



## CHART STANDARDIZATION & PAPER CHART WORKING GROUP (CSPCWG)

[A Working Group of the Committee on Hydrographic Requirements for Information Systems – CHRIS]

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### CSPCWG Letter: 15/2005

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To CSPCWG Members

Date 1 December 2005

Dear Colleagues,

### **Subject: 2<sup>nd</sup> CSPCWG Meeting (CSPCWG2), Monaco, 19-21 October 2005 - Report and Issues**

The report of a successful meeting of the CSPCWG is attached at Annex A.

There are some specific matters, for which it is appropriate to advise the wider Working Group of the meeting's decisions in order to invite your endorsement or action. They are as follows:

1. CSPCWG2 Action 2 (carried forward from CSPCWG1) requests the supply of any national, internal or published guidance on chart maintenance to help draft an M-4 entry. (This matter was also the subject of the recent IHO CL109/2005.)
2. Australia had helpfully prepared a discussion paper on line symbol hierarchies for paper charts (CSPCWG2-8.1A). Based on this paper, the meeting produced a list of principles to be followed for portraying maritime limits, for inclusion in M-4 sub-section B-439 during the current review of M-4. A copy of the draft principles is at Annex D to the Report. (CSPCWG2 Action 9 refers).
3. The meeting endorsed a suggestion by Finland (CSPCWG2-8.4A) that it would be helpful to include in M-4 (as an Annex to section B-100) some national examples of printing colour values. This may help new chart producers, and those changing their colour schemes or printing processes, to develop colour systems for their own charts. If your office is willing to make its colour values (ie Process CMYK values and/or Pantone Matching System values) available for publication in such an annex, please send them to the Secretary. (CSPCWG2 Action 16 refers).
4. Finland proposed an international symbol for a reporting line (CSPCWG2-8.5A). The meeting agreed that such a limit should be shown by inserting small size reporting point symbols perpendicular to the limit of the area. The limit should normally be a magenta dashed line (general maritime limit – N1.2). However, if the limit coincides with another limit, such as a PSSA (N22) or an international boundary (N41), then the symbols could be placed at intervals along that limit. The symbol currently shown in the German INT1 (published

2005) as Mg, would be inserted in the next revision of INT 1 as M40.2 (existing M40 being renumbered M40.1). (The meeting also agreed that the limit of a VTS area should be charted as N1.2, with the name of the VTS area (eg Helsinki VTS) placed along the inside of the limit. The limit of a VTS area is not necessarily a reporting line. (CSPCWG2 Actions 17 & 18 refer).

5. Modern technology leads to an increasing number of lights flashing in a synchronized or sequential pattern (CSPCWG2-8.6A-D). IALA also recommends that they be used for marking wind farms, which will lead to a further proliferation. The meeting decided that there is a need for a method of advising the mariner of such groupings. It is proposed that such lights be marked by a legend '(sync)'. Although sequential lights are not strictly the same as synchronized, it was decided that an additional legend '(seq)' is unnecessary; as an abbreviation it is less intuitive, and possibly confusing. INT1 would therefore state that '(sync)' means 'synchronized or sequential lights'. Any further detail would have to be given in a chart note, or in Lists of Lights. The location in INT1 is yet to be determined; M-4 B-478.3 would be amended during the current revision. (CSPCWG2 Action 19 refers).
6. The meeting also reviewed the charting of oscillating Port Entry Lights (CSPCWG2-8.7A-B) and concluded that the current practice of labelling sectors as, eg R, Al.WR, W, Al.WG, G is sufficient. Any further details should be provided in the Lists of Lights (column 8). For multi-coloured charts, the Danish method of showing concentric colour bands was recommended, and should be added to the next revision of INT 1. (CSPCWG2 Action 22 refers).
7. The meeting discussed the desirability of showing DGPS transmitting stations on charts (CSPCWG2-8.9A). It was agreed that they may be charted, using the magenta radio circle around the black position circle (or mast symbol, etc, as appropriate) and a magenta legend 'DGPS'. It was agreed that the new symbol will be included in INT 1 at S51; further, I propose that specification M-4B-481.5 is amended accordingly (and the reference to Omega corrections removed). (CSPCWG2 Action 23 refers)
8. Australia proposed symbols to chart boulders, as landmarks and intertidal features (CSPCWG2-8.9A rev 1). The meeting approved the use of the abbreviation *Bo* for Boulders, especially for use in intertidal areas. Definitions of size already exist in some national surveying guidelines. As a sub-class of Rock, it will be included in INT 1 as J9.1. The meeting agreed that isolated boulders should be treated as pinnacle rocks (K11) if intertidal, or as any other landmark or islet if permanently dry. The latter option will be included during the revision of M-4 B-300. (CSPCWG2 Actions 24 & 26 refer).
9. The meeting agreed that it would be useful to include a standard format for quoting geographical positions on charts (CSPCWG2-9.1A), and agreed to adopt the format recommended by ISO. The proposed wording, to replace M-4 B-131, is at Annex B.

IHB have requested that the use of the abbreviation CL for Circular Letter should be reserved for IHO CLs. Accordingly from now, our letters will simply be known as CSPCWG Letters.

I would be grateful if you would consider all the above matters, and send any comments you may have to the Secretary **by 26 January 2006**, using Annex C.

Yours sincerely,



Peter G.B. Jones,  
Chairman

Annex A: Report of 2<sup>nd</sup> CSPCWG meeting, 19-21 October 2005 (separate document).

Annex B: Draft Standard Format for Quoting Geographical Positions on Charts.

Annex C: Response form.

## ANNEX A to CSPCWG Letter 15/2005

### 2nd CSPCWG MEETING Monaco, 19-21 October 2005

#### RECORD

Note: The paragraph numbering is the same as in the agenda (CSPCWG 2-2A rev 3 – attached as Annex A).

#### 1. Welcome, Introductions and Administrative Arrangements

*Docs:* CSPCWG 2-1A rev 2 *List of Documents*  
CSPCWG 2-1B rev 2 *List of meeting participants and WG members*

Vice Admiral Maratos, IHB President, welcomed the members of the CSPCWG on behalf of the IHB, and updated the meeting on the current status of plans for future changes to the IHB Committee structure (Document CSPCWG 2-4C refers).

A list of meeting attendees is at Annex B.

The Chairman outlined his plans for the meeting, thanked members for attending and acknowledged that others could not attend for a variety of valid reasons. He stated that the record of the meeting would focus on main points, proposals and actions; full detailed minutes would not be taken.

**ACTION 1: Secretary** to produce draft report of CSPCWG 2 by end November 2005 in accordance with the Chairman's instructions, for participants to approve.

#### 2. Approval of Agenda

*Docs:* CSPCWG 1-2A rev 3 *Agenda*

The WG approved the agenda. The Chairman outlined planned milestones in progressing through it, and reserved the right to postpone discussion on some lower priority items if the milestones were not achieved.

#### 3. Status of Actions from CSPCWG 1

*Docs:* CSPCWG 2-3A *Status of actions from CSPCWG 1*

Very good progress had been made with the 43 actions from CSPCWG 1 (November 2004). The following remained outstanding, and were reviewed:

**Old Action 5:** Secretary and Australia had arranged a system for advising of changes to M-4 specification numbers. This therefore is now 'Business as Usual' and the action is closed.

**Old Action 15:** No national guidance on chart maintenance had been received by the Secretary. The Chairman advised that the action should remain open until the end of January 2006 and encouraged WG members to provide any such guidance. Germany offered to provide untranslated German guidance. UK advised that its guidance is published in Annual NM 9. New CSPCWG 2 Action 2 refers:

**ACTION 2: WG members** to supply any internal or published guidance on chart maintenance to the Secretary to help draft M-4 entry, by end of January 2006.

**Old Action 29:** IHO Member States had voted not to include Port Security Limits on charts (IHO CLs 22 and 61/2005 refer). Consequently CHRIS 17 advised CSPCWG not to pursue this issue. The Action is therefore closed; however in the interests of cartographers, a brief explanation should be noted for inclusion in M-4 when the relevant section is revised (B-430).

**Old Actions 23, 25, 27, 37 and 38:** All these remaining outstanding actions were brought

forward as agenda items for the current meeting; the existing actions were therefore closed.

#### 4. Relationship with CHRIS

*Docs:*      *CSPCWG 2-4A*              *CSPCWG report to CHRIS 17*  
                 *CSPCWG 2-4B*              *Notes from CHRIS 17*  
                 *CSPCWG 2-4C*              *IHO Committees future organization*

4.1 The Chairman briefed the meeting on the CHRIS 17 conference. He emphasized the need to improve consultation between the relevant CHRIS WGs, especially with C&SMWG. He also asked members to consider whether there are interested non-HO (NGIO) people who could usefully contribute to CSPCWG correspondence or meetings.

