

**6th CSPCWG MEETING
IHB, Monaco, 1-3 December 2009**

Paper for Consideration by CSPCWG

Size of chart symbols

Submitted by:	CSPCWG Secretary
Executive Summary:	Secretary was recently asked whether S-4 permits varying size of rock symbols in complex areas.
Related Documents:	S-4, INT1.
Related Projects:	None

Introduction / Background

CSPCWG Secretary was recently asked (by Spain) whether S-4 permits varying size of rock symbols (K11-13) in complex areas.

Analysis / Discussion

CSPCWG agreed that when designing new symbols it would specify dimensions as exactly as possible for standardization (and for the benefit of software manufacturers). However, the rock symbols have been used since before any of us can remember, with no specified size. A cross is a very simple symbol, easily recognizable whatever the size. Different nations have chosen their own preferred size, or sizes.

There is nothing specifically about varying the size of these symbols in S-4. However, we do allow a reduction of K30 at B-422.7c and varying the sizes of other symbols (see B-326.2, B-431.3, B-435.2, B-447.6, B-461.5, B-470.5), so the precedent is well established. There seems no reason why the same principle should not apply to K11-13. This principle can be inferred from the examples listed above. However it is not explicitly stated.

The nature of the hydrography can be an influence, where the degree of detailed content must be balanced with clarity at the portrayed scale. One other possibility in rock-strewn areas is to surround by danger line and insert a selection of rock symbols, sufficient to indicate a rock-strewn area.

Variation in size can be a useful flexibility to enable clarity, but there needs to be limitations, to avoid encouraging use of very small symbols to try to depict areas which would benefit from larger scale charting. However, a number of further questions arise, eg:

- should there be a minimum reduction factor?
- Should there be a list of which specific symbols may be reduced in size? (Clearly, the more complex the symbol, the less beneficial the reduction will be).
- is it also acceptable to reduce the size of soundings?

Enlarging symbols which identify area limits is already permitted in specified cases.

Conclusions

Cartographers would find specific guidance on varying the size of certain, possibly specified, chart symbols useful.

Recommendations

It is suggested that some general guidance should be added to B-125, eg:

‘Most symbols, especially symbols marking a fixed point, should be produced at a consistent size, whatever the placement. For a few symbols, there are two recognized sizes, intended to differentiate a character such as prominence (eg B32 – see B-340.5) or importance (eg P1 – see B-470.5).

Symbol sizes [is it necessary to specify which?] may also be varied at the discretion of the cartographer by:

- reducing the size [by not more than 30%?] where numerous symbols are charted in complex areas or the space available is particularly limited (eg K11-13 – see B-421.2-5, K48 – see B-447.6)
- enlarging the size of a symbol which identifies the purpose of an area, when centralized in an area which is extensive at chart scale (eg M16 – see B-435.2, N12.1 – see B-431.3).’

Justification and Impacts

Justification: clarification on cartographic practice

Impact: small change to S-4. Would it need Member States approval?

Action required of CSPCWG

The CSPCWG is invited to:

- a. discuss the issues surrounding symbol sizes
- b. endorse the need for clarification on when symbol sizes may be varied
- b. agree suitable wording and placement in S-4
- c. consider whether any action required for INT1