Review of relevant IHO Charting Specifications (S-4)

1. It was decided at TWLWG 5 to recommend to HSSC 5 to move Resolution 1/2008, as amended, from Section 2.3.1 to Section 2.2 of IHO publication M-3. It was felt Resolution 3/1947, as amended, still had relevance and a number of occurrences on charts where this Resolution applied, thus it was felt there remained a need to retain this Resolution and therefore TWLWG would liaise further with CSPCWG before providing any recommendation on the removal of Resolution 3/1947.

2. Below is the information provided to TWLWG 5:

Background

- 3. In the recent work of CSPCWG, including the revision and updating of S-4 (*Chart Specifications of the IHO*), there has been some success in incorporating appropriate TRs within S-4 and cancelling them from M-3 (*Resolutions of the IHO*). As a result, very few TRs remain in M-3 Section 2.3.1 (*Charts General*) and IHB has asked if these can be actively incorporated into S-4, other standards or proposed for cancellation.
- Of the extant TRs, two impinge to some degree on TWLWG's interests and expertise. I would welcome your TWLWG advice, and whether and how these could be incorporated into modern IHO standards:

Resolutions for Review:

Res 1/2008 NAMING CONVENTION FOR THE VERTICAL DATUM OF CHARTS

1 It is resolved that the vertical datum used on navigational charts, Chart Datum (CD), be defined without ambiguity in order to enable subsequent bathymetric data comparisons to be conducted in an efficient and reliable manner and for the accurate combination of datasets using different vertical datums.

2 It is recommended that a designated epoch for example CD (2006) or LAT-UK (2000) be used. The decision as to when a change in CD for a given area is necessary and the name given to that specific definition of CD remains a matter for each Member State based on their national requirements.

CSPCWG Comment:

- There is no exact equivalent of this in S-4.
- UKHO's former Head of Tides and IHO Tidal Committee chairman (John Page) advised not to include it within S-4.
- It is chart metadata and not relevant for the chart user.
- Further, it is a technical issue of how producer HOs decide to record this information in their charts' database and records.
- It does not seem appropriate to include within the 'Charts' section of M-3 nor in S-4.; it may be better in section 2.2 'Tides and Water levels'?
- Request advice from TWLWG.

Res 3/1947 SOUNDINGS TAKEN FROM FOREIGN CHARTS

It is resolved that, when soundings taken from original foreign charts are accepted unchanged, a note shall be given in the title of the chart stating the datum for sounding reduction used for each constituent area; alternatively the information may be conveyed in the table of tidal information on the chart.

CSPCWG Comment:

- There is no exact equivalent of this in S-4.
- However, S-4 says:
 - **B-405.3 Where the tidal range is appreciable**, the Lowest Astronomical Tide (LAT), or as closely equivalent to this level as is practically acceptable to

Hydrographic Offices, should be adopted as CD. Alternatively, the differences between LAT and national CD may be specified on nautical documents. If low water levels in a specific area frequently deviate from LAT, CD may be adapted accordingly. Since LAT is the recommended CD with worldwide application, and has the additional merit of removing all negative values from tide tables, this should be adopted as a long term objective, and be considered when opportunity for change arises.

And in the title notes section:

B-241.5 Unit of measure for depths with a general statement about the vertical chart datum used (see B-405).

- The only possible outstanding matter may be: 'a note shall be given in the title of the chart stating the datum for sounding reduction used <u>for each constituent</u> <u>area</u>'. This is considered a very rare requirement today, but conceivably could occur? Usually the words 'approximately LAT' (or equivalent) cover slight disparities in CD where different nations' charts have been used in a small scale derived chart.
- It is recommended that this Resolution may be considered time expired and cancelled.
- Request advice and confirmation of this recommendation from TWLWG.

5. TWLWG 6 is invited to consider this information and take any action it considers appropriate.