCWG procedures

Docs: CSPCWG7-06A CSPCWG Procedures

Changes to the CSPCWG procedures will be needed to take account of HSSC changes, specifically:

- Scheduling of meeting (avoiding 9 weeks before HSSC meetings)
- HSSC approval of new work items and changes (revisions, new editions) to IHO Standards
- New version control numbering for CSPCWG documents.

ACTION 7: Sec/Chair to draft revisions to procedures for WG approval.

7. CSPCWG work plan: Summary of progress

Docs: CSPCWG6-07A Updated Work Plan

The Secretary briefed the meeting on progress with items on the work plan (substantive discussion was deferred to Agenda Item 13). A considerable amount of progress had been achieved during the past 12 months, with a number of items completed and reported to HSSC2; these would now be removed from the work plan. The Chairman thanked everyone for their effective contributions over the past year.

8. Chart content:

8.1. Wrecks and other obstructions – use of danger circle (US)

No paper was available. A copy of the NOAA calendar for June 2009 was displayed, showing wrecks marked by abbreviation '*Wk*' only, without danger circles. R Heeley (US-NOAA) explained that in some areas modern multibeam surveys showed so many wrecks and obstructions that to include danger circles around every one would have the effect of creating 'no-go' areas. The meeting, however, considered that following the very thorough review of specifications for charting wrecks in recent times, there is no requirement to revisit this. The danger circle is a well-established convention for highlighting wrecks and obstructions. The specification provides adequately for being selective in portraying wrecks in crowded areas.

8.2. Artificial Islands (CA)

This subject had been retained from the last meeting (CSPCWG6), where it was not discussed. D Prince (CA) explained that these referred to situations where dredged material had been used to create man-made islands on which a platform could be established. However, such artificial islands were last established many years ago, are no longer being created, and most have now disappeared. CA had used a national symbol:

J Wootton (AU) undertook to raise the matter with TSMAD, to consider the implications for the S-57 enumerate.

ACTION 8: AU to refer 'Artificial Islands' to TSMAD.

- **8.3.** Depiction of surveys on Source Diagrams (UK)
 - Docs: CSPCWG7-08.3A Depiction of surveys on Source Diagrams

P Jones (UK) explained the various issues outlined in the paper, in respect of how and why to include details of surveys assessed for charting, even when the bathymetry is largely unchanged. For example, an area compiled from a single-beam 1990 survey may have been resurveyed in 2010 by multi-beam, which demonstrated that the bathymetry is unchanged. He asked whether this information should be conveyed to the mariner and, if so, how? WG members were asked for their views, which varied between no action necessary, to NM block, to update the Source or ZOC diagram. Another method is to announce the surveys in NM, advising the results even if no charting update action is required. It was agreed that some additional guidance should be added to S-4 in B-290 as an option to include evaluated sources on Source/ZOC Diagrams and also to include an additional NM criterion in B-620. TSMAD would pick up any changes needed for CATZOC from the CSPCWG actions.

ACTION 9: Secretary to draft clarifications to S-4 B-290 and B-620 for Source and ZOC diagrams.

8.4. Historic Wrecks **(AU)** Docs: CSPCWG7-08.4A Historic Wreck at INT1 – N26

J Wootton (AU) explained that in Australia, wrecks over 75 years old are automatically classified as historic wrecks. This status implies that certain activities on the wreck are not allowed (eg diving), but no area is specified. Existing S-4 specifications do not quite cover this situation, as the INT1 'symbol' is limited to an <u>area</u> and legend. It was agreed that:

Historic wrecks, with or without an associated area, should be indicated by a magenta legend. The S-4 specification should be amended accordingly, using wording suggested by AU and Secretary and relocated in the wrecks area (B-422), thereby changing the emphasis to the wreck rather than the area. INT1 N26 was considered to be redundant.

<u>ACTION 10</u>: Secretary (in consultation with AU) to draft revised wording on historic wrecks for S-4 and circulate to WG members for approval.

ACTION 11: INT1 producers to remove the example in N26.

8.5. Wharfside obstructions (KR / UK) Docs: CSPCWG7-INF1 Wharfside obstructions

Noting the problems raised by Y Baek (KR) are universal, it was agreed that some guidance could be added to S-4 along the lines outlined in the paper (possibly during the on-going review of B-300 under berthing areas, or at least cross referenced from there). B-410 was noted as another possible reference to use. M Wallhagen (SE) commented that they advised cartographers to ignore depths closer than 2m to a quayside.

<u>ACTION 12</u>: Secretary to draft wording for wharfside obstructions, based on CSPCWG7-INF1 and circulate to WG for approval.

8.6. Lighthouses (AU) Docs: CSPCWG7-08.6A Lighthouses

J Wootton (AU) suggested three possible ways of charting a disused lighthouse. The meeting consensus was that the best method is to use an appropriate landmark symbol (usually a tower E20) or a position circle (B22), without light flare or star. The legend LtHo (disused), or equivalent, should be placed adjacent. The guidance 'should' rather than 'must' is appropriate. Some clarification is required at B-457.3 to show this specification applies only to lighthouses which are in use for displaying navigational lights.

<u>ACTION 13</u>: Secretary (in consultation with AU) to draft wording for disused lighthouses, which brings together the guidance in one suitable place.

