

**IHO CSMWG-18
Cape Town, South Africa, 7-9 May 2008
[including a combined TSMAD-CSMWG meeting on 7 May]**

NO-SYMBOL OBJECTS

M. Eaton, 18 February '08

This note is to suggest symbols for objects not at present symbolized on ECDIS but identified as needing symbolisation by TSMAD 15 in Jan. '08

If it is finally decided between TSMAD and CSMWG in May '08 to follow the opinions recorded by Wootton following TSMAD15, changes to the PresLib will be needed. The following suggestions are not necessarily intended as a final solution for these changes but as a help in deciding them.

General principles followed

- The prominence of any symbol should be in proportion to the importance of the object to the Safety of Navigation
- Use existing ECDIS symbols if possible. (We should minimise the number of symbols on ECDIS: for example, one survey showed most mariners recognise less than 50% of paper chart symbols).
- If there is no ECDIS symbol, use the paper chart symbol if it is appropriate for the different medium and purpose.
- Invent a new symbol only if essential, and make sure it is self-evident and not over-prominent.

Suggested new symbolisation

CHKPNT (point and area.) Unfortunately the symbol SY(POSGEN04) - survey mark which is at present used for a CHPNT as an area and is not specific enough to identify a checkpoint and so we need a new symbol.

Develop new symbol SY(CHKPNT01): copy INT 1 symbol F61, with a 5mm diameter circular symbol using colour LANDF, line weight 0.3 mm. To be similar to, for example, SY(BUIREL04) in size and general appearance.

Details for the look-up table: display priority 4; radar "S" (supressed); IMO category "Other"; viewing group "32410".

Note: As well as adding CHPNT to the point look-up tables the current symbolisation of CHPNT as an area should be changed from SY(POSGEN04) to this new SY(CHKPNT01) in both the area look-up tables

CURENT (point, no orient attribute). Use existing symbol SY(CURDEF01) "Current or tidal stream whose direction is not known". (This object must have been symbolized earlier at some stage)

The display priority etc. should be the same as for a current of known direction.

GRIDRN (point and area). There is no appropriate ECDIS symbol for a gridiron and the INT 1 symbol F 24 appears to be intended as an area pattern. It is too large to be used for a point

symbol and would have to be oriented in the direction of the shoreline, thus needing a conditional symbology procedure

If the combined May 2008 meeting decides that gridirons should be symbolized I suggest we would have to develop a new symbol SY(GRIDRN01) for point and area gridirons consisting of a 4mm square with two vertical and two horizontal gridlines. All lines 0.3 mm, colour CHGRD. (These dimensions are based on looking at current SY(FSHFAC04))

Display priority 5; radar "S" (suppressed); IMO category "Other".; viewing group "32460".

Note: The current symbolisation of GRIDRN as an area should be changed to show this new symbol SY(GRIDRN01) added as a centred symbol in both area tables.

PRDARE (point). In the latest version of the PresLib in my files (ed. 3.3 of March 2004) all of PRDARE CATPRA 1, 5, 6, 8, 9 are in fact already symbolized as points, as I think they should be (I take back my earlier comment.) If it turns out that they are not symbolized as points, then the area centred symbols should be used as point symbols without boundary lines around them. The display priorities etc. will be the same as for area PRDAREs.

SMCFAC (point). Use SY(SMCFAC02) as a point symbol, with the same display priorities etc. as for an area SMCFAC

VEGATN (point). For point VEGATN CATVEG 7 and 21 (mangrove) symbolize with SY(TREPNT05) (mangrove). For point VEGATN CATVEG 3, 4, 5, 6, and 13-20 and 22 (bushes and trees) symbolize with SY(TREPNT04) (trees in general). This looks after symbolizing single trees, which I believe is the concern of TSMAD.

All VEGATN objects which are trees are at present also symbolized as areas, but grass etc (VEGATN CATVEG 1, 10, 11, 12) are not at present symbolized either as points or areas.

I suggest we should not symbolise VEGATN CATVEG 1, 10, 11, and 12 (grass, mixed crops, reeds and moss) either as points or as areas.

To avoid symbolizing VEGATN CATVEG 1, 10, 11 and 12 as points we should leave the existing first entry for VEGATN in the current point look-up tables unchanged and not list CATVEG 1, 10, 11, and 12 at all when we add all the tree VEGATN objects. Only the VEGATN objects which are specifically listed after the first line entry are symbolised

If however people feel strongly about distinguishing areas of farmed land (CATVEG1 and CATVEG10, grass and mixed crops) from reeds, moss (CATVEG 11 and 12) and land areas with no VEGATN coverage, I suggest we develop a new area pattern AP(FRMLND01) of short vertical lines of colour LANDF on the general LANDA colour fill. The pattern should be very subdued and could look something like pattern AP(NODATA03) rotated 90 degrees and using colour LANDF in place of CHGRD.

I don't think anyone will want a point symbol for farmed land.

The display priorities etc for VEGATN objects as points will be the same as for VEGATN objects as areas.

Technical Note

- **Any new symbols** should be tested on a chart background and modified as necessary to fit the requirements.
- They then have to be added to the Symbol Library Addendum
- They also have to be added to the ECDIS Chart 1 and to the lists and plots of symbols in PresLib section 15

- **All newly symbolized objects** will have to be added to the look-up tables for the appropriate primitive. In the case of **CHKPNT** and **GRIDRN** the existing symbolization as an area should also be changed to use the new symbols in order to maintain consistency with symbolization as a point.