

**5th CSPCWG MEETING
Sydney, 18-21 November 2008**

Paper for Consideration by CSPCWG

New complementary option for symbolising Unsurveyed and Inadequately Surveyed Areas

<i>Submitted by:</i>	Denmark (KMS), Finland (FMA), Norway (NHS) and Sweden (SMA)
<i>Executive Summary:</i>	The mentioned Nordic HOs would like to bring forward for discussion and further action by the CSPCWG a proposal to amend the current sections B-417.6 and B-418.1. of the International Specifications (M-4) in order to allow a new option for symbolising Inadequately surveyed areas and Unsurveyed areas.
<i>Related Documents:</i>	INT 1
<i>Related Projects:</i>	None known

Introduction / Background

In Sweden a blue and white striped raster has been used for several years to symbolise unsurveyed areas. During 2007 the four Nordic countries Denmark, Finland, Norway and Sweden formed a working group whose main purpose was harmonising the Nordic charts according to M-4. During one of the meetings the Swedish way of symbolising unsurveyed areas was discussed and some of the other countries were interested in adopting this form of symbolisation.

Therefore the four Nordic HOs have discussed the matter and agreed to forward a proposal to CSPCWG to amend the current M-4 sections B-417.6 and B-418.1. in order to allow the blue and white striped raster as an option for symbolising inadequately surveyed and unsurveyed areas.

Analysis / Discussion

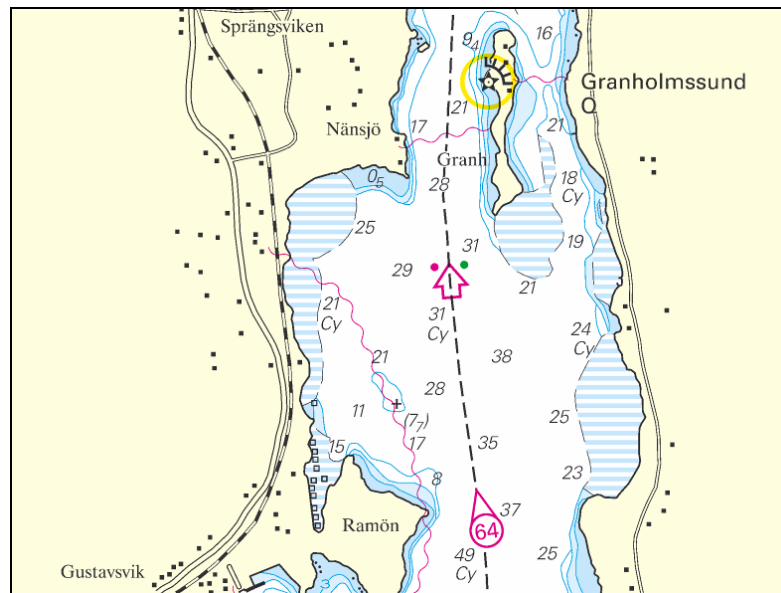
In certain inshore waters there is a need for symbolising inadequately surveyed or unsurveyed area with a raster symbol. A blank area, which is the present symbolisation according to M4, could in some cases be interpreted as an area possible to navigate in, especially when the area is so small that it is impossible or complicated to add the text '*Inadequately surveyed*' or '*Unsurveyed*'. Also larger areas might be so complex that the current symbolisation fails to give the very positive form of warning that might be required.

It is also indicated at present in M-4 B-418.2 that a blank area in inshore waters may also indicate that the chart is of too small a scale for navigation. Just leaving the area blank could in some cases be interpreted as a result of cartographic editing or generalisation. A raster symbol would in this respect be self-explanatory for the users.