8.7. Reed beds (UK)

Docs: CSPCWG7-08.7A Depiction of Reed Beds

After presentation of the paper, the following information was shared:

- Reed Beds are encoded in S-57 as land areas (but will be changed to water areas in S-101).
- T Kanazawa (JP) drew attention to a national 'grassy' coast symbol, very similar to the marsh symbol.
- Reed beds change with the seasons, including the extent and prominence, which makes it difficult to define a precise edge. (Various photographs were shown).
- Reed beds may cause a distinct radar image.
- There is no definition in S-32. The definition in S-57 is derived from the Oxford English Dictionary: marsh plants with firm stems.

The meeting concluded that no separate symbol is necessary; the marsh symbol C33 can be used. The specification is to be extended to cover that usage and INT1 to include the definition and an application over a shallow-water blue area (for use where there is no intertidal area, such as the Baltic Sea).

ACTION 14: Secretary to draft new wording for marsh/reed beds during revision of B-300.

<u>ACTION 15</u>: INT1 producers to include application of C33 to reed beds, and include version over blue tint, in new edition of INT1.

8.8.	Symb	ol for diving prohibited	(SE)
	Docs:	CSPCWG7-08.8A	Symbol for diving prohibited
		CSPCWG7-08.8B	Symbol for diving prohibited – some history

The meeting agreed that an INT symbol for diving prohibited would be useful. When previously considered by CSPCWG (Letter 04/2004 refers) it was suggested that a simpler symbol was needed for ease of hand drawing, but no simpler, intuitive symbol had been devised. This meeting considered that there is no need for the symbol to be very simple, as it is not expected that it should be inserted by NM and therefore need to be hand drawn. Several examples were viewed and the SE example was accepted as a good model. It was also agreed to use a 'cross' (X) rather than a 'stroke' (/) to signify prohibition, as this is consistent with other paper chart prohibited symbols and also avoids a clash with existing national symbols (eg DK) which use a stroke to signify advice.

ACTION 16: Secretary to draft a specification for diving prohibited.

8.9. Generic symbol for lights in multicoloured charts **(SE)** Docs: CSPCWG7-08.9A Generic symbol for lights in multicoloured charts

The meeting decided that the traditional solid magenta flare should be used for drawing attention to light stars for multicoloured lights where the sectors are not charted, and also for signal stations. Small changes would be requited to specifications to clarify this, at B-470 and B-494.

ACTION 17: Secretary to draft clarifications to specifications B-470 and B-494 for use of solid magenta flare.

8.10. Depiction of lights on platforms on multicoloured charts **(DE)** Docs: CSPCWG7-08.10A Depiction of lights on platforms on multicoloured charts

The paper was not provided, a presentation of charted examples being made instead. This was essentially the same issue and solution as item 8.9 above. Multiple coloured flares at platforms (and other lights) were considered to be unnecessary clutter.

8.11. Depiction of imprecise shoal depth areas (UK/US)

Docs:CSPCWG7-08.11ADepiction of imprecise shoal depth areasCSPCWG7-INF4Red dot areas (Commentary on CSPCWG7-08.11A)

Various methods of recognising the possible existence of shoal areas (eg from satellite photography, satellite altimetry, gravitational measurements) were explained, along with possible charting solutions. J Barone (US-NGA) explained the circumstances outlined in paper INF4. These include the use of existing styles such as '*Rep*' depths and areas, use of danger line and shallow water blue tint areas. While there is no invariable cartographic solution, it was decided that some general guidance in S-4 would be helpful.

<u>ACTION 18:</u> Secretary to draft some outline guidance, with examples of techniques, for showing possible shoal areas derived from remote sensing methods, in consultation initially with FR, AU and US(NGA).

8.12. Development dredging (UK) Docs: CSPCWG7-INF3 Development dredging

The draft specification in the paper was considered to cover the objections that had been directed at the original draft (arising from CSPCWG6 Action 25) for planned dredging areas. The Secretary was invited to circulate the new draft to the full WG for further consideration.

<u>ACTION 19</u>: Secretary to circulate revised proposal on development dredging to full WG for comment.

9. S-4

9.1. A-400 – consequential review required on publication B-600 (Chairman) Docs: CSPCWG7-09.1A Need to revise S-4 A400

The item was for information, to explain that S-4 Section A-400 (and B-128) needs some revision following publication of B-600. To avoid duplication, this would mainly be achieved by cross referencing. A-400 also requires a minor clarification as a result of a submission by IRCC, which had been approved by Member States (IHO CL50/10 refers).

After-meeting note: H Gorziglia (IHB, Chairman IRCC) has agreed the improved clarification proposed by CSPCWG Chairman.

ACTION 20: Secretary to draft revised A-400 and B-128 for circulation.

9.2. Colours under bridge lighting **(Chairman)** Docs: CSPCWG7-09.2A Colours under bridge lighting

Various information about users' reactions to the use of colour on charts was shared. Points included:

- The colour palettes used in ECDIS may be reduced to two.
- N Graasbøl-Schmidt (DK) reported feedback that blue contours tended to disappear under some bridge lights; the Danish Navy was to conduct some trials. DK undertook to inform the WG of the results.

- M Wallhagen (SE) reported similar feedback from the Swedish Navy, especially when modern LED lighting is used. They are considering adding some black to the blue.
- M Hovi (FI) reported the use of a red overlay which had been rejected by their Navy. Nevertheless, the Navy supported the use of red for flares, sectors and selected symbols.
- A Guitart (ES) commented that paper charts are often used in a separate area of the bridge, where better lighting can be used.

