NCWG2-09.2A

2nd NCWG MEETING IHB, Monaco 26-28 April 2016

Paper for Consideration by NCWG

Hanging light sectors

Submitted by: Executive Summary:	UK In complex areas or where a sector limit cannot be shown, the coloured sectors are sometimes indicated by short arcs either side of the white sector. There is no reference to this device in S-4
Related Documents:	None
Related Projects:	None

Introduction / Background:

1. In complex areas or where a sector limit cannot be shown, the coloured sectors are sometimes indicated by short coloured or dashed arcs either side of the white sector. There is no reference to this device in S-4 or example in INT1.

Analysis / Discussion:

2. Some examples are shown here:





- 3. There is no guidance on this practice in S-4 or example in INT1. It is suggested that an additional comment and example(s) at either B-475.1 or B-475.5 would be useful:
 - **B-475.1 Symbols for sector limits and sector arcs.** Limits of sectors and arcs should be charted as fine dashed lines (about 10 dashes to 10mm), except for fairway sector limits, see B-475.5. Small arrowheads should be inserted at the ends of the sector arcs, for example:

FI.WRG.4s21m18-12MGWR **P40.1**

Sector limits should cover the area where they are useful to mariners. They must not extend beyond the nominal range of a light. Very short sector arcs may be omitted.

Sometimes, for example in complex areas or where the outer limits of the bordering sectors fall outside the navigational area of the chart, the outer sectors can be indicated by a short section of arc, either side of the sector to be followed, for example:



B-475.5 Sector lights marking fairways

Sector limits and sector arcs: where a narrow light sector marks a fairway between off-lying dangers, the sector limits marking the edges of the fairway should be long enough to show the extent of the channel, see B-432.1.

Sometimes, for example in complex areas or where the outer limits of the bordering sectors fall outside the navigational area of the chart, the outer sectors can be indicated by a short section of arc, either side of the sector to be followed, for example:



The fairway may include a number of 'legs' demarcated by white sectors from more than one light. In such cases, on charts where the sector limits are normally shown by fine dashed lines, those lengths of the sector limits which mark the sides of the fairway should be shown by fine continuous lines, in order to highlight the channel. Sector limits may also be omitted where they cross the fairway, for example:

- 4. If the first location is chosen, it may be better to show an example with dashed arcs, rather than coloured arcs (as coloured arcs are not shown until later in B-475.1). The second location would cover most cases, but it is possible that this situation could apply to sector lights which do not mark fairways.
- 5. As the meaning of this should be intuitive to the chart user, it does not seem necessary to add an example to INT1.

Conclusion:

6. A brief clarification in S-4 on this technique may be useful.

Recommendation:

7. Add one of the above clarifications to S-4.

Justification and Impacts:

8. To cover an omission in the existing guidance.

Action required of NCWG:

- 9. The NCWG is invited to:
 - consider the above recommendation and advise whether it should be included in S-4 as a clarification.

Or:

- advise which of the suggested placements in S-4 is appropriate.
- confirm that no action is necessary in INT1.