4.2 For the submission of reports and proposals to CHRIS and its WGs, M Huet clarified that guidelines are available on the IHO website (under CHRIS) but that the detailed worked example has been removed.

#### 5. Review Terms of Reference

*Docs:*      *CSPCWG 2-5B*              *Working Group's TOR*  
                 *CSPCWG 2-5C*              *Working Group's TOR revised by CHRIS 17*

The WG approved the draft Terms of Reference (TOR), as amended by CHRIS 17 (document CSPCWG 2-5C refers), plus the following amendments:

5.1. Paragraph 3d: the last sentence (allowing the Chairman a casting vote) removed. It was considered that in the event of a tied vote, the WG would have failed to reach a consensus and therefore the matter should be referred to CHRIS.

5.2. A new sub-paragraph 4b added, in line with other WG TORs, and subsequent sub-paragraphs renumbered: 'Accredited Non-Governmental International Organizations observers may participate in CSPCWG activities'.

5.3. The revised TOR is attached as Annex C

**ACTION 3:** M Huet to add revised TOR to IHO website.

#### 6. Review CSPCWG procedures

6.1. No changes were suggested to the WG's existing procedures, which have been working well.

6.2. Document CSPCWG 2-6.1A (Bulletin Board) had not been submitted. The existing CSPCWG page and also the Bulletin Boards associated with other CHRIS WGs on the IHO website were viewed and some improvements were suggested, actions below. Future consideration may include a Bulletin Board to be inserted below the membership section, and to include a 'Frequently Asked Questions' section. The ability to expand M-4 to fill the screen was addressed during a break in the meeting.

**ACTION 4:** M Huet to improve links to M-4 on CSPCWG web page.

**ACTION 5:** M Huet to discuss within IHB whether M-4 & M-11 can be made 'free'.

**ACTION 6:** All WG members to examine CSPCWG web-page, and provide suggestions for improvements to Secretary and IHB by end February 2006.

**ACTION 7:** IHB, FR, CA & ES to discuss resourcing for M-4 translation.

#### 7. CSPCWG work plan

*Docs:*      *CSPCWG 2-4A (Annex B)*      *Work plan attached to CHRIS 17 report.*

7.1. The Secretary briefed the meeting on progress with items on the work plan.

7.2. It was agreed that item A4 (revision of M-4 B-400) should be progressed as sub-

sections, and the number A4 subdivided accordingly on the Work Plan. Each sub-section should be published as soon as approved by Member States.

7.3. Following discussion about the status of INT 1, 2 and 3 (Items E1-3), the following action was agreed:

**ACTION 8: Secretary** to prepare paper for discussion by WG on status of INT 1, 2, 3, for presentation to CHRIS 18 (Sept 2006)

## 8. Chart content

### 8.1. Charting of limits:

#### 8.1.1. Charting of Maritime limits (general) (AU)

*Docs: CSPCWG 2-8.1A Line Symbol Hierarchy discussion paper*

The principles proposed in the above document were reviewed, amended and simplified: summary at Annex D refers. The suggested location for the principles is in B-439, to be included during the present review. The principles to be first circulated to the full WG for endorsement.

**ACTION 9: Secretary** to prepare a CSPCWG Letter on the new 'Principles for Portraying Maritime Limits' as drafted at CSPCWG 2, for further discussion by WG.

#### 8.1.2. Hierarchy of charting International Boundaries and National Limits (DK)

*Docs: CSPCWG 2-8.1B Hierarchy of Charting International boundaries*

After viewing examples of the problems of charting various international boundaries in Danish waters, UK tabled advice from their 'Law of the Sea' officer, which the WG accepted as useful and valid. It was agreed that these principles should be added into B-440, during the review of that sub-section.

**ACTION 10: Secretary** to include UK's brief on Territorial limits as annex to CSPCWG2 Report (see Annex E) and note sub-section B-440 for including during review.

### 8.2. Fairway areas (FI)

<i>Docs</i>	<i>CSPCWG 2-8.2A</i>	<i>Fairway Area definition and symbol</i>
	<i>CSPCWG 2-8.2B</i>	<i>Comments by Chairman C&amp;SMWG</i>
	<i>CSPCWG 2-8.2C</i>	<i>Comments by CSPCWG members</i>

8.2.1. Finland presented their proposal for a new symbol for 'Fairway Areas', based on CSPCWG CL11/2005. Discussion followed, with the aim of agreeing a generic specification that could have wider application than just Baltic Waters.

8.2.2. The WG first considered the application of existing terms and symbols, in particular 'Two-way routes', 'Deep Water routes' and 'Recommended Tracks', comparing the proposal with the definitions provided in IMO publication 'Ships' Routing' (SR) (Part A – General Provisions). None were found to be exactly appropriate, although it was considered that excerpts from the SR definitions could be utilized.

8.2.3. The WG considered that the term 'Fairway Area' was too close to the existing widely used general term 'Fairway' to be defined as something more precise. The term 'Recommended Fairway' was proposed, to fill the gap in M-4 B-432.2 for a recommended route with defined limits.

8.2.4. The WG discussed the use of a grey infill tint to highlight the areas, but noted its use in ENCs to mark areas of no data (CSPCWG 2 8.2B refers). Other tint colours had already been eliminated. It was suggested that the use of a highlighting stipple band along the limits, as in the draft principles listed at Annex D, would be a

more suitable method.

- 8.2.5. Due to limited time, the exact outer limit symbol, colour and method of showing minimum depths and/or maximum draughts in fairways were not considered in depth. Finland was invited to consider the points made in the discussion and develop the proposal further, through correspondence, initially with the Chairman and Secretary. WG members were requested to consider the principles for the use of black and magenta for the presentation of all routeing measures, in preparation for the revision of B-430.

**ACTION 11: Finland** to consider discussion on Fairways and develop proposal further in consultation with Chair and Secretary, for inclusion within revision of B-430 to 439.

**ACTION 12: Secretary** to brief the S-32 WG (via S Shipman at IHB) on the various terms used in Ships' Routeing.

### 8.3. Antarctic symbols (Chair)

*Docs* CSPCWG 2-8.3A *Antarctic symbols*

The Chairman's recommendations in CSPCWG 2-8.3A were endorsed by the WG:

- i) The 'triangle' symbol for a refuge, hut, or unoccupied station was not accepted as an INT symbol, as an abbreviation 'Ref' (INT 1 T14) already exists and can be associated with a building symbol as appropriate. The triangle already has well understood application to triangulation points and cautions. An additional entry should be drafted for refuge buildings under M-4 B-370.8. The triangle symbol currently exists on a few Antarctic charts. Because it does not appear in guides available to the user, each such chart has a note explaining the symbol. It is recommended that M/S should be advised to change the symbol at next New Edition of such charts.
- ii) No further action need be taken for the penguin and flying bird symbols; these are adequately explained in INT 1 and M-4. It would not be possible or appropriate to include all existing and possible future species-specific environmental limits in INT 1.
- iii) Producers of INT 1 may consider whether to alter the ice limit symbol to the simplified version designed by HCA, and include an example with a date legend. M-4 B-449.1 could be amplified to include a reference to the legend. However, as the difference in style is unlikely to lead to confusion, there is no need for urgent action. It was also noted that the 'glacier' symbol (INT 1 C25) may be appropriate in some cases and may also have a date legend added.

**ACTION 13: Secretary** to note M-4 specifications B-370.8 (for refuge) and B-353.8 and B-449.1 (for ice limit date) for inclusion during the on-going revision.

**ACTION 14: Chairman** to advise IHB of outcome (by letter to HCA Secretary - M Huet), including reference to 'Glacier' symbol in advance of HCA (2 November 2005).

**ACTION 15: M Huet** to advise HCA that the WG accepted the recommendations of the CSPCWG Chairman.

### 8.4. Four colour printing / process colours in M-4 (FI)

*Docs* CSPCWG 2-8.4A

The WG agreed that it would be useful to include some examples of CMYK and PMS colour mix percentages used on members' charts as an Annex to M-4 B-100. There would be a need to ensure that all the examples refer to terms already used in M-4.

**ACTION 16: Secretary** to invite WG members to contribute colour mix percentages for use in 'examples annex' in M-4 B-100.