<u>ACTION 21</u>: All to advise the WG (via the Secretary) of any further feedback received and the results of any trials conducted into the use of colour on charts.

9.3. Sub-surface operations (Chairman) Docs: CSPCWG7-09.3A Sub-surface operations

The Chairman explained that UK is currently reconsidering what content the mariner expects on charts. The problem is that charts have a wide-range of users; submariners being one example. J Wootton (AU) quoted Lee Alexander that 'the mariner is not looking for more information, but for better information'. He had drafted some words which may be useful:

"The primary purpose of nautical charts is to provide the information required to enable the mariner to navigate surface vessels safely. Additional information to suit other requirements, such as sub-surface operations (military, research, fishing etc); natural resource exploitation; recreation; and port development, should be included on nautical charts if considered necessary by the producing authority, but this must not be done at the expense of clear portrayal and interpretation of navigationally critical information."

This draft could form the basis of some introduction to charting in S-4.

It was also agreed not to progress a more detailed guide to chart purpose and minimum content at the present.

<u>ACTION 22:</u> Secretary to draft some introductory words on charting based on AU's draft and suggest a suitable place in S-4.

9.4. GPS vulnerability – consequences for charting **(Chairman)** Docs: CSPCWG7-09.4A GPS vulnerability – consequences for charting

This item was a general exchange of views about the usefulness of charting various topographic details, as a guide to the Chairman, Secretary and WG as they embark on the revision of B-300. The advice of the meeting participants with significant navigation experience (including F Rogério BR, A Guitart ES, I Tellefsen NO, M Nelson ZA) was particularly informative in forming the general view that it is still important to show sufficient detail to enable position fixing, the general lie of the land and detail of maritime interest in port areas. No actions were proposed.

9.5. Enhancements to support ENC / paper chart consistency of presentation (Chairman / ALL)

Docs: CSPCWG7-09.5A Enhancements to support ENC / paper chart consistency of presentation

Some examples of significant differences between paper charts and ENC, and errors on ENC caused by misinterpretation of paper chart symbols were mentioned (eg EXPSOU 2 and Foul Areas/grounds). Areas of minimal depiction on paper charts (with unenclosed depth areas) could also cause significant problems when compiling into the ENC. Ideally, the paper chart and ENC compiler should be the same person to limit errors or misinterpretation. As a minimum, ENC should contain all the features in the paper chart but this may cause problems (eg where the paper chart has various graphics - such as sketches, tidal stream diagrams - which are difficult to display in ENC and may cause file loading problems because of size). No conclusions or actions were proposed, except the need for continued vigilance in noticing when such problems may occur.

9.6. Colour abbreviations for orange and amber lights **(AU)** Docs: CSPCWG7-09.6A Colour Annotation on Paper Charts

The proposal was to remove the option to chart orange and amber lights as yellow, to enable the population of the appropriate enumerates in S-57. The counter-proposal was to retain the existing options and leave the orange and amber enumerates in S-57 unpopulated (and delete them from S-101). However, as the proposals deal with colours of lights, it was decided that the issue should be referred to IALA for advice.

<u>ACTION 23</u>: Secretary to refer the issue of charting orange and amber lights to IALA for advice, explaining the background to the proposals.

9.7. Superbuoys (UK) Docs: CSPCWG7-INF2 De

Definition of superbuoy

This was for information, the matter having already been referred to IALA, who will discuss at their next Aids to Navigation committee meeting in 2011. J Wootton (AU) noted that there is a definition for 'Buoy, super' in S-32.

10. Other CSPCWG publications

10.1. S-11 Part A:

S-11 Part A was revised earlier in 2010 to include a new annex on Terms of Reference for ICCWG. This publication may be expanded to include guidelines for scheming of ENC.

10.2. Combined INT paper chart/ENC catalogue (IHB)

Tony Pharaoh (IHB) demonstrated a GIS database tool he has developed, with Google Earth as a backdrop, to show both ENC and INT chart coverage together. The database would utilise the information in the existing S-11 Part B, but this would need some reformatting to make it suitable. The intention is that, when fully developed, Regional Charting Coordinators would be provided with an interface to allow them to maintain it. This would be useful for planning and comparison purposes.

Some suggestions were made for enhancements of uses, including:

- $\circ \quad \text{Adding EEZ}$
- Grouping ENC by navigational purpose and also including similar groupings for the INT charts.
- Make it possible to query the database, eg for RENC provider, printer nations.

The meeting encouraged IHB's further development whilst noting that S-11 Part B is not a CSPCWG responsibility.

<u>ACTION 24</u>: Chairman to write to IHB, encouraging support for the development of a web-based, ENC/INT chart combined GIS database.

10.3. S-49

Edition 2 is now available. There was additional general discussion about Mariners' Routeing Guides (MRG), their function and updating. The Baltic Sea and German Bight MRGs have now been allocated INT numbers.

11. INT 1/2/3

11.1. Report of subWG on INT1 (Secretary)

Docs: CSPCWG7-11.1A Report of the INT1 subWG CSPCWG7-11.1B Report of INT1 subWG Meeting, Cadiz 16-17 June 2010

The Secretary presented the report of the INT1 subWG, noting the various subjects discussed at the meeting in Cadiz in June 2010. He confirmed that, because of on-going discussions, no changes would be made to the entry for 'Foul' in the planned new editions of INT1

The INT1 producers confirmed plans for NEs in 2011. The DE version (the official English language version) will be published very early in 2011 because of low stock; any final comments on the new DE version must be received by 15 December 2010.

