7th CSPCWG Meeting
23-26 November 2010, Simon's Town, South Africa

Paper for Consideration by CSPCWG

Generic Symbol for Lights in Multicoloured charts

Submitted by:	SWEDEN
Executive Summary:	Sweden would like to bring forward for discussion and further action by the CSPCWG a proposal for a generic light symbol for multicoloured charts. A generic light symbol would be applicable for e.g. Signal Stations and Lighthouses.
Related Documents:	S-4, INT 1
Related Projects:	None known

Introduction / Background
During 2009 the section B-480 to B-499 was reviewed. One question was raised concerning using a flare for signal stations with lights and how these should be portrayed in multicoloured charts.

This issue was also discussed at CSPCWG6 in Monaco 2009; see CSPCWG6-INF3 and Action 46.

Analysis / Discussion
In certain cases there is no need to shown the specific colour of the light but you may still want to show that the structure does have a light connected by using a flare. For multicoloured charts this is impossible today since there is no generic light symbol available. In non multicoloured charts all flares are magenta, but in multicoloured charts the actual colour of the light is shown by the colour of the flare.

The Swedish Maritime Administration (SMA) has discussed the matter and the issue was also discussed at CSPCWG6. SE proposes that a flare with a magenta outline should be used in these cases. See also images below. Specifically this method should be used when depicting signal stations with lights (B-494) where it is already mentioned in the standard that a standard form of presentation in multicoloured charts is missing. The flare with a magenta outline could also be used in small and medium scale charts when portraying a lighthouse carrying lights with more than one colour (see for example the lighthouse 'Sillnäsudde' below).

SE would like to bring this matter forward to CSPCWG for further discussion.

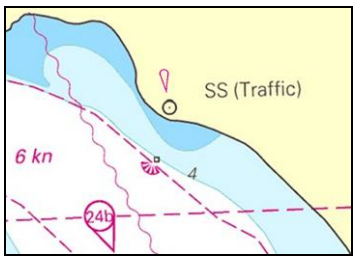

Image 1 Proposed portrayal of signal station with lights in multicoloured charts.

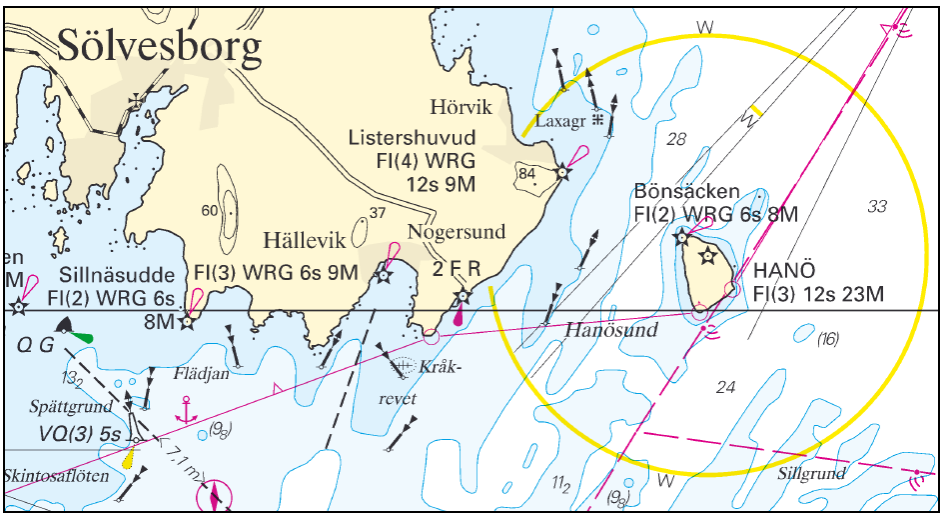

Image 2 Portrayal of generalised sector lighthouse in a medium scale chart using the proposed flare with the magenta outline. See for example the lighthouse 'Sillnäsudde'.

Conclusions

The specifications given in S-4 and INT1 would need to be amended.

Recommendations

It is recommended that S-4 section B470.4, the second bullet point, is amended to read;

• Light flares must be in the appropriate colour:
Yellow/orange should be used for white, yellow, amber and orange lights.
Red should be used for red lights. Alternatively, magenta may be used.
Green should be used for green lights.
Blue/cyan should be used for blue lights.
Magenta may be used for violet lights.
A flare with a magenta outline should be used as a generic symbol for lights in small and medium scale charts where it is not useful to portray all lights.

It is recommended that S-4 section B-494 is amended to read;

Signal stations communicating visually have declined in importance. They are charted not only for their main role of signalling information and instructions but also as a form of landmark. The signals generally exhibit lights by day and night but may display shapes or flags by day. If required to be charted, the position of the station should be represented by a position circle (**B22** - see B-305.1) with a light flare, unless it is known that the signals are not lights. ~~A standard form of presentation has yet to be developed for multicoloured charts (2009).~~ In multicoloured charts a flare with a magenta outline should be used.

Possibly INT1, P11 should be amended to also include the flare with the magenta outline.

Justification and Impacts

There might be a need for a similar approach in S-57/S-101 where an object has one or more connected lights but you do not wish to show all details for the users. In this case a more generic light symbol would be useful even in ECDIS. An alternative would be to keep all light attributes but include a specific attribute which tells the ECDIS that the lights should not be symbolised. This will give the user the possibility to select the object in order to find more details about the lights.

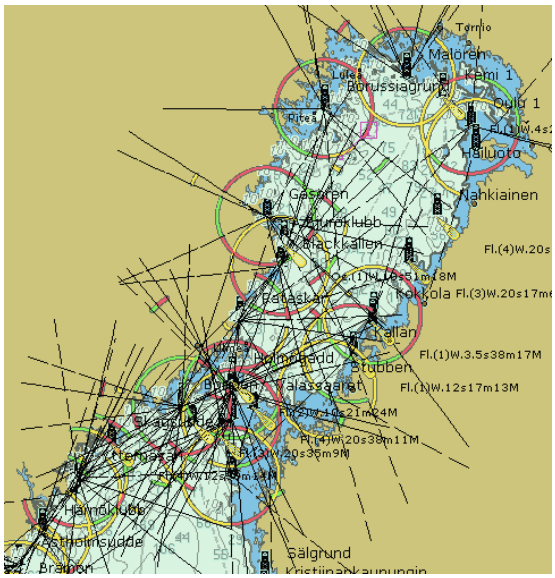

Image 3 Example from an ECDIS showing an Overview ENC where a more generic light symbol would be useful.

Action required of CSPCWG

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