### 8.5. VTS and Reporting Areas (FI)

*Docs CSPCWG 2-8.5A*

- 8.5.1. Finland presented their proposal for a new symbol for a Reporting Line, explaining the need to differentiate reporting lines from reporting points and VTS areas.
- 8.5.2. The WG agreed that existing symbols should be combined to form the appropriate limits as necessary, so that a VTS area limit would be a magenta general maritime limit (N1.2) with upright legend (eg VTS Helsinki). A reporting limit would usually include the general maritime limit (N1.2) with small versions of the reporting point symbol (M40) positioned at intervals perpendicular to the line. The actual limit symbol may be varied if it coincides with another area (eg Territorial Waters, PSSA). An example should be included in INT 1, when approved by Member States. This would be the same as the German national symbol currently shown as Mg and should be numbered M40.2. (M40 to be renumbered M40.1). Specifications should be included at M-4 B-488.1.
- 8.5.3. A CSPCWG Letter would be required to outline the proposal to the full WG for approval in the first instance. TSMAD and C&SMWG should be given opportunity to comment.

**ACTION 17:** Germany to supply dimensions of reporting line symbol to Secretary

**ACTION 18:** Secretary to draft CSPCWG Letter outlining Reporting line proposals (to include explanations of VTS, reporting points, areas), for consideration by full WG, TSMAD and C&SMWG.

#### 8.6. Synchronized and sequential lights (UK)

*Docs CSPCWG 2-8.6A*

*Charting of Synchronised & Sequential lights  
CSPCWG 2-8.6B Point Richards Chan lights*

*sequence diagram*

*CSPCWG 2-8.6C Victorian Notices to Mariners  
CSPCWG 2-8.6D Timed Sequential Flashing*

*Aids to Navigation*

- 8.6.1. The WG noted that the use of synchronized and sequential lighting patterns is increasing. It agreed that it would now be useful to show such cases on the chart (contrary to current specification B-478.3), although any details would have to be given in chart notes or associated publications.
- 8.6.2. The WG decided that the abbreviation 'sync' was reasonably intuitive, but that 'seq' was not. Although sequential lights are not strictly synchronized, it was decided that the qualifying term '(sync)' could be used to cover both cases, provided this is clearly defined in INT 1.
- 8.6.3. M-4 B-478.3 will need amending. The location in INT 1 Section P is yet to be determined.
- 8.6.4. A CSPCWG Letter would be required to outline the proposal to the full WG for approval in the first instance. TSMAD and C&SMWG should be given opportunity to comment. IALA to be informed of WG view, via UK's General Lights Authority (Trinity House) who have already been involved in preliminary discussions.

**ACTION 19:** Secretary to draft CSPCWG Letter to WG members, TSMAD and C&SMWG re proposal for abbreviation '(sync)'. Also to include consideration of location in INT 1.

**ACTION 20:** UK to contact IALA (via Trinity Ho) to advise of proposal (sync)

#### 8.7. PEL Sector Lights with oscillating boundaries (DK)

*Docs* CSPCWG 2-8.7A

*PEL Sector Lights with oscillating boundaries  
CSPCWG 2-8.7B Information on Port Entry*

*Lights (PEL)*

- 8.7.1. The WG considered that no new chart symbols were required to highlight oscillating Port Entry Lights (PEL). The sectors should be labelled, using Al.R or Al.G as appropriate for the variable sectors. It was suggested that such lights should be noted as Oscillating PEL in Remarks column of LL. (This advice should be included in M-12, but there is at present no WG responsible for this publication).
- 8.7.2. An explanation of oscillating PEL, and the methods for depicting them, should be included in M-4 B-475.7.
- 8.7.3. This Danish method for showing the sectors on multi-coloured charts was considered to be appropriate and DE, FR and ES were invited to include the depiction at P30.4 in the next revision.

**ACTION 21: DE, FR and ES** to include coloured version of oscillating light sectors at INT 1 P30.3 (at next revision).

**ACTION 22: Secretary** to note M-4 B-475.7 to include explanation of PEL and methods of depiction for oscillating PEL and to advise TSMAD and C&SMWG.

#### 8.8. Charting of Differential GPS stations (ES)

*Docs* CSPCWG 2-8.8A

*Charting of Differential GPS Stations*

- 8.8.1. The WG discussed the value of charting DGPS stations and it was agreed that DGPS stations may be charted if required, by use of the magenta radio circle with associated upright legend DGPS, ie as German national symbol Sa.
- 8.8.2. It was agreed that INT 1 S51 was the appropriate place for the new symbol. Chairman and Secretary would review the options for the placement of an associated specification in M-4.

**ACTION 23: Secretary** to draft CSPCWG Letter to WG members, TSMAD and C&SMWG, re proposal for DGPS stations, and include suggested placement of specification in M-4.

#### 8.9. Charting of boulders (AU)

*Docs* CSPCWG 2-8.9A rev 1 *Portrayal of Boulders*

- 8.9.1. The WG noted that the abbreviation *Bo* for boulders had been widely used as a seabed quality, but had been omitted from the list at B-425.6 when M-4 was published. It was believed that as survey grabs were unable to pick up boulders, it was not practicable for surveyors to distinguish between boulders and generally rocky underwater areas.
- 8.9.2. The WG decided that it would be useful to renew the use of the abbreviation, especially for use in intertidal areas (where they would be more easily recognized). It will be included in the current revision of B-425.5. as '*Bo (usually used in intertidal areas)*'.
- 8.9.3. The definition for boulders (size greater than 256mm) is still used in UK's surveyors' guidelines and possibly others. It should be included in S-44 in the future, when the existing list from M-4 B-425.6 is transferred. 'Boulders' is a subclass of rock, and therefore the WG decided it should be included as INT 1 J9.1.
- 8.9.4. Isolated, possibly conspicuous, movable and permanently dry boulders should be treated as any other landmark. The legend BOULDER, ROCK or ISLET should be



used as appropriate. Examples and explanations should be included at the revision of B-300. Isolated drying boulders should be charted as drying rock pinnacles (K11).

**ACTION 24: Secretary** to include *Bo* as Nature of seabed in M-4 B-425.5 revision, with '(usually used in intertidal areas)' comment.

**ACTION 25: DE, FR and ES** to add *Bo* as Nature of seabed at INT 1 J9.1 and sections V & W (at next revision).

**ACTION 26: Secretary** to note B-300 for inclusion of solitary, conspicuous boulders, for inclusion at revision.

## 9. M-4

### 9.1. Expressing geographical positions (UK)

*Docs: CSPCWG 2-9.1A                      Geographical positions*

9.1.1. The WG decided that the ISO style for geographical positions should be adopted for M-4. It was agreed that national preferences for the decimal separator should be accepted.

9.1.2. The revised entry for M-4 B-131 is therefore:

Geographical positions quoted on charts and in related publications should be:

- expressed in degrees, minutes and decimals of a minute
- with a single space between the coordinates and no other spaces
- without punctuation
- with a decimal separator according to national practice (comma, decimal point or full stop)
- with leading zeros for single number minutes, but not for degrees
- with the minute tick following the fractional part,

eg:        51°42,03'N 5°07,14'E  
          51°42.03'N 5°07.14'E  
          51°42.03'N 5°07.14'E

Exception:

- Degrees, minutes and seconds may be used if the graduation of the chart concerned is in that format, to avoid confusion.

**ACTION 27: Secretary** to include revised wording for B-131 in draft IHO CL for M/S approval of B-400 to B-429.

### 9.2. Height / Elevation / Vertical length (UK)

*Docs: CSPCWG 2-9.2A                      Elevation, Height & Vertical Length*

9.2.1. The WG noted that IHO CL 34/2005 states that 'Consultation of several English language dictionaries show that "**height**" and "**elevation**" are considered to be synonymous and are both defined as "*above a given level*" or "*above the level of the sea*".'

9.2.2. The WG also accepted that the second paragraph at B-302 had caused some confusion, was inaccurate (as height and elevation is generally synonymous in English) and should therefore be deleted as an editorial correction at the next revision of M-4.

**ACTION 28: Secretary** to remove the 2nd paragraph of B-302 at the next revision of M-4.

### 9.3. Dangerous / Non-dangerous wrecks (Chairman)

*Docs CSPCWG 2-9.3A Wrecks*

9.3.1. The Chairman presented a draft revision of B-422.5 to B-422.7, which took into account concerns and suggestions expressed by France, Spain and Greece during the revision of B-400 to B-429. Specifically, the order was re-arranged to give precedence to the use of the 'estimated safe clearance' wreck symbol (K30), to remove the terms 'dangerous' and 'non-dangerous' in relation to wrecks, and to add advice about re-assessing existing charted wrecks. The draft was welcomed and accepted by the WG.