It was decided to remove the entry for Historic Wreck, which raised the question of how to prevent the INT1 number being accidentally reused. It was agreed for the time being to include a statement in S-4, with an explanation and a list of 'retired' INT1 numbers (to be maintained). This is based on the INT1 subWG rule, and agreed at CSPCWG6, that numbers should not be reused. It was also suggested that longer term this may benefit from a formal INT1 register in S-100. J Wootton (AU) agreed to raise this at the forthcoming TSMAD meeting.

ACTION 25: Secretary to add INT1 subWG ROP 8g and list of retired INT1 refs to S-4.

ACTION 26: AU to discuss at TSMAD whether INT1 references should be included as a register in the S-100 Registry and advise CSPCWG.

11.2. INT1/S52 combined publication **(US / UK)** Docs: CSPCWG7-11.2A INT1/S52 combined publication

R Heeley (US NOAA) presented US plans for a P(paper)/ECDIS symbols and abbreviations publication (US Chart 1 Edition 12), to be issued after their Edition 11. Edition 12 has been in development for some time; it is in landscape format with columns and some narrative sections specifically explaining the characteristics of ENC. US confirmed that:

- Editions 11 and 12 would not co-exist.
- Edition 12 would be made available internationally as a resource.

S Spohn (DE) offered to provide a digital copy of the new edition (2011) of INT1. J Wootton (AU) commented that there may still be some S-52 symbols to be developed from the latest new paper chart symbols.

UK showed a simple Quick Guide to ENC symbols (single A4 sheet) that had been developed as a free-of-charge product for ENC users.

There had been anecdotal reports of a guide developed by Kelvin Hughes, but this had not been seen by any of the meeting participants.

ACTION 27: DE to provide US (NOAA & NGA) with a digital copy of NE (2011) INT1 as soon as available for purpose of P/ECDIS US Chart 1.

11.3. Restructure of INT1 section K **(DE)** Docs: CSPCWG7-11.3A Restructure of INT1 section K

S Spohn (DE) presented an embryonic plan for reorganizing sections K and L of INT1 to group all 'obstruction' symbols together in a simplified form. It was recognized that this would not be a small task and there would need to be clear benefits. There was no knowledge of any user requirement for the proposed change. The concept could be applied more widely in INT1 which contains a lot of 'composite' symbols. There is a need to consider any potential impact on ECDIS manufacturers. DE was invited to consider these comments and decide whether to develop the concept further. It was suggested it could be the subject for an agenda item at the next meeting, or for correspondence between meetings.

<u>ACTION 28:</u> DE to further develop ideas for reducing INT1 Section K as a paper for CSPCWG8 (or by correspondence before the meeting)

11.4. Preview of 2011 edition of INT1 (DE)

S Spohn (DE) presented their draft new edition of INT1 including the more significant changes (removal of sections G & O, rearrangement of indexes, removal of INT symbols from section U). Some of the new symbols were shown. There was discussion about the reasons for apparent differing symbols (derived from national symbol libraries) between INT1 versions and S-4.

11.5. INT2 (NL)

NL (M de Graaf) had advised that there are no current plans to produce a new edition of INT2. US(NGA) reported some difficulty with a missing halfway marker among minor sub-divisions. A van Craeynest (ZA) commented that there were no examples of supplementary graduation for larger scale charts. Both US and ZA were advised to explain the issues directly to NL (by email, copy to Secretary).

11.6. INT3 (UK)

A Heath-Coleman (UK) reported plans to prepare a new edition of INT3 during 2011/12, to update for new symbology adopted since the current edition, dated 2005.

12. Lessons learned from Marine Incidents

I Tellefsen (NO) briefed the meeting on the background and outcomes from the court proceedings related to the 'Rocknes' incident. The need to ensure consistency of statements across S-4 was emphasized (eg A-400, B-128 and B-620).

D Prince (CA) mentioned two groundings of cruise ships in the Arctic region. This was focussing CA's thinking about charting priorities.

M Wallhagen (SE) stated that in SE's waters there has been an increase in incidents involving leisure boats, apparently as a result of over-reliance on plotters rather than official charts and of inadequate training.

The Chairman recommended all should keep under active review their national documents explaining how charts should be used.

13. Review of Actions and Work Plan

- **13.1.** The actions from the meeting were reviewed and agreed.
- **13.2.** The new specifications required for 'diving prohibited areas' and 'shoal areas derived from remote sensing' were added to the Work Plan.
- **13.3.** Priorities for work items were agreed and updated.
- **13.4.** Timescales for work items were agreed and updated.

A revised work plan is attached at Annex E.

14. Any Other Business

14.1. Reports from non-attendees

No reports had been received from non-attendees.

14.2. The following items are worthy of bringing to the attention of HSSC:

- S-11 Part B: T Pharaoh's (IHB) GIS catalogue development work
- P/ECDIS: US to consider when this reaches a stage to inform HSSC (eg by INF paper)

14.3. dKart demonstration (Jeppesen)

J Hornby (Jeppesen Marine) gave an overview of the dKart Office package and a demonstration of the capability of dKart publisher to produce paper charts from S-57 data. He emphasized that the compiler would be working with recognizable INT1 objects, rather than S-57 primitives.

