

10th CSPCWG MEETING
21-24 January 2014. Wellington, New Zealand

Paper for Consideration by CSPCWG

Maintained / Dredged Areas

Submitted by:	Australia; UK
Executive Summary:	This paper summarises Hydrographic Office discussions regarding the depiction of maintained and non-maintained dredged areas on paper charts since CSPCWG9, and proposes further discussion at CSPCWG10.
Related Documents:	S-4 Regulations of the IHO for International (INT) Charts and Chart Specifications of the IHO; INT1 Symbols, Abbreviations and Terms used on Charts; CSPCWG8-08.09A Maintained/Dredged Areas; CSPCWG9-08.22A Maintained/Dredged Areas; Minutes – CSPCWG8 and CSPCWG9.
Related Projects:	INT1 and S-4 Maintenance; S-101 Development

Introduction / Background

The referenced CSPCWG8 Paper recommended that consideration be given to retiring symbol INT1 – I21 (Dredged channel or area with depth of dredging in metres and decimetres); and amending the description at INT1 – I23 slightly to indicate that a dredged channel may be maintained through regular control surveys as well as dredging. The referenced CSPCWG9 Paper summarised the discussions between Australia and UK since CSPCWG8 and recommended that CSPCWG review the summary of these discussions and assess the progress made in terms of improving the interpretation of symbology on paper charts between dredged areas that are maintained and dredged areas that are not regularly maintained. No clear decision could be reached at CSPCWG9 and Australia and UK were instructed to continue consulting about charting of dredged areas to produce a detailed proposal for WG consideration.

This Paper provides a summary of the discussions since CSPCWG9 for consideration and discussion for CSPCWG10.

Analysis / Discussion

Although Australia and UK have not discussed this issue directly since CSPCWG9, there have been discussions held within the respective HO's.

Discussions at the Australian Hydrographic Office (AHO) have been based on the content of the referenced CSPCWG8 and CSPCWG9 Papers and the summary of the discussions at CSPCWG9. These discussions have involved senior AHO cartographers, mariners and representatives of port authorities. The summary of these discussions is as follows:

- The interpretation of the mariner and the port authorities was consistent in regard to the depiction of dredged depths on charts. This interpretation was as reported in the Paper presented at CSPCWG9, i.e. a depth shown on the chart with no associated year of dredging (I21 and I23) was considered to be the minimum depth in the channel (i.e. a “maintained” depth); and a depth shown with an associated year of dredging was considered to be the prompt to the mariner to contact the relevant authority for further information (i.e. depth “not maintained”).
- Mariners did not distinguish between symbols I21 and I23.
- All participants in the discussions were comfortable with the current AHO process for “maintaining” the depths shown in dredged areas on the chart by (T)NM, as supplied to the AHO via the latest control survey of the area. All were in agreement that this corresponded to the use of the I21 and I23 symbols.
- There was no concern raised by any participant in regards to the use of the word “maintained” at I23. Other options such as “design depth” and “control/project depth”

as mentioned in the CSPCWG8 Paper were further discussed but all agreed that these were not appropriate, particularly in regard to the Australian interpretation of I23.

- All participants were happy with the I22 symbol, and considered that there were no interpretive issues with this symbol.
- It was considered that the addition of a chart Note advising mariners to contact the relevant authority for the latest information regarding depths in dredged areas would be useful (refer to CSPCWG9 Paper), but only if the year of dredging could not be included in the area due to lack of space. [Note: It was stated from a cartographic perspective that if the year of dredging would not fit on the chart then the “see Note” chart legend would not likely fit on the chart.]
- From a cartographic perspective, it was considered that use of “Dredged to” for “maintained” areas was not appropriate in the Australian context, as the depth is maintained by control survey and not necessarily by dredging. Mariner feedback was that in all cases “Dredged to” was considered to indicate a “non-maintained” area, as it is only shown at I22.

The agreed conclusions of these discussions were:

- From a mariner’s perspective, there is no requirement to amend the symbols shown at I21 – I23. In terms of the descriptions of the symbols, the mariner does not have an interest in a literal translation of the descriptions, i.e. does attach much (if any) meaning to the use of the term “Dredged channel or area” – they are interested in the indication as to the reliability of the charted depth.
- From a cartographic perspective, assuming the symbols I21 – I23 are retained in INT1, the descriptions could be amended to:
 - I21: Channel or area with minimum surveyed depth
 - I22: Channel or area not regularly maintained with minimum surveyed depth and year of latest survey
 - I23: Channel or area with maintained depth

There is no requirement to include a legend “see Note” for symbol I21, as this is self-explanatory to the mariner.

- In S-4, additional text could be added to B-414 (as adapted from UKHO recommendation in CSPCWG9 Paper) similar to:

If possible, one of the methods of defining the type of dredged area below (I22 or I23) should be used, in consultation with the local authority. However, if that is not possible, eg:

- because the area is known to be “not maintained” but the year of dredging or date of latest control survey is not known; or
- because the local authority does not permit the use of the term ‘Maintained’,

then the depth only should be charted (I21). Where symbol I21 is used and the area is considered “not maintained”, an explanatory note should also be included, eg:

DREDGED DEPTHS

Dredged depths may be less than charted. For the latest information, consult the Port Authority [or Harbour Master or Pilot].

Consideration may also be given to charting a maximum authorized draught (M18, see B-434.5) instead of a dredged or maintained depth, if agreed by the local authority.

Recommendations

1. That CSPCWG consider amending the descriptions of INT1 symbols I21 – I23 as follows:
 - a. I21: Channel or area with minimum surveyed depth
 - b. I22: Channel or area not regularly maintained with minimum surveyed depth and year of latest survey
 - c. I23: Channel or area with maintained depth
2. That CSPCWG consider amending S-4 – B-414 similar to the sample text above.

Justification and Impacts

Discussions subsequent to the submission and consideration of Papers at CSPCWG8 and CSPCWG9 have indicated that there would be no major impact on the mariner if no changes were made to INT1 symbols I21 – I23. However, the changes suggested in this Paper may result in a clearer distinction between the symbols in INT1, and more complete guidance for the cartographer in providing information to the mariner in regard to dredged areas in S-4.

Action required of CSPCWG

CSPCWG is invited to:

- a. Consider this Paper; and
- b. Determine appropriate changes to INT1 and S-4 (if any).