9.3.2. France remained concerned that reassessing existing charted wrecks would be a long process, and suggested an interim solution, which could be added to the advice at B-422.7, and is attached at Annex F. The WG decided that the Chairman and Secretary should use this suggestion, in consultation with France, to add to the existing draft and incorporate in M-4.

**ACTION 29: Secretary (in consultation with France)** to draft additional wording in B-422.5-.7 (Wrecks) to include FR proposal.

**9.4. B-400 revision progress (Chairman)**

*Docs CSPCWG 2-9.4A B-400 revision round 3 - soft copy for display*

9.4.1. Round 3 of the draft B-400 to B-429 revision, with additional suggestions and comments (mainly from Australia) was reviewed 'on screen' by the WG.

**ACTION 30: Secretary** to include further amendments to B-400-429 as discussed, and circulate to WG as 'Round 4'.

**9.5. Compliance with M-4 (AU)**

*Docs CSPCWG 2.9.5A Not produced*

9.5.1 Although no paper had been prepared, AU, supported by CA, strongly encouraged all to strengthen the wording in M-4 reviews, wherever possible; the document itself is guidance so the obligations so placed on HOs is limited. This notes the closer links now required with digital charting where a more rules-based approach is necessary.

**9.6. Definition for Drying heights (AU)**

*Docs CSPCWG 2.9.6A Not produced*

9.6.1. A definition for drying heights was included in the review of B-400 to B-429 at item 9.4

**9.7. Unsurveyed areas (AU)**

*Docs CSPCWG 2.9.7A Not produced*

9.7.1. The WG agreed that 'unsurveyed areas' should have a separate paragraph in M-4, at B-418.

**9.8. All INT 1 entries to have corresponding entries in M-4 (AU)**

*Docs CSPCWG 2.9.8A Not produced*

This issue was not discussed

**9.9. New sections of M-4 to agree with S-57 (AU)**

*Docs CSPCWG 2.9.9A Not produced*

This issue was not discussed

**10. Progress with M-11 new edition (IHB)**

10.1.M Huet updated the WG on progress with the amalgamation of M-11 Part A with the INT Chart Catalogue (Part B). The need to translate Part A into French had delayed progress; the translation has been completed but not yet checked. Some re-working of the Preface is still required. He expected the work to be completed by end 2005.

**ACTION 31: Secretary and M Huet** to collaborate on revised preface to M-11.

## 11. INT 1 / 2 / 3

### 11.1.INT 1

- 11.1.1. The Chairman expressed thanks to Germany for the preparation of the new edition of INT 1. France stated that a new edition of the French language version is planned for 2006 and Spain stated that a new edition of the Spanish language version is planned for 2007.
- 11.1.2. The WG debated ownership of the copyright of INT 1, whether reformat should be charged for and whether copies of INT 1 could be made available on the IHO web-site (relates to Actions 8).
- 11.1.3. The WG decided that use of new numbers (and sub-numbers) should be approved by the WG.
- 11.1.4. The WG decided that NMs correcting the German, French and Spanish versions of INT 1 should be announced by IHO CL.

**ACTION 32: DE, FR and ES** to consider whether their official language versions of INT 1 can be placed on IHO website.

**ACTION 33: Chairman** to respond to Brazil regarding INT 1 (in consultation with DE)

**ACTION 34: DE, FR, ES** to advise Secretary and IHB of NMs for INT 1, so that IHO CL can be issued.

### 11.2.INT 2

- 11.2.1. NL do not currently have the resources to progress a new edition of INT 2. It is unlikely to be completed in 2006. Following an offer from FR, NL will request assistance for translating the text, at an appropriate time. UK supplied NL with a proof copy of a new edition of the UK version (D6695), with revised text largely derived from the revised M-4 B-200.

### 11.3.INT 3

- 11.3.1. UK have produced a new edition of INT 3 (UK chart D6067), to be published 1 December 2005; this includes new symbols such as PSSA, ASL and Entry Prohibited. Proofs were made available for viewing. Sufficient free copies will be supplied to IHB for distribution of one copy to each IHO Member; further copies can be purchased from UKHO. UK was asked to consider whether a low resolution version could be made available for viewing on the IHO website.

**ACTION 35: Secretary** to enquire whether a low resolution version of INT 3 could be made available for the IHO website.

## 12. Review of Work Plan

- 12.1.The WG reviewed the Work Plan 'on screen'. Items which had been completed before the report to CHRIS 17 were deleted (ie items A2, A7, B1, C1, D1, D2, D4.1 and D4.2). New items were added (A9, D9-12).
- 12.2.Priorities were reviewed and D5, D6 and D12 were included in the High priority category.

12.3. The Chairman and Secretary were asked to update the remaining columns.

**ACTION 36: Secretary** to update Work Plan as discussed and include in report (see Annex G).

### 13. Any Other Business

#### 13.1. Items to bring to the attention of CHRIS:

The status of INT 1, 2 and 3 (Action 8 refers).

#### 13.2. INF papers

13.2.1. The WG thanked Australia for the submission of their draft specification papers (INF 1).

13.2.2. The WG reviewed the IALA paper on the marking of wind farms. It decided that there is no need to amend the existing specifications and symbols. The Chairman was asked to provide a short response to IHB to collate with responses from other WGs as a formal IHB response to IALA. This response should include a recommendation to IALA to seek aviation authorities' views about Aeronautical obstruction lights not being visible below the horizontal plane of the lights.

**ACTION 37: Chairman** to respond to IHB re marking of wind farms, for IHO's formal response to IALA.

**ACTION 38: AU** to raise IALA paper at TSMAD12 (November 2005)

13.3. DK raised a question regarding the presentation on Source Diagrams of unsurveyed areas and areas surveyed by commercial contract using multibeam swathe systems (Greenland waters). The WG provided advice accordingly.

13.4. M Huet asked that the term "Circular Letter" (CL) be reserved for IHO business requiring a change in terminology for CSPCWG correspondence (ie to "CSPCWG Letter"). This was accepted.

13.5. The name of the WG was acknowledged to be unwieldy and that proposals for a change would be welcome. However, the Chairman advised that any alteration should await the implementation of the proposed new IHO technical committee structure.

13.6. Following a query raised at CHRIS17 by Lee Alexander, the Chairman sought advice from the WG regarding the continued use of the term 'ESSA'. The WG advised that the term was indeed of value and should be retained, as appropriate, in documentation.

13.7. AU suggested that there should be a single user document providing a comprehensive comparison of objects, attributes, terminology and symbology between the paper and digital environment as represented in M-4/ INT1 and S52. However, no resource to undertake this work was identified. Whilst differences exist, we may not be providing the best support to the end users of our various products. The WG encouraged members to take any opportunity offered to enhance the education of users of such presentation matters (eg writing articles for professional journals).

13.8. In providing increased visibility to the WG's activities and as a means of seeking maximum involvement of M/S, M Huet requested that an insertion be placed in the next appropriate IHO CL to encourage participation.

**ACTION 39: M Huet** to include a paragraph to increase visibility to the WG's activities and as a means of seeking maximum involvement of M/S in next appropriate IHO CL.

### 14. Date, duration and venue of next meeting

14.1. The WG agreed that a meeting would be very useful, at approximately 12 month intervals, at least while the revision of M-4 Part B continues. It was suggested that ideally early November 2006 would be most suitable for CSPCWG3.

14.2.The WG agreed that 2½ days is an appropriate duration for the meeting.

14.3.No firm decision was taken about the venue, although it was noted that Monaco provided excellent facilities and logistic support.

**ACTION 40: WG members** to consider whether they could offer to host CSPCWG3, and advise Secretary by 26 January 2006.

**Concluding remarks**

Following expressions of thanks to the Chairman and Secretary, and to all participating members, the meeting closed at 1300, Friday 21 October.

