8th CSPCWG MEETING Turku, Finland, 29 Nov – 02 Dec 2011

Paper for Consideration by CSPCWG

Report to CSPCWG8 on HDWG Activities

Submitted by: Australia

Executive Summary: Report on HDWG Activities Since CSPCWG7.

Related Documents: IHO On-line Hydrographic Dictionary

HSSC2-05.9A – HDWG Report HSSC3-05.9A – HDWG Report

Related Projects: S-4/INT1 development

Introduction / Background

The IHO Hydrographic Dictionary Working Group (HDWG – formally the Committee on the Hydrographic Dictionary (CHD)) is a technical Working Group of the IHO HSSC. Its primary objectives are to review and update the different volumes (English, French and Spanish) of the Hydrographic Dictionary on a continuing basis; to liaise with other IHO bodies developing publications containing glossaries to ensure consistency; and to liaise with bodies of other organisations developing dictionaries and/or glossaries. Review and update of the Hydrographic Dictionary is done only on the on-line "Wiki" Hydrographic Dictionary which can be accessed via the IHO web site.

The HDWG consists of membership from 8 IHO Member States and the IHB, which acts in the Secretarial role. The Working Group is chaired by the US. Although the Working Group aims to meet at least every two years, all business conducted by the HDWG is currently being done by correspondence, principally through a Discussion Forum hosted by the IHB. The last meeting of the Working Group (which met as the CHD) was in 2001.

Analysis / Discussion

All new/revised definitions endorsed by HSSC2 were circulated to IHO member States via IHO CL 75/2010, and adopted with minor amendments, as announced in IHO CL 18/2011. This included revisions resulting from proposals submitted to HDWG by CSPCWG. For a full summary of the HDWG proposals submitted to HSSC2, refer to paper HSSC2-05.9A – HDWG Report.

The following is a summary of the activities and recommendations of the HDWG since CSPCWG7 that may of interest to the CSPCWG (NOTE: The full list of recommendations can be found in paper HSSC3-05.9A – HDWG Report):

- A review of the 29 terms and definitions from S-52 Appendix 3 Glossary of ECDIS Terms, which had
 not been included in S-32 Appendix 1 Glossary of ECDIS Related Terms, was conducted. A number
 of new or amended definitions have been recommended by the Working Group. New or amended
 definitions that may be of interest to CSPCWG include:
 - Revised definition for "aid to navigation";
 - New definition for "Automatic Identification System";
 - Revised definition for "electronic chart";
 - o New definition for "INT1"; and
 - o Revised definition for "nautical chart".

NOTE: S-32 Appendix 1, although remaining as a stand-alone IHO publication, has been included within the on-line version of the Hydrographic Dictionary.

• At the request of TSMAD, 58 terms and definitions from S-57 which were either not included in S-32, or were defined but not consistent with S-32, were reviewed. A number of new or amended definitions have been recommended by the Working Group. The following may be of particular interest to CSPCWG:

- As a result of proposals from TSMAD to define the various types of IALA navigational aids (buoys and beacons), the HDWG conducted a rationalisation of these definitions in S-32. A generic definition for "navigation mark" is proposed, and it is further proposed that the various categories of navigation mark be defined as "mark"; e.g. "cardinal mark"; "lateral mark". Entries for the various "buoy" and "beacon" types have a reference to the appropriate "mark"; e.g. "Cardinal buoy: See Cardinal mark";
- O Proposed revised definitions for "elevation", "height" and "altitude". This prompted a great deal of discussion in the Working Group, and consultation with the Chairs of CSPCWG and TWLWG. HDWG has attempted to provide three consistent, yet distinct, definitions. It was considered that there was not a clear distinction in the use of the words "elevation" and "height", to the extent that the terms are often interchanged, particularly in relation to paper charts. The distinction agreed on was that elevation relates to the vertical distance of the ground above a defined datum; height relates to the vertical distance of the top of an object affixed to the surface of the earth above a defined datum (except for lights), or the vertical dimension of an object; and altitude relates to the vertical distance of a point not affixed to the surface of the earth above a defined datum. Concessions were required to be made in the definitions for elevation and height to accommodate the interchanging of the terms in S-4, INT1 and IHO Technical Resolution 3/1919. Australia has taken an action to raise this issue in terms of the definitions of these terms in the IHO Geospatial Information Registry, and in terms of their use in S-4 and INT1. To assist in any discussion at CSPCWG8, the proposed revised definitions are included in Annex A to this Report. The requirement for discussion at CSPCWG8 will be dependant on the decisions made in relation to the HDWG report to HSSC3.
- At the request of the WWNWS Sub-Committee, 16 Hydrographic Dictionary definitions were reviewed taking into account revised definitions included in S-53 "Joint IMO/IHO/WMO Manual on Maritime Safety Information"; the IMO International SafetyNET Manual; and the IMO NAVTEX Manual, all of which have been prepared by the WWNWS and approved by IHO Member States. A number of new and revised definitions have been proposed in order to align these documents. These include revised definitions for "navigational warning" and "radio navigational warning"; and new definitions for "coastal warning", "local warning" and "NAVAREA warning".

