8th Meeting of the Data Quality Working Group (DQWG)

Wollongong, NSW, Australia, 25-28 March 2014

Nine perceived axioms

Our proposals are based on the following perceived axioms (self-evident truths). These are presented intentionally to spark discussion, and not as final axioms.

1 - The purpose of nautical charts is to *facilitate informed decision-making* by mariners and other chart users.

2 - Portrayal of chart quality indicators are most likely to be used during voyage planning, less frequently during voyage monitoring, but may also be important during emergencies. Emergency use may raise issues concerningappropriate display methods providing prompt access.

3 - It is NOT the purpose of charts and ancillary information complementing charts to replace the mariners and other end users as decision-makers. Information provided with charts should NOT extend into decision-making.

4 - Component quality indicators, whose meaning is transparent to end-users, effectively facilitate informed decision-making.

5 - The three types ofquality components identified in Dorst & Howlett (*measurement uncertainty*; *completeness*; *currency*) represent a good starting point in defining indicators that are useful, intuitive, "mariner-friendly", that is have a *transparent meaning to mariners*.

6 - However the assumption built into the above statement must be tested by eliciting feedback from mariners on the use of these types ofquality components, sooner rather than later.

7 - In general, composite indicators on their own, such as CATZOC, or a replacement for CATZOC, risk incorporating a priori decision-making, which is inappropriate, and has an opaque meaning to end users. It may be that mariners will find a composite indicator useful, but to maintain transparency this should beaccompanied by its component indicators. But this should be testedwith regular mariner feedback.

8 - Past efforts to represent chart quality, whether by source diagrams or CATZOC encodings, represent chart quality in ways that may be useful to a hydrographer, but, as indicated by the DQWG survey results, do not address allthe needs of, nor are easily interpreted by, a mariner.

9 - Development of a composite algorithm that combines not only chart quality attributes but also environmental and ship factors as well, goes well beyond the chart quality mandate of the DQWG; will inevitably be complex; and risks being even more opaque to mariners.