Annexes:

- A Agenda
- B Participants in CSPCWG 2
- C Revised Terms of Reference
- D New Principles for Charting Maritime Limits
- E UK brief on Hierarchy of Territorial Limits
- F French proposal on the 'Use of dangerous and non-dangerous wreck symbols'
- G CSPCWG Work Plan (updated at CSPCWG 2)
- H CSPCWG2 Actions
- I CSPCWG 2-1A rev 2: List of Documents

**2nd CSPCWG MEETING  
Monaco, 19-21 November 2005**

**AGENDA**

**Please assemble at 0845, for 0900 start. Lunch break 1230-1400 approximately.  
Close 1700 approximately (Friday 1200).**

**1. Welcome, Introductions and Administrative Arrangements**

*Docs: CSPCWG 2-1A rev 2 List of documents*  
*CSPCWG 2-1B rev 2 List of meeting participants and WG members*

**2. Approval of Agenda**

*Docs: CSPCWG 2-2A rev 3 Agenda*

**3. Status of Actions from CSPCWG 1**

*Docs: CSPCWG 2-3A Status of actions from CSPCWG 1*

**4. Relationship with CHRIS**

*Docs: CSPCWG 2-4A CSPCWG report to CHRIS 17*  
*CSPCWG 2-4B Notes from CHRIS 17*  
*CSPCWG 2-4C IHO Committees future organization*

**5. Review Terms of Reference**

*Docs: CSPCWG 2-5A withdrawn*  
*CSPCWG 2-5B Working Group's TOR*  
*CSPCWG 2-5C Working Group's TOR revised by CHRIS 17*

**6. Review CSPCWG procedures**

**6.1. CSPCWG Bulletin Board (AU)**

*Docs: CSPCWG 2-6.1A Not available*

**7. CSPCWG work plan: Summary of progress**

*Docs: CSPCWG 2-4A (Annex B)*

**8. Chart content:**

**8.1. Charting of limits:**

**8.1.1. Charting of Maritime limits (general) (AU)**

*Docs: CSPCWG 2-8.1A Line Symbol Hierarchy discussion paper*

**8.1.2. Hierarchy of charting International Boundaries and National Limits (DK)**

*Docs: CSPCWG 2-8.1B Hierarchy of Charting International boundaries*

**8.2. Fairway areas (FI)**

*Docs CSPCWG 2-8.2A Fairway Area definition and symbol*  
*CSPCWG 2-8.2B Comments by Chairman C&SMWG*  
*CSPCWG 2-8.2C Comments by CSPCWG members*

**8.3. Antarctic symbols (Chair)**

*Docs CSPCWG 2-8.3A Antarctic symbols*

**8.4. Four colour printing / process colours in M-4 (FI)**

*Docs CSPCWG 2-8.4A*

- 8.5. VTS and Reporting Areas **(FI)**  
Docs CSPCWG 2-8.5A
- 8.6. Synchronized and sequential lights **(UK)**  
Docs CSPCWG 2-8.6A *Charting of Synchronised & Sequential lights*  
CSPCWG 2-8.6B *Point Richards Chan lights sequence diagram*  
CSPCWG 2-8.6C *Victorian Notices to Mariners*  
CSPCWG 2-8.6D *Timed Sequential Flashing Aids to Navigation*
- 8.7. PEL Sector Lights with oscillating boundaries **(DK)**  
Docs CSPCWG 2-8.7A *PEL Sector Lights with oscillating boundaries*  
CSPCWG 2-8.7B *Information on Port Entry Lights (PEL)*
- 8.8. Charting of Differential GPS stations **(ES)**  
Docs CSPCWG 2-8.8A *Charting of Differential GPS Stations*
- 8.9. Charting of boulders **(AU)**  
Docs CSPCWG 2-8.9A rev 1 *Portrayal of Boulders*

## 9. M-4

- 9.1. Expressing geographical positions **(UK)**  
Docs: CSPCWG 2-9.1A *Geographical positions*
- 9.2. Height / Elevation / Vertical length **(UK)**  
Docs CSPCWG 2-9.2A *Elevation, Height & Vertical Length*
- 9.3. Dangerous / Non-dangerous wrecks **(Chairman)**  
Docs CSPCWG 2-9.3A *Wrecks*
- 9.4. B-400 revision progress **(Chairman)**  
Docs CSPCWG 2-9.4A *B-400 revision round 3 - soft copy for display*
- 9.5. Compliance with M-4 **(AU)**  
Docs CSPCWG 2.9.5A *Not available*
- 9.6. Definition for Drying heights **(AU)**  
Docs CSPCWG 2.9.6A *Not available*
- 9.7. Unsurveyed areas **(AU)**  
Docs CSPCWG 2.9.7A *Not available*
- 9.8. All INT 1 entries to have corresponding entries in M-4 **(AU)**  
Docs CSPCWG 2.9.8A *Not available*
- 9.9. New sections of M-4 to agree with S-57 **(AU)**  
Docs CSPCWG 2.9.9A *Not available*

## 10. M-11

- 10.1. Progress with new edition **(IHB)**

## 11. INT 1 / 2 / 3

- 11.1. INT 1
- 11.2. Progress with NE INT 2 **(NL)**
- 11.3. Progress with NE INT 3 **(UK)**

## 12. Review of Work Plan

- 12.1. New items
- 12.2. Priorities
- 12.3. Timescales for tasks

## 13. Any Other Business

- 12.1 Items to bring to attention of CHRIS
- 12.2 INF papers  
Docs: CSPCWG 2- INF1 *Australian specifications (AU)*  
CSPCWG 2- INF2 *Marking of Offshore Wind Farms (IALA)*

**14. Date, duration and venue of next meeting**



Annex B to CSPCWG 2 Record

PARTICIPANTS IN CSPCWG 2

Member State	Name	Email
Australia	Mr Chris ROBERTS	chris.roberts@defence.gov.au
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Denmark	Mrs Hanne BERG	hnb@kms.dk
Finland	Mr Jarmo MAKINEN ( <b>Vice-Chairman</b> )	jarmo.makinen@fma.fi
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Spain	Cdr Angel CHANS	ihmesp@retemail.es
United Kingdom	Mr Peter JONES ( <b>Chairman</b> )	peter.jones@ukho.gov.uk
United Kingdom	Mr Andrew HEATH-COLEMAN ( <b>Secretary</b> )	andrew.coleman@ukho.gov.uk

† Representing Rene Lepage

\* Guest (Non-member of CSPCWG)

**TERMS OF REFERENCE**  
*for the*  
**CHART STANDARDIZATION AND PAPER CHART W.G. (CSPCWG)**

**1. Objectives**

- a. To provide a core of expertise on the basic concepts of charting, noting that whatever physical form the chart may take the fundamental concepts and elements of marine cartography remain the same.
- b. To develop and maintain the IHO publications for which it is responsible.

**2. Authority**

The Working Group (WG) is a subsidiary of CHRIS and its work is subject to CHRIS approval. In the interests of procedural efficiency the WG has authority to reach decisions on the maintenance and updating of the documents for which it is responsible and seek direct endorsement of its proposals by IHO Member States via the IHB. This does not include matters that may have a strategic or financial implication for Member States or other interested stakeholders.

**3. Procedures**

- a. The WG's main tasks are to:
  - i. Keep under continuous review the IHO publication M-4 'Regulations of the IHO for International (INT) Charts and Chart Specifications of the IHO', in order to advise the IHO on their updating, design and format. Note: M-4 incorporates:
    - INT 1 'Symbols, Abbreviations and Terms used on Charts'
    - INT 2 'Borders, Graduation, Grids and Linear Scales'
    - INT 3 'Use of Symbols and Abbreviations, as recommended by the IHO'
  - ii. Advise the IHO on suggestions put forward by Member States to update M-4, in accordance with IHO Specification B-160, with the goal of achieving the maximum possible adherence by Member States to the Regulations and Specifications.
  - iii. Keep under continuous review the IHO publication M-11 Part A 'Guidance for the Preparation and Maintenance of International Chart Schemes' in order to advise the IHO on its updating.
  - iv. Advise the IHB and Regional Hydrographic Commissions, as appropriate, on the work of Regional Charting Groups (RCG) in order to promote the production of large- and medium-scale international (INT) charts. The role of the WG is purely consultative.
  - v. Offer advice based on its experience to RCG and individual Member States, on chart schemes and cartographic work, in order to encourage adherence to IHO charting standards. The role of the WG is purely consultative.
- b. The WG conducts its business mainly by correspondence. It will also plan to hold meetings at least once every two years, dependant on membership support and business needs.