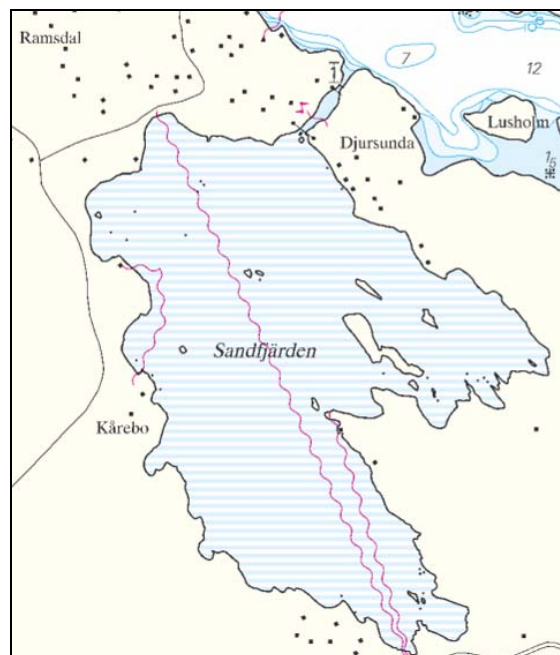
Where appropriate the blue and white striped raster could be used together with the appropriate legend, like '*Unsurveyed*' but if the area is too small to add a text the raster symbol itself is self-explanatory for navigators. It is also beneficial to use a raster symbol instead of text in order to avoid the chart becoming cluttered with too much text information.

The thickness of the stripes should be 0.5mm and the blue colour should be the same colour as for the tint used to emphasize shallow waters.

Below some examples are shown where it could be useful to present the area with the blue and white striped raster.



This example is from the Swedish Chart 523. In this geographical area sunken timber has made it impossible to perform any hydrographical surveys near the shoreline.



This example is from the Swedish Chart 622. In the Baltic Sea there are many examples of shallow areas where hydrographical surveys are impossible to perform.

In Annex A there is an example from the Finnish Chart 27 showing the same larger area with both current symbolisation and the proposed blue and white stripes.

The CSPCWG is invited to discuss the matter and consider possible further action.

Conclusions

The CSPCWG should amend the current M-4 sections B-417.6 and B-418.1. in order to allow the blue and white striped raster as an option for symbolising unsurveyed and inadequately surveyed areas.

Recommendations

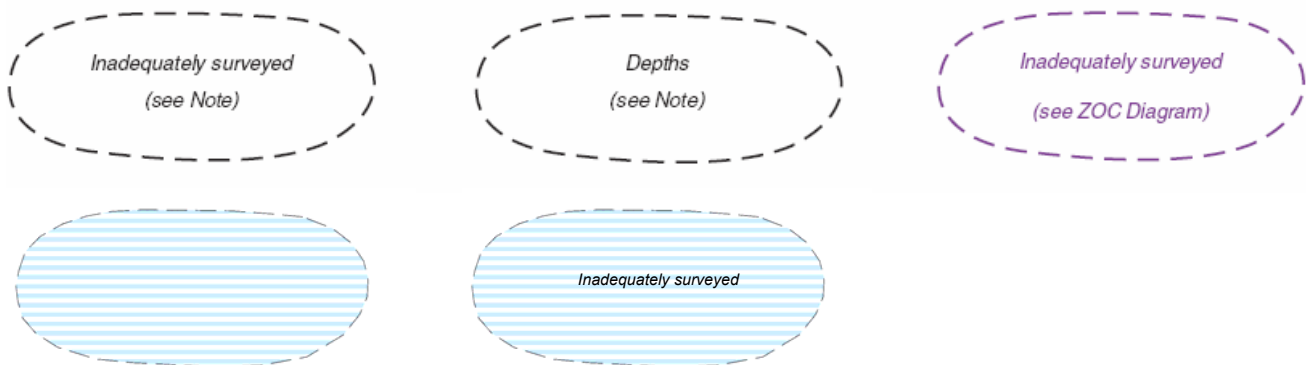
It is recommended that M-4 section B-417.6 is amended to read:

B-417.6 Areas delimited by a bold line. In some rocky or coral reef waters, depth information may be so inadequate that a very positive form of warning is required. Such areas must be shown by bold dashed black or magenta limits, with the legend may be inserted with either:

- 'Inadequately surveyed' (which may be accompanied by a note) or
- 'Depths (see Note)'.