14.4. Presentation (ESRI)

C Green (ESRI) presented his experience of trying to derive a paper chart from an ENC (the opposite process to that common in HOs). He explained the challenges, in particular that the reference documents (S-4, INT1, etc) are not designed to support this process. S-57 often has no reference to S-4 (although it may contain a reference to INT1, which is a chart user's guide, not a specification). It would be useful to have a complete S-57/S52 to S-4 mapping, including details such as name, geometry, dimensions, line weights, for each paper chart symbol. J Wootton (AU) stated that AU had attempted this. In discussion, the history of paper chart symbol development was explained.

14.5. Quality (Chairman)

The Chairman outlined the issues relating to Quality in charts being discussed in UK, noting that the elements of quantity and timeliness of output are relatively easy to define, whereas less account may be taken of quality as it is much more difficult to objectively define. Quality is more subjective and also more in the perception of the user than the HO producer.

In discussion, it became evident that the problem associated with quality being under pressure from production/resource issues is widespread.

14.6. INF papers:

Docs: CSPCWG7-INF1	Wharfside obstructions
CSPCWG7-INF2	Definition of superbuoy
CSPCWG7-INF3	Development dredging
CSPCWG7-INF4	Red dot areas (Commentary on CSPCWG7-08.11A)

These papers had all been considered under the relevant agenda items.

14.7. Naming of submarine cables: A Guitart (ES) asked if consideration could be given to a specification for the naming of submarine cables on charts. While questions were asked about the benefit to the chart user and the risk of clutter, it was agreed to add a brief statement in the specification, similar to that already stated for submarine pipelines.

ACTION 29: Secretary to add 'may' include cable names at end points to S-4 as a clarification.

14.8. New Arctic Regional Hydrographic Commission: The Chairman asked CA to advise him if the new Arctic RHC should appoint a RCG or ICCWG, so that he could introduce himself to its coordinator in his role in advising such groups, as stated in CSPCWG's TOR.

<u>ACTION 30</u>: CA to advise Chairman CSPCWG if the Arctic RHC appoints a RCG or ICCWG coordinator.

15. Date, duration and venue of next meeting

The participants agreed that regular (approximately annual) meetings of CSPCWG are valuable for progressing business efficiently.

The duration of 3 full days for discussions was considered to be about right.

The participants agreed that the next meeting should commence 29 November 2011 (week 48).

FI offered to host the next meeting and the invitation was gladly accepted.

WG members are reminded to note items for the next meeting throughout the year (and advise the Secretary as they arise).

7th CSPCWG MEETING Simon's Town, South Africa, 23-26 November 2010

AGENDA

1.	Welcome, Introductions and Administrative ArrangementsDocs:CSPCWG7-01A rev3List of documentsCSPCWG7-01B rev3List of meeting participants and WG members
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2.	Approval of Agenda Docs: CSPCWG6-02A rev3 Agenda
3.	Status of Actions from CSPCWG6 Docs: CSPCWG6-03A rev1 Status of actions from CSPCWG6
4.	Relationship with HSSC4.1. Report from HSSC 2 (Chairman)4.2. Report from DIPWG (Vice Chairman)4.3. Report from TSMAD (Vice Chairman)4.4. Report from EUWG (FR)4.5. HDWG – point of contact (Chairman)Docs: CSPCWG7-04.1ACSPCWG7-04.1BCSPCWG7-04.1BCSPCWG7-04.2AReport from HSSC2 - Notes by CSPCWG ChairmanCSPCWG7-04.3AReport to CSPCWG7 on DIPWG activitiesCSPCWG7-04.3AReport to CSPCWG7 on TSMADWG activitiesplease refer to HSSC2-05.10A
5.	Terms of Reference Docs: CSPCWG7-05A CSPCWG TOR
6.	CSPCWG procedures Docs: CSPCWG7-06A CSPCWG Procedures
7.	CSPCWG work plan 7.1. Summary of progress (Sec) Docs: CSPCWG7-07A Work Plan updated for HSSC2
8.	 Chart content: 8.1. Wrecks and other obstructions – use of danger circle (US) 8.2. Artificial Islands (CA) 8.3. Depiction of surveys on Source Diagrams (UK) Docs: CSPCWG7-08.3A Depiction of Surveys on Source Diagrams 8.4. Historic wrecks (AU) Docs: CSPCWG7-08.4A Historic Wrecks 8.5. Wharfside obstructions (KR) Docs: CSPCWG7-1NF1 Wharfside obstructions 8.6. Lighthouses (AU) Docs: CSPCWG7-08.6A Lighthouses 8.7. Reed beds (UK) Docs: CSPCWG7-08.7A Depiction of reed beds 8.8. Diving Prohibited (SE) Docs: CSPCWG7-08.8A Symbol for Diving Prohibited CSPCWG7-08.8B Symbol for Diving Prohibited SPCWG7-08.8B Symbol for Lights in Multicoloured charts 8.10. Depiction of lights on platforms on multicoloured charts (DE) Docs: CSPCWG7-08.10A Depiction of lights on platforms on multicoloured charts (not provided; presentation of chart examples instead) 8.11. Depiction of imprecise shoal depth areas (UK) Docs: CSPCWG7-08.11A Depiction of imprecise shoal depth areas