- c. All members shall inform the Chairman in advance of their intention to attend meetings of the WG.
- d. Decisions should generally be made by consensus. If votes are required on issues or to endorse proposals presented to the WG, votes shall be on the basis of one vote per Member State represented.
- e. The WG should identify a work programme for each year, including expected time frame for progressing tasks.
- f. The WG will maintain close liaison with other CHRIS WGs, particularly C&SMWG; and other international and IHO bodies, as appropriate and as instructed by CHRIS.
- g. The WG will report progress to meetings of CHRIS and to Member States through the CHRIS report in the Annual Report of the IHB

#### **4. Composition and Chairmanship**

- a. Membership of the CSPCWG is open to all Member States wishing to be represented. Normally there should be not more than one representative from each Member State.
- b. Accredited Non-Governmental International Organizations observers may participate in CSPCWG activities.
- c. A Chairman and Vice-Chairman will be appointed by election from participant Member States of the WG.
- d. Length of tenure of Chairmanship and Vice-Chairmanship is governed by IHO Technical Resolution T1.1.
- e. The Chairman and Vice-Chairman will decide between themselves the organization of the work entailed in these posts.
- f. The Chairman will monitor membership to ensure that each regional hydrographic commission is invited to be represented on the WG.
- g. A Secretary will be appointed, normally from within the organization of the Chairman of the WG, to ensure the smooth running of business, and to administer consultation and collation of members' views. The Secretary is a member of the WG.

#### **5. Guiding principles**

- a. M-4 Part B provides an internationally-agreed product specification for both national and international (INT) charts at medium- and large-scale. The role of M-4 Part B is twofold, in that it provides:
  - i. an explanation of the general concepts and rationale behind the portrayal of features on charts, much of which is relevant to both digital and paper charts.
  - ii. specific guidance for paper charts, including the use of text and symbology.

**New Principles for Portraying Maritime Limits**

[For inclusion in M-4 revision at B-439]

The following principles apply for portraying maritime limits (including boundaries):

1. For coincident limits, the limit symbol (line) portraying the area which is considered to be potentially the most dangerous to navigation (usually bounding permanent physical obstructions) has priority, with other limits being broken accordingly. Restrictive limits have precedence over non-restrictive limits. Subsequently, the hierarchy is: black, magenta, green, other.
2. The graticule may be broken for limits.
3. All limits should be portrayed in their true location, but may be offset for clarity.
4. A tint band may be added for emphasis or clarity when required.
5. Tint bands must be of the same colour as the limit they emphasize.
6. Where a limit symbol is broken for coincident limits, any supplementary tint band should continue unbroken along the appropriate side of the limit line.
7. Bolder and longer dashes (or T shaped dashes) should be used to emphasize areas associated with routeing measures.
8. Legends may be added within areas as necessary to improve clarity.
9. Legends alongside limits must be placed on the inside of the limit and should not be inverted.
10. The coast line and depth contours must not be broken for any maritime limit that is coincident with it. In such cases, the limit may be offset, or information describing this fact may be included in a chart note or associated nautical publication.
11. For multi-feature limits, see B-439.6.

**UK Brief on Hierarchy of Territorial Limits**

1. The following note provided by UK's 'Law of the Sea' officer (Chris Carleton):
  - a. The International Boundary always takes precedence. Where several different types of maritime zones merge towards a boundary they will do so progressively and the jurisdiction for each of the zones applies up to the boundary until in the ultimate you could reach a boundary that separates internal waters. The hierarchy of jurisdiction is progressive from EEZ – CZ – TS to Internal Waters. In other words Internal Waters jurisdiction will include all measures contained within the other outer zones as well as additional jurisdiction.
2. The following additional points were suggested by UK's CSPCWG officers, and approved by the WG:
  - a. The EEZ is denoted by the legend EEZ along an unbroken line. If it coincides with another boundary, the simple solution is to retain the legend against the International Boundary (probably preceded by the name of the state, as the EEZ limit in this case may be for two countries whose zones are each side of the line.
  - b. Where a fishery limit coincides with another limit, the fish symbol can still be inserted in the line at appropriate intervals.

*Use of dangerous and non-dangerous wreck symbols*

French comments on CSPCWG 2-9.3A

18/10/05

The Chairman's new proposal is a real improvement. But his conclusions show that in fact there remains doubt on the eradication of the inconsistency of the symbol K29. Thus now, the question is how the inconsistencies can be eradicated (and what action to take in re-assessing existing charted wreck). The risk is in the meaning (for users) and the use (for HOs) of K29.

If we suppose that users think that K29 means "non dangerous to any surface vessel" we have two options (not exclusive):

- to advise them clearly that IK 29 does not always mean "non dangerous to any surface vessel",
- or (and)
- to ensure that IK 29 does always mean "non dangerous to any surface vessel".

The Chairman's new proposal recommends the second option, but retains the first option while HO's portfolios have not reached the state of second option. We would all prefer that K29 ideally means "non dangerous to any surface vessel", but it will be impossible to reach and to maintain this state for our portfolios, because:

- how to reassess our charts? We will have to study :
  - the value of the surrounding depths,
  - the different types of ships likely to attend the zone,
  - their possible draughts,
  - the probability of the maximum draught ships attending the zone
- o What a heavy work! ..and all that with no data on the concerned wrecks!
- how maintain our charts, noting that "The use of symbol K29 should be reviewed if the size of vessels capable of navigating in the vicinity changes"? We will have to know all the time:
  - o if the traffic will change (not that the traffic has changed – it will be too late!) in the chart area,
  - o if the draught of vessels will change with time...

So, in the reality, how and when can an HO guarantee that K29 means "non dangerous to any surface vessel" at any time, on all its charts? Reading UKHO NP100, it seems very, very difficult. And, in this way, the goal will be never reached.

We have to find a way to reach the goal (ie, that K 29 always means "non dangerous to any surface vessel").

We agree that we have to reduce the use of K28 and K29. They are very strange symbols: in nautical charts, all information shows facts from which users **deduce** the consequences to their own navigation. K28 and K29 are an exception. With these symbols, **we provide** a final and strong conclusion for navigational consequences instead the users' analyse. And we do that on the most essential characteristic for navigation (ie dangerous/not dangerous to any surface vessel) for objects very badly known.

I propose to add in B-422-7 of the Chairman's new proposal a way to reassess easily charts and to specify the use of K29. This way should reduce the use of K29 to cases where we are sure at all times that K29 always means "non dangerous to any surface vessel".

The recommended way I propose is the following:

Current HO's chart HO's chart in accordance with K28 and K29 new definitions

----- 0 m -----

-----


K28 

K28 

----- depth criterion (for example 20 m) -----

---

K29 

K30 with criterion value <sup>1/2</sup>  
(In this case, size of K30 could be reduced (new symbol?))

-----depth (seabed) from which it's impossible that any wreck with unknown depth can be dangerous at any time (for example 100 m) ---

K29 

K29 

-----200 m -----

-----

K29 

K29 

This solution is "easy" to apply (SHOM applies this method to translate its paper charts in ENC).

It ensures that K29 always means "non dangerous to any surface vessel". The depth criterion can be reviewed if the size of vessels capable of navigating in the vicinity changes but in this case charts don't need to be reassessed urgently for safety reasons (to guarantee K29 meaning). The chart remains safe.

HOs can use their own depth criterion. There is no problem (no risk) for facsimiles and charts compiled from foreign charts, as the criterion is explicitly shown on chart.

Between depth criterion and depth (seabed) from which it's impossible that any wreck with unknown depth can be dangerous at any time, we can consider using the K30 symbol with a reduced size to avoid congestion on chart. This reduced K30 could be a new symbol with the exact definition: "wreck of unknown depth but considered to be covered by more than the indicated depth of water".

**CSPCWG Work Plan (updated at CSPCWG 2 – October 2005)**

- *Tasks and Work Items are pursued in accordance with IHO Work Programme 2003-2007, Programme 3 (Techniques and Standards Support), Element 3.1 Nautical Cartography. In particular, the objectives: 3.1.1.1 the refinement and expansion of specifications and standards; 3.1.2 the development of standards for cartography and geographic information; 3.1.3 the development of the international [paper] chart series, including development of new symbology (3.1.3.1) and the extension of the INT chart scheme (3.1.3.3); task 3.1.1 the revision, development and maintenance of publications, including M-4 (Chart Specifications of the IHO & Regulations of the IHO for INT Charts) and M-11 (Catalogue of INT Charts).*
  - *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, whilst drawing together, wherever possible, common issues of paper/digital charting.*
  - *As a Plan it will and should evolve; accordingly, contributions from WG members and others are welcomed at any time. This version has evolved from that produced for CHRIS 17; it shows progress since that plan, and includes draft plans (next milestones and dates) for continuing the work.*
- A Revise, develop and maintain Publication M-4 “Chart Specifications of the IHO & Regulations of the IHO for INT Charts”, including creation of digital version of M-4 (IHO T3.1.1 refers) - *Revised digital version developed by UK and available on IHO website (April 2005).*
- B Revise, develop and maintain Publication M-11 “Catalogue of INT Charts” (IHO T3.1.1 refers) – *Part A produced by CSPCWG and available on IHO website (April 2005). New format and content for M-11 agreed with IHB.*
- C Review requirement for standardization of International Notices to Mariners (IHO O3.1.3.2 refers) – *Completed. Follow-on work item at A.8.*
- D Development of new symbology (IHO O3.1.3.1 refers).
- E Maintenance of M-4 supplementary publications INT 1, 2 & 3.



