Hydrographic Services and Standards Committee

Report of the

Data Quality Working Group

To HSSC 5

5-8 November 2013, Shanghai, China

Presented by Mr. Chris Howlett (DQWG Chair)

Principal activities and achievements

- Held the 7th meeting 16 – 18 July, 2013 in Fredericton, Canada
- Through work with an MSc student working with University of Southern Mississippi / University of New Brunswick the method of portrayal of the data quality has been settled on. This is a colour wash overlay of red for poor quality data, yellow for intermediate quality and green or no colour wash for good.

Principal activities and achievements

- Although the display method has been settled on, how the individual data quality indicators are combined to form this is still unclear. A sub-group, named the HICUP group (Hierarchical Indicator of Composite Uncertainty Propagation), has been formed to investigate. They are to make an initial report to TSMAD 27 in Monaco (December 2013).

Principal activities and achievements

- The final report of the HICUP group will be delivered to DQWG 8 scheduled to coincide with TSMAD 28 planned for Australia in March 2014.

Principal activities and achievements

- Another strand of work that has progressed is the education of the mariner in matters relating to data quality. CL 51/2013 has been issued inviting member states to provide examples of data quality documentation. The intention is to develop a uniform set of data quality documentation which will reside on the IHO web site as a pattern / resource for HOs when developing national documents.

Principal activities and achievements

- Education of the mariner is also progressing with articles placed in mariners journals. Contact has been made with the Nautical Institute with the intention of placing an article in their ‘Seaways’ journal and also on their web site.

Problems or outstanding issues

- Develop the method of combining data quality elements into the composite overlay to drive the colour wash (HICUP sub-group).

Problems or outstanding issues

- Data Quality is only part of the problem for mariners who need to know the depth of water under their keels. Hence there is charted depth, uncertainty of depth , tidal height and uncertainty of tidal height. To make the work of the DQWG more useful to the end user there is potentially a need to develop a method for dynamic tidal correction of soundings either from predictions or from broadcast actuals.

Future work programme

- Develop the hierarchy approach for combining data quality elements.
- Continue with developing methods of educating mariners in data quality issues.
- Build data quality indicators into S-100 demonstrator and test (via TSMAD).

Action requested of HSSC

- Note Chairman's report: HSSC5-05.6A
- Endorse continued activity of the WG to:
  - Complete the development of the colour wash overlay for data quality.
  - Develop the IHO standard documentation on Data Quality.
  - Debate the desirability of expanding data quality into dynamic tides / water levels and hence develop the go/no go scenarios or 'FITUSE' as originally proposed by the DQWG.