All proposed new and revised definitions have been submitted to HSSC3 for endorsement. In addition, a set of draft "Business Rules" have been developed for consideration of HSSC3, which will provide guidance on entries which are appropriate for inclusion in S-32 and the way in which these entries are managed.

Work Items currently in the HDWG Work Program include CSPCWG submissions regarding definitions for "aquaculture" (new term) and "phase of a navigational light" (revised definition). These Work Items are currently being discussed by HDWG. An additional Work Item is being proposed to review all terms in S-32 for conformance with the proposed "Business Rules".

Conclusions

Continued monitoring of HDWG activities by the CSPCWG is required in order to assess the impacts of new or revised terms and definitions on IHO Publications for which CSPCWG is responsible, notably S-4 and INT1. The latest submissions of the HDWG to HSSC include revised definitions for the terms elevation, height, and altitude, which requires discussion by CSPCWG to determine possible impacts on S-4 and INT1.

Recommendations

It is recommended that CSPCWG consider the impacts of the revised definitions for the terms elevation, height and altitude in regard to their use in S-4 and INT1, and identify corresponding revision for these documents if required. At the time of submission of this Report, HSSC is yet to discuss the HDWG proposals, but it is hoped that decisions made at HSSC3 will be known prior to CSPCWG8.

Justification and Impacts

Amendments to S-4 and INT1 may be required in order to better align these documents with new or revised definitions for terms in the Hydrographic Dictionary. In regard to the proposed revised definitions for the terms elevation, height and altitude, there could be significant impact on both S-4 and INT1.

Action required of CSPCWG

The CSPCWG is invited to:

- a. endorse this report.
- b. note issues within the report of interest to CSPCWG.
- c. discuss possible impact of revised definitions for the terms elevation, height and altitude on S-4 and INT1.

Attachments:

Annex A: Revised HDWG Definitions for Elevation; Height and Altitude.

CSPCWG8

REVISED HDWG DEFINITIONS FOR ELEVATION; HEIGHT AND ALTITUDE AS PROPOSED TO HSSC3

elevation:

- I The vertical distance of a POINT or a LEVEL, on or affixed to the surface of the EARTH, measured from a specified vertical DATUM usually MEAN SEA LEVEL. The term elevation is sometimes used synonymously confused with ALTITUDE which in modern use refers particularly to the distance of POINTs or objects above the EARTH's surface. For paper NAUTICAL CHARTS, this term is often synonymous with HEIGHT.
- 2 For navigational lights, such as lighthouses, the vertical distance of the focal point of the light measured from a specified vertical DATUM.
- 3 An area higher than its surroundings, as a hill.

height:

- 1 The vertical distance of a LEVEL, a point, or the top of an object affixed to the surface of the EARTH, considered as a point, measured from a specified DATUM usually a High Water datum.
- 2 The vertical dimension of an object. *Also called vertical length*.

altitude:

- 1 The vertical distance of a LEVEL, a POINT or an object considered as a POINT (but not affixed to the surface of the EARTH), measured from a given DATUM, usually MEAN SEA LEVEL. See also ELEVATION and HEIGHT.
- 2 In ASTRONOMY, the vertical angle between the plane of the HORIZON and the line to a CELESTIAL BODY. See also ANGLE OF DEPRESSION and ANGLE OF ELEVATION.