CSPCWG7-INF4

Red dot areas

8.12. Development dredging (Chairman) Docs: CSPCWG7-INF3 Development dredging

9. S-4

- 9.1. A-400 consequential review required on publication B-600 (Chairman) Docs: CSPCWG7-09.1A Need to revise S-4 A400
- 9.2. Colours under bridge lighting (Chairman) Colours under bridge lights Docs: CSPCWG7-09.2A
- 9.3. Sub-surface operations (Chairman) Docs: CSPCWG7-09.3A Sub-surface operations
- 9.4. GPS vulnerability consequences for charting (Chairman) Docs: CSPCWG7-09.4A GPS vulnerability - consequences for charting
- 9.5. Enhancements to support ENC / paper chart consistency of presentation (Chairman / ALL)
 - Docs: CSPCWG7-09.5A Enhancements to support ENC / paper chart consistency of presentation
- 9.6. Colour abbreviations for orange and amber lights (AU) Docs: CSPCWG7-09.6A Colour Annotation on Paper Charts
- 9.7. Superbuoys (UK) Docs: CSPCWG7-INF2 Definition of superbuoy

10. Other CSPCWG publications

- 10.1. S-11 Part A
- 10.2. Combined INT paper chart/ENC catalogue (IHB) **10.3.** S-49
- 11. INT 1/2/3
 - 11.1. Report of subWG on INT1 (Sec)
 - Report of the INT1 subWG Docs: CSPCWG7-11.1A
 - CSPCWG7-11.1B Report of INT1 subWG Meeting, Cadiz 16-17 June 2010
 - 11.2. INT1/S-52 combined publication (US and UK)

INT1/S-52 combined publication Docs: CSPCWG7-11.2A

- **11.3.** Restructure of INT1 section K (DE) Docs: CSPCWG7-11.3A
- 11.4. Preview of 2011 edition of INT1 (DE)
- 11.5. INT2 (NL)
- 11.6. INT3 (UK)

12. Lessons learned from Marine Incidents

13. Review of Actions and Work Plan

- **13.1.** Actions
- 13.2. New items for Work Plan
- **13.3.** Priorities
- **13.4.** Timescales for tasks

14. Any Other Business

- 14.1. Reports from WG members (including non-attendees)
- 14.2. Items to bring to attention of HSSC
- **14.3.** dKart demonstration (Jeppesen)
- 14.4. Presentation (ESRI)
- 14.5. Quality (Chairman)
- 14.6. INF papers:

Docs: CSPCWG7-INF1 CSPCWG7-INF2 CSPCWG7-INF3 CSPCWG7-INF4

Wharfside obstructions Definition of superbuoy Development dredging Red dot areas (Commentary on CSPCWG7-08.11A)

Annex B to CSPCWG7 Record

7th CSPCWG MEETING Simon's Town, South Africa 23-26 November 2010

LIST OF DOCUMENTS

CSPCWG7-01A rev CSPCWG7-01B rev	 List of documents List of meeting participants and WG members
CSPCWG7-02A rev	8 Agenda
CSPCWG7-03A rev	Status of actions from CPSCWG6
CSPCWG7-04.1A CSPCWG7-04.1B CSPCWG7-04.2A CSPCWG7-04.3A EUWG report: please	CSPCWG report to HSSC2 Report from HSSC2 – notes from CSPCWG Chairman Report to CSPCWG7 on DIPWG activities Report to CSPCWG7 on TSMADWG activities refer to HSSC2-05.10A
CSPCWG7-05A	CSPCWG Terms of Reference
CSPCWG7-06A	CSPCWG Procedures
CSPCWG7-07A	Work Plan updated for HSSC2
CSPCWG7-08.3A CSPCWG7-08.4A CSPCWG7-08.6A CSPCWG7-08.7A CSPCWG7-08.8A CSPCWG7-08.8B CSPCWG7-08.9A CSPCWG7-08.10A CSPCWG7-08.11A	Depiction of Surveys on Source Diagrams Historic Wrecks Lighthouses Depiction of reed beds Symbol for Diving Prohibited Symbol for Diving Prohibited – some history Generic Symbol for Lights in Multicoloured charts Depiction of lights on platforms on multicoloured charts (not provided) Depiction of imprecise shoal depth areas
CSPCWG7-09.1A CSPCWG7-09.2A CSPCWG7-09.3A CSPCWG7-09.4A CSPCWG7-09.5A CSPCWG7-09.6A	Need to revise S-4 A400 Colours under bridge lighting Sub-surface operations GPS vulnerability – consequences for charting Enhancements to support ENC / paper chart consistency of presentation Colour Annotation on Paper Charts
CSPCWG7-11.1A CSPCWG7-11.1B CSPCWG7-11.2A CSPCWG7-11.3A	Report of INT1 subWG Report of INT1 subWG Meeting, Cadiz 16-17 June 2010 INT1/S-52 combined publication Restructure of INT1 section K
CSPCWG7-INF1 CSPCWG7-INF2 CSPCWG7-INF3 CSPCWG7-INF4	Wharfside obstructions Definition of superbuoy Development dredging Red dot areas (Commentary on CSPCWG7-08.11A)

7th CSPCWG MEETING Simon's Town, 23-26 November 2010

CSPCWG7 PARTICIPANTS

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7th CSPCWG MEETING Simon's Town, 23-26 November 2010

