

CSMWG REPLY TO CSPCWG LETTER 15/2005 ON NEW SYMBOLS

Where appropriate, CSMWG responses to your form C are given below. Further comments follow on the next page.

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). (See S-52 reference in attachment)	X	
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.	X	
5a	Do you agree to the use of '(sync)' as an INT abbreviation to mean 'synchronized or sequential lights'?	X	
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?	X	
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?	X	
9	Do you agree to standardize the format for quoting geographical positions on charts as Annex B?		

FURTHER COMMENTS

1. CHART MAINTENANCE. This presumably refers either to the maintenance of the database or to issuing chart corrections, neither of which are a responsibility of the CSMWG.

2. LINE SYMBOL PRIORITIES. The ECDIS drawing engine controls the sequence in which objects are drawn on the display by the 'Display Priority', given for every object in its line of the look-up tables, section 11 of the S-52 Presentation Library (PresLib). Coincident point and area symbols are overdrawn, but to overdraw lines would cause an unreadable mess and so only the line with the highest priority is drawn.

The line priority principles proposed by the CSPCWG in Annex D to the minutes of the meeting describe solutions (tint bands, legends etc.) which are too complex for an operational navigation aid such as ECDIS, both from the processing point of view and considering their potential to confuse the mariner.

3. COLOURS. The colours to be used on ECDIS have been developed in cooperation with Netherlands and Canadian Perception Institutes over the past 14 years, aiming to give optimum clarity on the day and night chart displays. They are specified in CIE x,y,L coordinates and discussed in sections 4 of both the S-52 Colour & Symbol Specifications and the PresLib.

The details of the colour specifications used will presumably differ widely between paper and electronic displays, but the overall colour schemes should be as close as possible, particularly because raster data may be mixed with vector data on the ECDIS display. This is not always the case at present, the outstanding difference being the use of green for environmental features on the paper chart, whereas green has been used for the radar overlay on ECDIS since 1990 (because it was not then used on paper charts and mariners were accustomed to seeing green radar displays on the bridge).

4. REPORTING LINE. For a reporting line ECDIS uses a complex linestyle consisting of a dashed magenta line with the reporting point symbol embedded, as CPSCWG LETTER 15/2005 letter suggests. However ECDIS does have the problem that if the reporting line coincides with a PSSA or international boundary only the reporting point line will be drawn and the other lines will be suppressed because they are of lower priority (from a navigation safety point of view). The mariner will have to make a cursor click enquiry in the area to find out what other conditions might apply.

For ECDIS, CSMWG would probably not want to create new hybrid complex linestyles by embedding a reporting point symbol in, for example, the boundary line for a PSSA to meet this requirement, for several reasons including:

- i) this would require a new 'Conditional Symbology Procedure' (CSP) - in effect a real-time chart compilation procedure - to determine whether such a line was required and describe how to draw it. A global condition of S-52 is to limit the use of CSPs to speed draw time and reduce the danger of software breakdown.
- ii) most mariners recognise only the most commonly used symbols, and introducing unfamiliar symbolisation tends to cause confusion, which is the one thing that a real-time ship-handling system like ECDIS must avoid.

5. SEQUENTIAL LIGHTS. The near-infinite variations in light characteristics, coupled with IALA's apparently ready acquiescence, have given ECDIS presentation trouble from

the start (and may perhaps also confuse mariners?). As with any other new feature CSMWG will wait until TSMAD introduce a new attribute value for Light Characteristic and then our Group will revise the extensive CSP for object class 'Lights' to include the abbreviation 'sync'.

6. OSCILLATING LIGHTS. ECDIS uses coloured arcs to symbolise sector lights as in INT1 P41.2 (but without the dashes along the sector radial). For 'Al.WR' or 'Al.WG' we show only a red or a green sector.

Please send CSMWG a copy of the explanation of "Oscillating Port Entry Lights (PEL)" referred to in section 8.7.2 of the minutes of the 2nd. CSPCWG meeting to check whether the existing solution within S-52 is sufficient for this new case.

7. DGPS TRANSMITTER. Symbolisation rules for such objects in place have not identified the purpose of radio stations up to now (because non-essential text causes clutter). But since DGPS accuracy depends on the distance from the DGPS monitor (presumably located at or near the transmitter) CSMWG will consider a revision to add a label 'DGPS' on ECDIS.

8. BOULDERS. S-52 is using a more prominent version of the asterisk symbol "*" than is shown at the right of INT1 K11 for a rock or boulder (object class UWTROC) in the intertidal.

However, for credibility a corresponding change in the definition would be appropriate. To be conspicuous, hence a landmark, a boulder would have to be much bigger than the geological definition of "with diameter 256mm or larger" quoted in CSPCWG 8.9.3. and in S-57. Perhaps one could say "A rounded stone often much larger than the minimum 0.25m in diameter". (This avoids using the word "rock" which is elsewhere defined as "an integral part of the lithosphere".)

9. REPORTING POSITIONS. This is not a responsibility of the CSMWG.

Rostock, 10. February 2006

Mathias Jonas
Chair of CSMWG