

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

**Paper for Consideration by CSPCWG
Depiction of Surveys on Source Diagrams**

Submitted by:	UK
Executive Summary:	Source (and Zone Of Confidence) Diagrams usually reflect the actual sources used in the chart's compilation, rather than any later surveys assessed which show unchanged bathymetry; is this helpful for the user?
Related Documents:	S-4: B290-298; B620
Related Projects:	None

Introduction / Background

When a new survey is received and assessed by a hydrographic office, and it is judged that changes to the charted depths are of no navigational significance, no New Edition would normally be made of the relevant chart. (NMs may be used to promulgate any isolated navigationally significant depth changes, obstructions, etc). Consequently, the Source Diagram is not modified to indicate that the new survey has been assessed. The mariner may therefore avoid an area which has been more recently surveyed and to modern standards, because the Source (or ZOC) Diagram implies the source survey is old or of poor quality.

Another issue (in UK, but possibly other nations) is that it does not look like good value when a government or other authority spends large sums of money conducting a survey and then the results (to all visible purposes) do not appear on a chart for a long time.

Analysis / Discussion

Questions arise as follows:

1. Should a Source Diagram only show the actual sources used to compile a chart, or should it show more recent sources which have been assessed, but not used because the differences from the existing depiction are insufficient to warrant recompilation in a full New Edition?
2. Should a Source Diagram be updated between editions? And, if so:
 - By what mechanism (eg NM)?
 - What impact might that action have in prioritising the next edition of the chart?
 - In the event of a marine incident, how would such partial 'action' be viewed and explained in an enquiry?

There is currently no provision in the guidance on Source Diagrams in S-4 (B-290 et seq) for showing sources which have been assessed but not used in chart compilation. Some HOs do this (eg US, by stating in the source details that '*the outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting*'). This may be more helpful to the user than a simple record of the surveys actually used in compilation. This may be more succinctly put by titling the Source Diagram as:

'SOURCES

(most recent used or evaluated for charting)'.

Note: The same problem may be true of ZOC diagrams, for example where the actual source used in compilation is a 'B' (or lower) category, but a later 'A' category survey has not found any significant discrepancies.

The recently published Selection Criteria for NMs in B-620 does not include any mention of updating a Source Diagram. It would seem inappropriate to update Source (or ZOC) Diagrams by NM (presumably NM Block) unless it is considered to be a safety of navigation issue. This would be rare, but may occasionally happen, such as when a survey is conducted specifically to prove the safety of a route.

Current policy for Source (and ZOC) Diagrams may not provide the most current data for the chart user. The counter argument is that the chart user is assured that any *significant* changes are issued by NM and does not need to know immediately (and be burdened by applying a NM update) of insignificant changes.

In organizations which operate a chart database, it may be that the database is updated for the latest survey (including its CATZOC and survey attributes). However, this still requires a positive action to produce an ENC update. This may or may not be at the same time as the paper chart is updated for the same survey (for example, see SE's paper CSPCWG6-09.4A from the 2009 meeting).

Possible actions:

- Add some additional advice on including an option regarding 'evaluated' sources onto Source (and ZOC) Diagrams in B290.
- Add an additional optional NM criteria for updating Source (and ZOC) Diagrams to B620.
- Need to consider any impact for CATZOC and survey attribute presentation on ENC where the same principles apply.

Conclusions and Recommendations

None

Justification and Impacts

Existing guidance does not cover how and when Source (and ZOC) Diagrams should be updated for surveys evaluated for charting but not actually used as a compilation source.

Some drafting work for Secretary and then the usual process of consultation and approval of amendments to S-4.

Action required of CSPCWG

The CSPCWG is invited to discuss and decide on any action required.