

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

Paper for Consideration by CSPCWG
Light Vessels

Submitted by:	UK
Executive Summary:	Although the 'new' light vessel symbol proposed following CSPCWG9 was approved by responses to WG Letter 06/13, some further questions arise.
Related Documents:	CSPCWG9-08.2A; CSPCWG9 report; CSPCWG Letters 06 & 11/2013; INT1subWG report (CSPCWG10-11.1A)
Related Projects:	Next editions of INT1

Introduction / Background.

1. CSPCWG9 agreed that there should be a separate symbol for depicting light vessels (or lightships), distinct from the 'LANBY' (Large Automatic Navigational BuoY) and minor light float symbols. The old distinction between 'manned light vessels' and 'unmanned major light floats' is no longer relevant; the visual appearance of the vessel, very different from a large buoy, is considered more significant.
2. The symbol should be:
 - Based on a slightly simplified version of the obsolescent P6 (3 masts with 'X' or light star on centre mast, no 'shading' to stern and bow, flare from position circle).
 - Located in section Q, where most mariners would expect to find the symbol, rather than P
 - Placed at Q32 (INT1), with the sub-title changed to 'Light floats and Light vessels'.
3. Although the symbol was agreed (and its location in Section Q of INT1), questions have been raised since:
 - Some have expressed doubts that the symbol is sufficiently more prominent than the minor light float symbol;
 - One respondent to Letter 06/13 apparently thought that the 'X' on the centre mast was a topmark;
 - Another correspondent suggested that colour should be added, in case it was significant as an IALA mark (and the same could apply therefore to a topmark);
 - The INT1 subWG expressed the view that P6 would be a better location in INT1 (to complement the existing LANBY symbol) and also that the symbol should be reviewed.

Analysis / Discussion.

4. Symbol

4.1 The 'new' symbol  that was agreed is:

- A slightly revised obsolete symbol;

- The same size as the minor light float symbol. The only visual differences are the superstructure (including a real topmark on the light float) and the filled-in body in the case of a green lateral float;
- Not more prominent; indeed, it may be less;
- The 'X' (or small star in FR's INT1) on the mast is a left-over from when it represented the light star (in common with obsolete versions of buoys and light floats) and the flare used to be attached to the 'X'. It now serves no function other than to help distinguish it from the light float symbol and, although slightly different, could be mistaken for an IALA special topmark;
- But without the 'X' the light vessel symbol would look very bare and certainly be less prominent.

4.2 While most floating lights are on buoys and represented by a flare attached to the position circle of the profile buoy (or minor light float) symbol, most other lights are shown as 'plan' light star symbols. Therefore, one option could be that a major floating light should be treated similarly, eg by a light star superimposed on a 'plan' symbol, similar to L17. This would:

- Be distinctive from the minor light float symbol;
- However, it may be less intuitive to the mariner;
- Possibly it should also have an 'all-round light' coloured circle on multicoloured charts (although that is contrary to current specification B-470.4a.v 2nd bullet);
- Such a symbol would not lend itself to addition of colour abbreviation or topmarks.

4.3 A simpler option would be to use a larger and bolder version of Q30. (Note: Light vessels are usually at sea, whereas light floats usually act as light buoys in rivers where currents may be a problem for normal buoys.):

- This could mean using essentially the same symbol: a large version meaning light vessel and a small version (the current Q30) meaning light float;
- It could also have an 'all-round light' coloured circle on multicoloured charts (although that is contrary to current specification B-470.4a.v 2nd bullet);
- A higher superstructure could be developed (perhaps with a 'lantern' or lattice – Q111 - shape in place of the 'X' to look more like:



4.4 It would, of course, be possible to add such a picture to the chart (in accordance with B-390.1), but could not be mandated, so a distinctive symbol is necessary.

4.5 A further possibility would be to use a standard light star at the top of the tower, but this could cause confusion about the position of the vessel (which is always the base of a profile symbol).

5. IALA - MBS

5.1 A question to resolve is whether light vessels are ever part of the IALA Maritime Buoyage System (MBS), and therefore whether the colour of the hull structure (and superstructure) is relevant and whether a topmark would ever be carried.

5.2 'Major floating aids' are described in part 8 'Other Marks' of the IALA publication '*IALA-AISM Maritime Buoyage System and other Aids to Navigation*' Edition 2 2010, along with other non-MBS marks such as leading lights, sector lights, lighthouses, beacons and auxiliary marks. The shape is described as 'Vessel or buoy shape with light tower' and the colour as 'As appropriate – predominantly red'. We have confirmed that all light vessels in UK waters are 'painted IALA standard red' and not part of MBS (and so carry no IALA topmark). However, potentially they could be other colours. It is not known whether any form part of the MBS and carry IALA topmarks.

6. INT1

P6 is used for 'major floating light' but at present includes only the LANBY symbol (for a feature which is probably no longer in existence), the very symbol which is considered not suitable for a light vessel (see CSPCWG9-08.2A). To leave this symbol alone representing major floating lights seems odd, while locating the new symbol alongside minor light floats possibly diminishes any distinction. Section Q deals more with structures than lights; while the reason for choosing a new symbol is to do with structure, the main emphasis remains the importance of the light exhibited from that structure.

Conclusions.

A more distinctive symbol is required which should not include the confusing cross on the central mast. It could be a plan or profile symbol.

As a major light it should be referenced to INT1 Section P rather than Q.

Recommendations.

Design a new symbol, either:

- A profile symbol to reflect actual shape, with light tower/lantern shape amidships. This could be based on a larger version of existing Q30;
- A plan symbol comprising a standard light star on a boat shape (as L17).

Agree whether the light should be:

- Highlighted by appropriately coloured flare; or
- All-round circle.

Make no provision for colour or topmark. If a 'light vessel' is used as a MBS mark, the light float symbol (Q30) should be used.

Justification and Impacts.

Some changes to S-4 and INT1, depending on decisions about symbol selected.

Action required of CSPCWG.

The CSPCWG is invited to consider the options above and advise the Secretary on how to progress the action.