A reference to the Source or ZOC Diagram may be inserted instead of a note. A 'Depths' note has the advantage of drawing the users' attention to the limitations of the data, without making judgements on its adequacy, which may vary for different users.

Examples:



This treatment is likely to be most appropriate in inshore waters such as coastal archipelagos and barrier reefs; it may be reinforced by the omission or insertion of colour tints within the bold line line or insertion of a blue and white striped raster.

If the blue and white striped raster is used the thickness of the stripes should be 0.5mm and the blue colour should be the same colour as for the tint used to emphasize shallow waters.

Certain IMO-adopted 'Areas to be Avoided', as promulgated in 'Ships' Routeing', may be regarded as special cases. These may, however, have been adopted for such reasons as insufficient aids to navigation and the existence of conservation areas, as well as inadequacy of survey. These areas must be delimited by T-shaped dashes in magenta (see B-435.7).

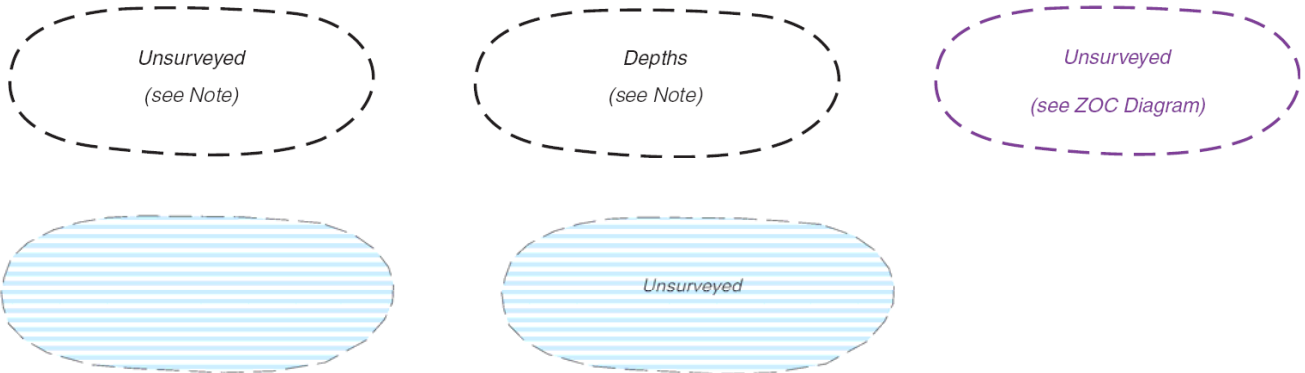
It is recommended that M-4 section **B-418.1** is amended to read:

B-418.1 Areas delimited by a bold line. In unsurveyed areas which are considered dangerous for vessels to enter, a very positive form of warning is required. Such areas must be shown by bold dashed black or magenta limits, A with the legend may be inserted with either:

- 'Unsurveyed' (which may be accompanied by a note) or
- 'Depths (see Note)'.

A reference to the Source or ZOC Diagram may be inserted instead of a note.

Examples:



This treatment is likely to be most appropriate in inshore waters such as coastal archipelagos and barrier reefs and where ice has receded. It may be reinforced by the omission ~~or insertion~~ of colour tints within the bold line or insertion of a blue and white striped raster. Small areas (eg gaps left in surveys because of obstructions such as icebergs or moored vessels), may have the legend alongside the limit.

If the blue and white striped raster is used the thickness of the stripes should be 0.5mm and the blue colour should be the same colour as for the tint used to emphasize shallow waters.