LIST OF ACTIONS

No	Action	Delegate	Status
1.	Secretary to produce draft report of CSPCWG7 by end of December 2010, for participants to approve.	Sec	
2.	All WG members to make early bids for travel budget to CSPCWG8; advise Chairman if any difficulties.	All WG members	
3.	All WG members to note agenda items for CSPCWG8 throughout the year (and forward to Secretary as they arise).	All WG members	
4.	All WG members to provide any national documents on ENC scheming good practice to Chairman by end February 2011.	All WG members	
5.	Secretary to provide AU and IHB guidance on ENC scheming to all.	Sec	
6.	IHB to include editorial amendments to TOR on website (ensuring special provision for S-4 is maintained).	IHB	
7.	Sec/Chair to draft revisions to procedures for WG approval.	Sec/Chair	
8.	AU to refer 'Artificial Islands' to TSMAD.	AU	
9.	Secretary to draft clarifications to S-4 B-290 and B- 620 for Source and ZOC diagrams.	Sec	
10.	Secretary (in consultation with AU) to draft revised wording on historic wrecks for S-4 and circulate to WG members for approval.	Sec/AU	
11.	INT1 producers to remove the example in N26.	INT1 producers	
12.	Secretary to draft wording for wharfside obstructions, based on CSPCWG7-INF1 and circulate to WG for approval.	Sec	
13.	Secretary (in consultation with AU) to draft wording for disused lighthouses, which brings together the guidance in one suitable place.	Sec/AU	
14.	Secretary to draft new wording for marsh/reed beds during revision of B-300.	Sec	
15.	INT1 producers to include application of C33 to reed beds, and include version over blue tint, in new edition of INT1.	INT1 producers	
16.	Secretary to draft a specification for diving prohibited.	Sec	WP
17.	Secretary to draft clarifications to specifications B- 470 and B-494 for use of solid magenta flare.	Sec	
18.	Secretary to draft some outline guidance, with examples of techniques, for showing possible shoal areas derived from remote sensing methods, in consultation initially with FR, AU and US(NGA).	Sec/FR/AU/ US(NGA)	WP
19.	Secretary to circulate revised proposal on development dredging to full WG for comment.	Sec	

No	Action	Delegate	Status
20.	Secretary to draft revised A-400 and B-128 for circulation.	Sec	
21.	All to advise the WG (via the Secretary) of any further feedback received and the results of any trials conducted into the use of colour on charts.	All WG members	
22.	Secretary (in consultation with AU) to draft some introductory words on charting based on AU's draft and suggest a suitable place in S-4.	Sec/AU	
23.	Secretary to refer the issue of charting orange and amber lights to IALA for advice, explaining the background to the proposals.	Sec	
24.	Chairman to write to IHB, encouraging support for the development of a web-based, ENC/INT chart combined GIS database.	Chairman	
25.	Secretary to add INT1 subWG ROP 8g and list of retired INT1 refs to S-4	Sec	
26.	AU to discuss at TSMAD whether INT1 references should be included as a register in the S-100 Registry and advise CSPCWG.	AU	
27.	DE to provide US (NOAA & NGA) with a digital copy of NE (2011) INT1 as soon as available for purpose of P/ECDIS US Chart 1.	DE	
28.	DE to further develop ideas for reducing INT1 Section K as a paper for CSPCWG8 (or by correspondence before the meeting)	DE	
29.	Secretary to add 'may' include cable names at end points to S-4 as a clarification	Sec	
30.	CA to advise Chairman CSPCWG if the Arctic RHC appoints a RCG or ICCWG coordinator.	CA	

Annex E to CSPCWG7 Record

CSPCWG Work Plan

(updated December 2010, following CSPCWG7)

- Objectives, Tasks and Work Items are pursued in accordance with IHO Work Programme 2008-2012, Programme 3 (Techniques and Standards Coordination and Support):
 Element 3.1 Meetings of Working Groups:
 - Task 3.1.3 Chart Standardization and Paper Chart Working Group
 - Element 3.3 Nautical Cartography. In particular:
 - Task 3.3.1 Nautical publications
 - Task 3.3.5 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 T3.3.1 refers)
- B Revise, develop and maintain Publication S-11 'Catalogue of INT Charts' Part A (IHO T3.3.1 & T3.3.5 refer)
- D Development of new (and revised) symbology (IHO T3.3.1 refers)
- E Maintenance of S-4 supplementary publications INT 1, 2 & 3 (IHO T3.3.1 refers)
- F Revise, develop and maintain S-49 'Recommendations concerning Mariners' Routeing Guides' (IHO T3.3.1 refers)

