

## Paper for Consideration by CSPCWG

### Omission of redundant abbreviations for colours on multi-coloured charts

<b>Submitted by:</b>	Denmark (KMS), Finland (FMA), Norway (NHS) and Sweden (SMA)
<b>Executive Summary:</b>	The mentioned Nordic HOs would like to present for discussion and further action by the CSPCWG a proposal to amend the current sections B-471.3, B-471.4. and B-471.5. of the International Specifications (M-4) in order to allow the omission of some colour abbreviations on multi-coloured charts.
<b>Related Documents:</b>	INT 1
<b>Related Projects:</b>	None known

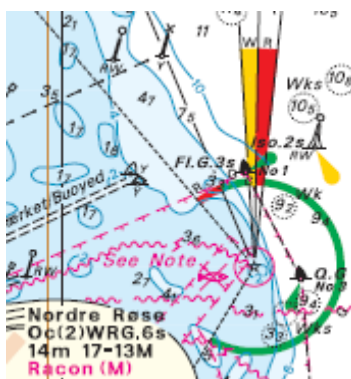
### Introduction / Background

At a recent meeting the four Nordic HOs have discussed the feasibility and necessity of having the colours of lights (e.g. sector lights) stated or shown as much as three times on a multi-coloured chart. The description of e.g. a sector light with minimum 3 different coloured sectors are today

1. given as part of the light character itself e.g. Fl.WRG
2. given as a colour abbreviation shown on the outer side of the sector arcs (W, R and G)
3. shown as true coloured arcs e.g. yellow representing W, red representing R and green representing G

A similar situation can be found when light buoys are shown.

The example is from the Danish Chart 133 (INT 1333):




### Analysis / Discussion

Today most of the four Nordic HOs use all three methods to describe a sector light. The result is that the HOs sometimes have experienced difficulties when placing all the information in a way that would benefit the user and not obscure or lead to omission of other and perhaps more important information.

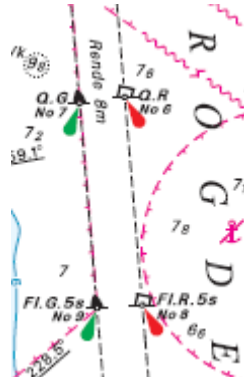
The four Nordic HOs have discussed the matter and agreed to forward a suggestion to CSPCWG to amend the current M-4 sections B-471.3., B-471.4. and B-471.5. in order to allow for omission of some information.

Especially in narrow and congested waters with limited space to show all the important information it should be a possibility to omit at least 2 of the three colour descriptions e.g. as shown in the examples below.

However where the presentation of e.g. a sector light is restricted to only show the light character and nothing else the sector light may be shown as e.g. Fl. WRG or 

A similar situation occurs when light buoys are shown. The colour of the light exhibited is shown twice on multi-coloured charts. It should be sufficient to show it only once.

The example is from the Danish Chart 133 (INT 1333):



Only in cases where something differs from what could be expected the situation should be described to a greater extent in order not to cause any misinterpretation by the user.

The meeting is invited to discuss the matter and consider possible further actions

## Conclusions

### Recommendations

It is recommended that M-4 section B-471.3., B-471.4. and B-475.5. are amended to read:

**B-471.3** The colour(s) of a light ~~shall always~~ must be charted, ~~if required~~, by the international abbreviations as listed in B-450.2. As stated in B-450.3., they shall be charted in capital letters (except for the second letter of two-letter abbreviations).

~~The omission of a colour abbreviation signifies that the light is white (as with light buoy (B-466.3))~~ colour abbreviations on multi-coloured charts is optional but the colour of the light must always be stated by one of these means: use of a colour abbreviation as part of the light character or use of a 'true coloured' sector arc, patch or flare,

The omission of a colour abbreviation will otherwise always signify that the light is white.

On 'non-multi-coloured' charts where there is more than one colour exhibited as in some sector lights, and in alternating lights, the abbreviation W must be included.

Where colour abbreviations are used as part of the light character ~~In the case of~~ to indicate sector lights, the brightest colours are given first, eg WRG. For the charting of colours on the sectors, see B-475.

**B-471.4** Coloured flares or circular 'patches' ~~may be~~ which are used on multi-coloured charts, ~~in addition to the abbreviations~~, makes the use of additional colour abbreviations to indicate the colour of red, green and white (shown as yellow) lights ~~redundant and is therefore optional~~. P11. For the additional use of colours on sectored lights see B-475.

**B-475.5** **Legends on sector arcs:** where sectors are differentiated by colour only, the abbreviations for colours shall be inserted on the sector arcs, (~~including except on~~ multi-coloured charts where ~~true coloured arcs may be are used in addition to the abbreviations~~). Where sectors are very wide and there is a risk of a single abbreviation being 'lost' in the charted detail, the abbreviations may be repeated at intervals.

## **Justification and Impacts**

### **Action required of CSPCWG**

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

Here are just examples showing the current situation and the result if the proposed changes are accepted and implemented. According to the views of the four Nordic HOs the mariner can easily see and understand the colours of the lights exhibited.

Examples of the current (left) and the proposed new situation (right) on DK Chart 133 (INT 1333):