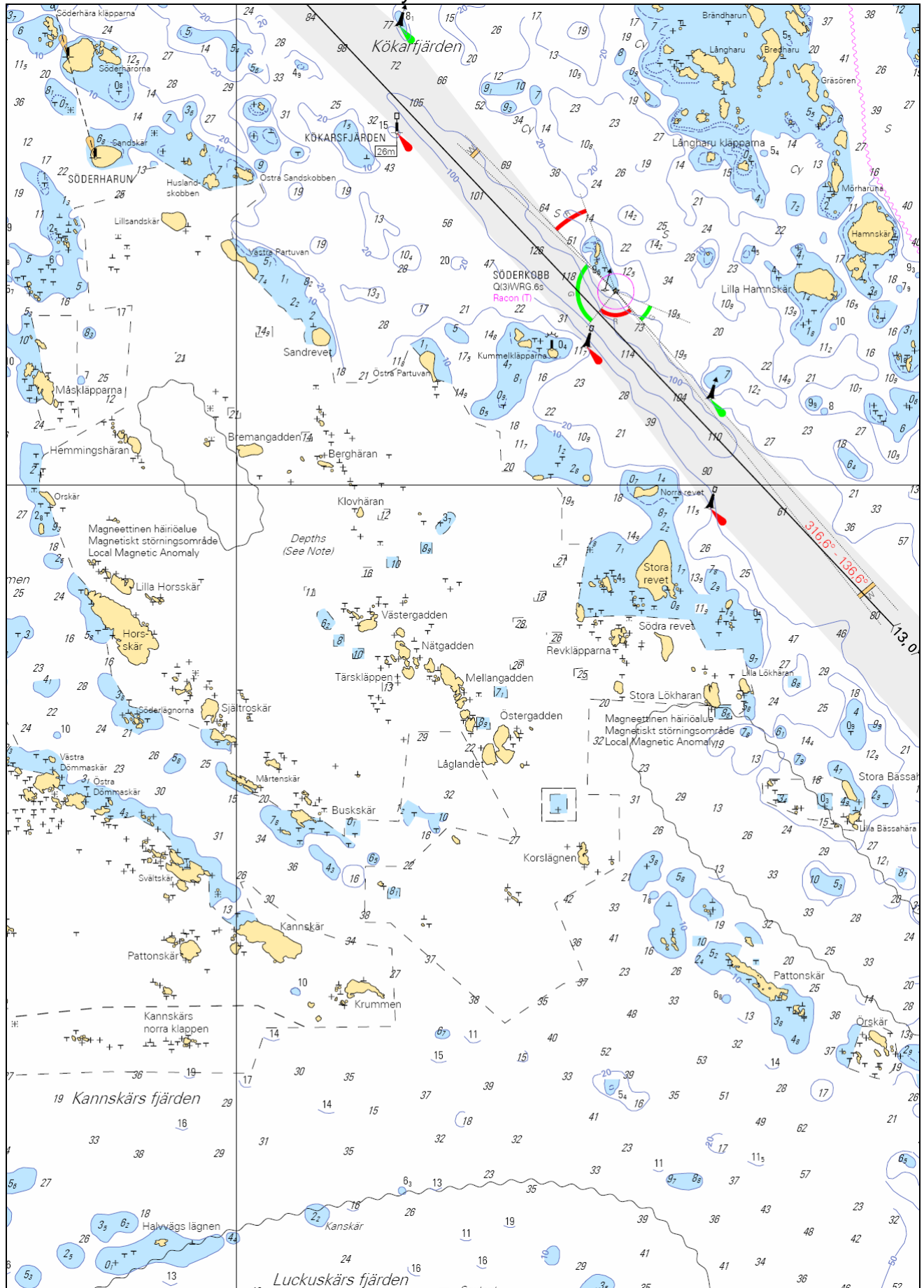
Justification and Impacts

The insertion of a blue and white striped raster in inadequately and unsurveyed areas will make it more obvious for the navigators that this particular area must be avoided. It is also beneficial to use a raster symbol instead of text in order to avoid the chart becoming cluttered with too much text information.

Action required of CSPCWG

The CSPCWG is invited to discuss the possible benefit and implementation of the proposal.

Finnish Chart 27 with current international symbolisation



Finnish Chart 27 with proposed symbolisation