Task	Work item	Priority *	Next Milestone	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard	Remarks
A.3	Revise M-4 Part B Section 200	H		2004	2005	C	Sec CSPCWG	M-4 / B-200	Awaiting posting on website
A.4	Revise M-4 Part B Section 400	H	Publish revision of sub-section B-400 to B-429	2005	2006	O	Sec CSPCWG	M-4 / B-400	B-400 divided into sub-sections for manageability.
A.4.1	Sub-section B-400 to B-429	H	CL for round 4	2005	2006	O	Sec CSPCWG	M-4 / B-400	Reviewed at CSPCWG 2
A.4.2	Sub-section B-430 to B-439	H	CL for round 1	2005	2006	O	Sec CSPCWG	M-4 / B-400	Draft in prep with Sec/Chair
A.4.3	Sub-section B-440 to B-469	H	CL for round 1	2006	2006	P	Sec CSPCWG	M-4 / B-400	Not started
A.4.4	Sub-section B-470 to B-499	H	CL for round 1	2006	2006	P	Sec CSPCWG	M-4 / B-400	Not started
A.5	Revise M-4 Part B Section 300	L	Completion of A.4	2006		P	Sec CSPCWG	M-4 / B-300	Start after A.4 completed
A.6	Revise M-4 Part B Section 500	L	Completion of A.5			P	Sec CSPCWG	M-4 / B-500	Start after A.5
A.8	New specification for Chart Maintenance section	L	Receipt of responses to CSPCWG 2, Action 2			P	Sec CSPCWG	M-4	Position in M-4 to be determined. To include NM criteria, print dates, thumb labels etc (B-252 round 2 comments refer)
A.9	Annex to B -100 for colour examples	L	CL to WG requesting examples	2006	2006	P	Sec CSPCWG	M-4	Not started. CSPCWG2 Action 16 refers.
reerD.3	Vessel Traffic Services guidance	L	Review of B-480	2005	2006	C	Sec CSPCWG	M-4/B-435 & 488	Requirement from IHC XVI, to be included in review under A.4. CHRIS18 to note action now transferred to A4.4.
D.5	Review requirement for Fairway symbology	H	FI/Chair/Sec consultation	2004	2006	O	Vice Chairman CSPCWG	M-4, INT 1	New submission required from FI to take account of CSPCWG 2
D.6	Review Wreck depth definitions	H	CL B-400 to B-429 round 4.	2005	2006	O	Sec CSPCWG	M-4, INT 1	Revised wording approved CSPCWG2, plus addition of FR proposal.
D.7	Charted limits: styles, hierarchies, multi-feature lines	H	CL B-430 revision round 1	2005	2006	P	Sec CSPCWG	M-4 B -439	Include principles approved at CSPCWG2 in B -430 revision
D.8	Develop symbols for AIS-equipped AtoN	H	M/S responses to IHO CL 75/05	2005	2005	O	Sec CSPCWG	M-4, INT 1	Responses to IHO CL 75/05 due end Oct 2005

\* H = High, M = Medium, L = Low

\*\* P = Planned, O = Ongoing, C = Completed

D.9	Develop new symbol for synchronized and sequential lights	M	CL to WG, and dialogue with IALA	2005	2006	O	Sec CSPCWG	M-4, INT 1	Include in A.4.4
D.10	DGPS symbol	M	CL to WG	2005	2006	O	Sec CSPCWG	M-4, INT 1	Include in A.4.4
D.11	Reporting line	M	CL to WG	2005	2006	O	Sec CSPCWG	M-4, INT 1	Include in A.4.4
D.12	Boulders	H	CL B-400 to B-429 round 4	2005	2005	O	Sec CSPCWG	M-4, INT 1	Include in A.4.1
E.1	New edition INT 1		French language version published	2003	2007	O	DE: S Spohn FR: Y Le Franc ES: A Chans	INT 1	English language version completed by DE 2005. French version planned for 2006, Spanish version for 2007.
E.2	New edition INT 2	M	Publication B-200	2005	2007	P	NL: M de Graaf	INT 2	
E.3	New edition INT 3	M	Publication by UK	2005	2005	O	Sec CSPCWG	INT 3	NE published 1 Dec 2005 by UK
E.4	Symbols for vacant entries in INT 1	L				P	Sec CSPCWG	INT 1, M-4 part B	
E.5	Small craft symbols	L				P	Sec CSPCWG	INT 1, M-4 part B	

\* H = High, M = Medium, L = Low

\*\* P = Planned, O = Ongoing, C = Completed

### CSPCWG Meetings:

1. Date: 03-05 Nov 2004      Location: IHB Monaco.
2. Date: 19-21 Oct 2005      Location: IHB Monaco.
3. Date: Nov 2006      Location: tbd

Chairman: Peter Jones

Vice Chairman: Jarmo Makinen

Secretary: Andrew Heath-Coleman.

Email: [peter.jones@ukho.gov.uk](mailto:peter.jones@ukho.gov.uk)

Email: [jarmo.makinen@fma.fi](mailto:jarmo.makinen@fma.fi)

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Annex H to CSPCWG 2 Record

**CSPCWG 2 ACTIONS**  
(updated to 30 November 2005)

No	Action	Delegate	Status
1	Produce draft report of CSPCWG 2 by end November 2005 in accordance with the Chairman's instructions, for participants to approve.	Sec	Completed
2	Supply any internal or published guidance on chart maintenance to the Secretary to help draft M-4 entry, by end of January 2006. <i>Action 15 from CSPCWG 1 carried forward until end January 2006</i>	All WG members	
3	Add revised TOR to IHO website.	M Huet	Completed
4	Improve links to M-4 on CSPCWG web page.	M Huet	
5	Discuss within IHB whether M-4 & M-11 can be made 'free'.	M Huet	
6	Examine CSPCWG web-page, and provide suggestions for improvements to Secretary and IHB by end February 2006	All WG members	
7	Discuss resourcing for M-4 translation.	IHB, FR, CA & ES	
8	Prepare paper for discussion by WG on status of INT 1, 2, 3, for presentation to CHRIS 18 (Sept 2006).	Sec, Chair	
9	Prepare a Letter on the 'Principles for Portraying Maritime Limits' as drafted at CSPCWG 2, for further discussion by WG. <i>Included in Annex D to CSPCWG2 report and covering letter to CSPCWG2 Report</i>	Sec, Chair	Completed
10	Include UK's brief on Territorial limits as annex to CSPCWG2 Report and note sub-section B-440 for including during review. <i>See Annex E to CSPCWG2 report</i>	Sec	Completed
11	Consider CSPCWG2 discussion on Fairways and develop proposal further in consultation with Chair and Secretary, for inclusion within revision of B-430 to 439.	FI, Chair, Sec	
12	Brief the S-32 WG (via S Shipman at IHB) on the various terms used in Ships' Routeing. <i>Letter sent to S Shipman 09/11/05</i>	Sec	Completed
13	Note M-4 specifications B-370.8 (for refuge) and B-353.8 and B-449.1 (for ice limit date) for inclusion during the on-going revision.	Sec	Completed
14	Advise IHB of outcome (by letter to HCA Secretary - M Huet), including reference to 'Glacier' symbol in advance of HCA (2 November 2005). <i>Letter sent 26/10/05</i>	Chair	Completed
15	Advise HCA that the WG accepted the recommendations of the CSPCWG Chairman.	M Huet	
16	Invite WG members to contribute colour mix percentages for use in 'examples annex' in M-4 B-100. <i>Included in covering letter to CSPCWG2 Report</i>	Sec	Completed
17	Supply dimensions of reporting line symbol to Secretary. <i>Included in covering letter to CSPCWG2 Report</i>	DE	Completed
18	Draft Letter outlining Reporting line proposals (to include explanations of VTS, reporting points, areas), for consideration by full WG, TSMAD and C&SMWG. <i>Included in covering letter to CSPCWG2 Report</i>	Sec, Chair, FI	Completed