Task	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	Revise S-4 Part B Section 300	М	WG Letter	2010	2011	0	Sec CSPCWG	S-4 / B-300	Draft in preparation
A.6	Revise S-4 Part B Section 500	L	Completion of A.5	2011	2012	Р	Sec CSPCWG	S-4 / B-500	Start after A.5
A.9	Revise S-4 A-400 & B-128	Н		2011	2011	Р	Sec CSPCWG	S-4	CSPCWG7-Action 20 Consequent on publication B-600
A.10	Remote sensed shoal depth guidance	М		2011	2011	Р	Sec CSPCWG	S-4	CSPCWG7-08.11 & Action 18
B.3	Develop guidelines for preparation & maintenance of small / medium scale ENC schemes.	Н		2009	2011	0	Chair CSPCWG	S-11 / S-65 ?	CHRIS Action 20/24
D.20	Virtual AIS	М	Responses to CL67/10	2009	2011	0	VC & Sec CSPCWG	S-4, INT 1	CL67/2010 refers
D.21	Oscillating directional lights	М	Include in S-4	2009	2011	0	Sec CSPCWG	S-4	Approved by MS via CL56/2010
D.22	Floating wind turbines	М	Include in S-4	2009	2011	0	Sec CSPCWG	S-4, INT 1	Approved by MS via CL56/2010
D.23	'Development' dredged depths	М	Circulate draft to WG	2009	2011	0	Sec CSPCWG	S-4	CSPCWG7–INF3 & Action 19
D.24	Floating waste bin	М	Include in S-4	2009	2011	0	Sec CSPCWG	S-4	Approved by MS via CL56/2010
D.25	Sub-surface obstructions (ODAS)	М	Include in S-4	2009	2011	0	VC & Sec CSPCWG	S-4, INT 1?	Approved by MS via CL56/2010
D.26	Diving prohibited	М	Circulate draft to WG	2011	2011	Р	Sec CSPCWG	S-4, INT 1	CSPCWG7-08.8 & Action 16. Based on SE national symbol
E.1	Maintain official INT 1s	n/a	Next round of revisions			0	FR: O Parvillers	INT 1	French version 2006
			(new editions				ES: A Guitart		Spanish version 2007
			scheduled 2011)				DE: S Spohn		English version 2008
E.4	Symbols for vacant entries in INT 1	L	Review when revision of S-4 completed			Р	Sec CSPCWG	INT 1, S-4 part B	
E.5	Small craft symbols	Н	Include in S-4 & INT1			0	Sec CSPCWG	INT 1, S-4 part B	Approved by MS via CL71/2010
E.6	Maintain INT 3	М		2011	2012	Р	Sec CSPCWG	INT 3	UK to update 2005 edition

CSPCWG Meetings (IHO T3.1.3 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	Finland	CSPCWG 8

Chairman: Peter JONES (UK)Email: peter.jones@ukho.gov.ukVice Chairman: Jeff WOOTTON (AU)Email: jeff.wootton@defence.gov.auSecretary: Andrew HEATH-COLEMAN (UK)Email: andrew.coleman@ukho.gov.uk

7th CSPCWG MEETING Simon's Town, 23-26 November 2010

LIST OF ACRONYMS AND ABBREVIATIONS USED AT CSPCWG7

(that are not given in full in the immediate vicinity in the text)

AtoN	Aid to navigation
AU	Australia
BR	Brazil
CA	Canada
CATZOC	Category of Zone of Confidence
CL	Circular Letter (of IHO)
CSPCWG	Chart Standardization and Paper Chart WG (of HSSC)
DE	Germany
DIPWG	Digital Information Portrayal Working Group (of HSSC)
DK	Denmark
doc	CSPCWG7 document or paper associated with the meeting
ECDIS	Electronic Chart Display and Information System
EEZ	Exclusive Economic Zone
ENC	Electronic Navigational Chart
ES	Spain
ESRI	Environmental Systems Research Institute
EUWG	ENC Updating Working Group
EXPSOU	Exposition of sounding
FI	Finland
FR	France
GIS	Geographic Information System
HDWG	Hydrographic Dictionary Working Group (of HSSC)
НО	Hydrographic Office
HSSC	Hydrographic Standards and Services Committee (of IHO)
IALA	International Association of Marine Aids to Navigation and Lighthouse
	Authorities
ICCWG	International Charting Coordination Working Group
IHB	International Hydrographic Bureau
IHO	International Hydrographic Organization
IMO	International Maritime Organization
INF	Information paper
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
IRCC	Inter-Regional Coordination Committee
ISO	International Organization for Standardization
JP	Japan
KR	Republic of Korea
LED	Light-emitting diode
LtHo	Lighthouse
M-3	Resolutions of the IHO
MRG	Mariners' Routeing Guide
MS	Member State (of IHO)
n/a	Not applicable
NGA	National Geospatial-Intelligence Agency (USA)
NE	New edition
NL	Netherlands
NM	Notice to Mariners
NO	Norway
NOAA	National Oceanic and Atmospheric Administration (USA)
P/ECDIS	Paper Chart/ECDIS
RCG	Regional Charting Group
rev	Revision
RENC	Regional ENC Co-ordination Centre

RHC	Regional Hydrographic Commission
ROP	Rules of procedure
S-4	Chart Specifications of the IHO and Regulations for International (INT)
	Charts
S-32	Hydrographic Dictionary
S-49	Guidance for Mariners' Routeing Guides
S-57	IHO Transfer Standard for Digital Hydrographic Data
S-100	IHO Geospatial Standard for Hydrographic data
S-101	ENC Product Specification (currently draft)
SANHO	South African Navy Hydrographic Office
SE	Sweden
Sec	Secretary (of CSPCWG)
TOR	Terms of reference
TR	Technical Resolution (of the IHO) – see M-3
TSMADWG	Transfer Standard Maintenance and Application Development Working
	Group (of HSSC)
UK	United Kingdom of Great Britain and Northern Ireland
US	United States of America
V-AtoN	Virtual aid to navigation
WG	Working Group (of IHO)
Wk	Wreck
Wiki	A website that allows the easy creation and editing of any number of
	interlinked web pages via a web browser
ZA	South Africa
ZOC	Zone of Confidence