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

# Paper for Consideration by CSPCWG

## Dredged area – project depths

Submitted by:	UK
Executive Summary:	S-4 does not give guidance on charting project depths for dredged
	areas.
Related Documents:	S-4
Related Projects:	none

## **Introduction / Background**

UKHO has published charts for developing ports where planned dredged areas are depicted. Because there is no explicit instructions in S-4 on how to chart such areas, the depiction has not been consistent.

# **Analysis / Discussion**

The following sections of S-4 are relevant:

B-414 deals in general with dredged areas, while additional paragraphs deal with dredged areas which are, or are not, regularly maintained. Note that there is no guidance here on 'projected' dredging, to be carried out perhaps during a port development.

B-329 deals in general with 'works under construction and projected'. The following excerpts from that section are relevant:

**B-329.3** Works at sea which will be wholly or partly submerged when completed, such as training walls or pipelines should be shown by the symbol used for completed features of that nature, but with a legend such as 'Under Construction (2004)'.

**B-329.4** Where detailed information is lacking or the scale of the chart is too small to show limits of work under construction, a legend such as 'Works in progress (2004)', spaced out if necessary to cover the approximate area, should be inserted.

**B-329.5** Limits of works marked by lights or buoys. Because lights and buoys may be moved without notice, their positions should be shown only where it seems safe to do so. In other cases, a subsidiary legend such as '(Outer end marked by red lights)' may be added.

**B-329.6 Work projected** shall not be inserted on charts unless it is about to begin, in which case it shall be indicated as work under construction.

There is no guidance in either section specifically about 'projected' dredging, to be carried out perhaps during a port development. B-329.6 is closest, but 'under construction' is not an appropriate term to be used for dredging.

# <u>Different Representations of Dredged Areas on GB Charts</u>

Recently published GB 3781 covered significant port developments at Ras Laffan, Qatar. Works, creating a large harbour complex and many new berths were nearing completion; however UKHO had not yet received post-dredge surveys. In this case the legend 'Being Dredged to XX.Xm (2009)' (see figure 1 below) was used and when confirmation of the completion of the dredging was received NM 4287/09 amended the legends to 'Dredged to' etc. At the time it was felt that 'being dredged to' was a little vague; however, due to the significance of the port developments, UKHO was happy with the depiction on the basis that when confirmation was received an NM would enable the picture to be updated.

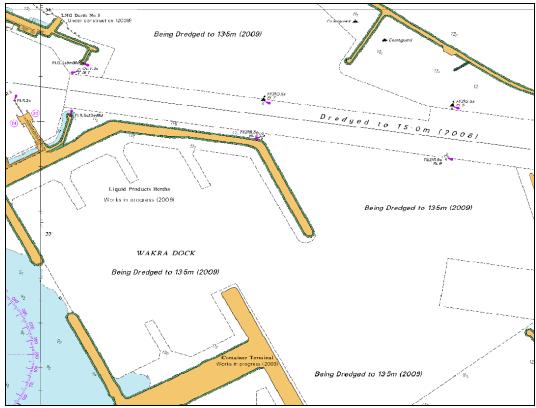


Figure 1. Use of 'Being Dredged' legend on GB 3781 published 25/06/2009.

Another GB chart, 2399 Burgas and Approaches, Bulgaria, deals with a somewhat similar situation. The legend 'Project Depth XX.Xm' was used with an accompanying note 'Port Developments' as shown in figures 2 and 3. Clearly the situation at Burgas may be different and it is possible that works may take much longer to complete making a note a more appropriate means of conveying this information. However, clarification of best practices in this situation would be useful given that it will no doubt occur again in future and that it would help maintain consistency across our products.

An alternative might be the legend 'Dredged depths (see note)' with a note to explain the situation further.

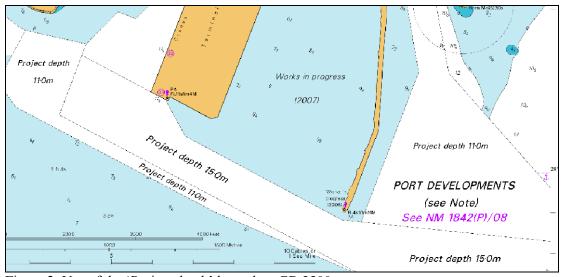


Figure 2. Use of the 'Project depth' legend on GB 2399.

#### PORT DEVELOPMENTS

The Port of Burgas is undergoing major developments. This includes changes to coastline and the dredging of access channels and berths; buoys are moved accordingly. The dredged depths and the limits of access channels are based on the projected port developments and are not confirmed. For the latest information on depths, access channels, aids to navigation and other port developments, the Port Authority must be consulted.

Figure 3. 'Port Developments' note on GB 2399.

## **Conclusions**

Applying the general principles therefore, which are given for projected works in B-329, the representation on GB 2399 is very clear. The 'Port Developments' legend at the entrance makes it clear to the user that things may not be exactly as charted, so he will quickly understand the meaning of 'Project depth' in that circumstance and the note gives all the information that can be provided succinctly.

GB 3781 also conforms to the general principles in B-329, with 'Being dredged' equivalent to 'Being reclaimed'. Nevertheless, a little more information could have been provided, eg as a note similar to that on 2399.

Using the legend 'under construction' would be inappropriate for dredged areas. B-329.6 could be interpreted to mean that work about to begin should be charted in accordance with the general principles set out in section B-329, which is entitled 'Work under construction and projected', rather than specifically by the legend 'under construction'.

## Recommendations

A consistent policy should be considered and appropriate guidance or clarification drafted for S-4.

# **Justification and Impacts**

Justification: a consistent policy would be helpful to cartographers and chart users alike.

Impacts: possible minor work in S-4

Unlikely, but possible change to INT1

## **Action required of CSPCWG**

The CSPCWG is invited to:

a. discuss options for charting projected dredging and advise on whether more explicit guidance should be given in S-4.