No	Action	Delegate	Status
19	Draft Letter to WG members, TSMAD and C&SMWG re proposal for abbreviation '(sync)'. To include consideration of location in INT 1. <i>Included in covering letter to CSPCWG2 Report</i>	Sec, Chair	Completed
20	Contact IALA (via Trinity Ho) to advise of proposal (sync).	Sec	
21	Include coloured version of oscillating light sectors at INT 1 P30.3 (at next revision).	DE, FR, ES	
22	Note M-4 B-475.7 to include explanation of PEL and methods of depiction for oscillating PEL and to advise TSMAD and C&SMWG. <i>Included in covering letter to CSPCWG2 Report</i>	Sec	Completed
23	Draft Letter to WG members, TSMAD and C&SMWG, re proposal for DGPS stations, to include suggested placement of specification in M-4. <i>Included in covering letter to CSPCWG2 Report</i>	Sec, Chair	Completed
24	Include <i>Bo</i> as Nature of seabed in M-4 B-425.5 revision, with '(usually used in intertidal areas)' comment.	Sec	
25	Add <i>Bo</i> as Nature of seabed at INT 1 J9.1 and sections V and W (at next revision).	DE, FR, ES	
26	Note B-300 for inclusion of solitary, conspicuous boulders, for inclusion at revision. <i>Noted to probably include at B-312.5</i>	Sec	Completed
27	Include revised wording for B-131 in draft IHO CL for M/S approval of B-400 to B-429.	Sec	
28	Remove the 2nd paragraph of B-302 at the next revision of M-4. <i>Removed from M-4 version 3.002</i>	Sec	Completed
29	Draft additional wording in B-422.5-.7 (Wrecks) to include FR proposal.	Sec	
30	Include further amendments to B-400-429 as discussed, and circulate to WG as 'Round 4'.	Sec	
31	Collaborate on revised preface to M-11.	Sec, M Huet	
32	Consider whether DE, FR & ES INT 1 versions can be placed on IHO website.	DE, FR, ES	
33	Respond to Brazil regarding INT 1 (in consultation with DE). <i>Email sent 21/11/05</i>	Chair	Completed
34	NMs for INT 1 – DE, FR, ES to advise Secretary and IHB so CL can be issued.	DE, FR, ES	
35	Enquire whether a low resolution version of INT 3 could be made available for the IHO website.	Sec	
36	Update Work Plan as discussed and include in report (see Annex F).	Sec	Completed
37	Respond to IHB re marking of wind farms, for IHO's formal response to IALA.	Chair	
38	Raise IALA paper at TSMAD12 (November 2005)	AU	
39	Include a paragraph to increase visibility to the WG's activities and as a means of seeking maximum involvement of M/S in next appropriate IHO CL.	M Huet	
40	Consider whether to offer to host CSPCWG3, and advise Secretary by 26/01/06.	All WG members	

**LIST OF DOCUMENTS****CSPCWG 2 papers:**

CSPCWG 2-1A rev 2	<i>List of documents</i>
CSPCWG 2-1B rev 2	<i>List of meeting participants and WG members</i>
CSPCWG 2-2A rev 3	<i>Agenda</i>
CSPCWG 2-3A	<i>Status of Actions from CSPCWG 1</i>
CSPCWG 2-4A	<i>CSPCWG 2 report to CHRIS 17</i>
CSPCWG 2-4B	<i>Notes from CHRIS 17</i>
CSPCWG 2-4C	<i>IHO Committees future organization</i>
CSPCWG 2-5A	<i>TOR with marked up changes from draft - withdrawn (2-5C refers)</i>
CSPCWG 2-5B	<i>Working Group's TOR</i>
CSPCWG 2-5C	<i>Working Group's TOR revised by CHRIS 17</i>
CSPCWG 2-6.1A	<i>Bulletin board – Not produced</i>
CSPCWG 2-8.1A	<i>Line Symbol Hierarchy discussion paper</i>
CSPCWG 2-8.1B	<i>Hierarchy of Charting International boundaries</i>
CSPCWG 2-8.2A	<i>Fairway Area definition and symbol</i>
CSPCWG 2-8.2B	<i>Comments by Chairman C&amp;SMWG</i>
CSPCWG 2-8.2C	<i>Comments by CSPCWG members</i>
CSPCWG 2-8.3A	<i>Antarctic symbols</i>
CSPCWG 2-8.4A	<i>Spot Colour Printing / Process Colours</i>
CSPCWG 2-8.5A	<i>International Reporting Line Symbol (VTS and Reporting Areas)</i>
CSPCWG 2-8.6A	<i>Charting of Synchronized and sequential lights</i>
CSPCWG 2-8.6B	<i>Point Richards Channel light sequence diagram</i>
CSPCWG 2-8.6C	<i>Victorian Notice to Mariners</i>
CSPCWG 2-8.6D	<i>Timed Sequential Flashing Aids to Navigation</i>
CSPCWG 2-8.7A	<i>PEL Sector Lights with oscillating boundaries</i>
CSPCWG 2-8.7B	<i>Information on Port Entry Lights (PEL)</i>
CSPCWG 2-8.8A	<i>Charting of Differential GPS Stations</i>
CSPCWG 2-8.9A rev1	<i>Portrayal of Boulders</i>
CSPCWG 2-9.1A	<i>Geographical positions</i>
CSPCWG 2-9.2A	<i>Use of terms Elevation, Height &amp; Vertical Length</i>
CSPCWG 2-9.3A	<i>Wrecks</i>
CSPCWG 2-9.4A	<i>M-4 B-400 to B429 revision round 3 – soft copy displayed</i>
CSPCWG 2-9.5A	<i>Compliance with M-4 - Not produced</i>
CSPCWG 2-9.6A	<i>Definition for Drying heights - Not produced</i>
CSPCWG 2-9.7A	<i>Unsurveyed areas - Not produced</i>
CSPCWG 2-9.8A	<i>All INT 1 entries to have corresponding entries in M-4 - Not produced</i>
CSPCWG 2-9.9A	<i>New sections of M-4 to agree with S-57 - Not produced</i>
CSPCWG 2-INF 1	<i>Australian specifications</i>
CSPCWG 2-INF 2	<i>The Marking of Offshore Wind Farms</i>

**Draft Standard Format for Quoting Geographical Positions on Charts**

Entry for M-4 B-131 to be replaced by:

Geographical positions quoted on charts and in related publications should be:

- expressed in degrees, minutes and decimals of a minute
- with a single space between the coordinates and no other spaces
- without punctuation
- with a decimal separator according to national practice (comma, decimal point or full stop)
- with leading zeros for single number minutes, but not for degrees
- with the minute tick following the fractional part

eg:     51°42,03'N 5°07,14'E

          51°42·03'N 5°07·14'E

          51°42.03'N 5°07.14'E

Exception:

- Degrees, minutes and seconds may be used if the graduation of the chart concerned is in that format, to avoid confusion.

**ANNEX C to CSPCWG Letter 15/2005**

**RESPONSE FORM**

(Please return to CSPCWG Secretary by 26 January 2006)

[andrew.coleman@ukho.gov.uk](mailto:andrew.coleman@ukho.gov.uk)

1. Please use the table below to record your response

Paragraph Number		Yes	No
1	Do you have any guidance on chart maintenance which you can make available for consideration in the development of a future section of M-4? (If yes, please supply to Secretary by 26 January 2006).		
2a	Do you agree with the New Principles for Portraying Maritime Limit at Annex D to the CSPCWG2 Report?		
2b	Do you agree with the suggested location in M-4 (B-439)?		
3a	Do you agree that including examples of colour values in an Annex to M-4 B-100 is a good idea?		
3b	Is your office willing to make its colour values available for publication in such an annex? (If yes, please supply to Secretary).		
4	Do you agree to approve Germany's national symbol for a Reporting line (Mg) as an INT symbol? Dimensions of German symbol: circle diameter 1.85mm, triangle base 1.15mm, height 1.50 mm.		
5a	Do you agree to the use of '(sync)' as an INT abbreviation to mean 'synchronized or sequential lights'?		
5b	If yes, where do you suggest it should be located in INT1? (eg P15.2, P56 or P66 + V & W)		
6	Do you agree that no special chart symbol is required for charting oscillating Port Entry Lights?		
7a	Do you agree that a radio circle with 'DGPS' legend should be approved as a symbol for use?		
7b	Do you agree with the suggested location in INT 1 (S51)?		
7c	Do you agree with the suggested location in M-4 (B-481.5)?		
8	Do you agree to the use of the abbreviation <i>Bo</i> to be used for Boulders in intertidal areas?		
9	Do you agree to standardize the format for quoting geographical positions on charts as Annex B?		

2. Any further comments:

Name.....

Member State.....