

## **1<sup>st</sup> meeting of the IHO Hydrographic Dictionary Working Group (HDWG1)**

25 - 26 July 2017, IMarEST HQ, London, United Kingdom

*(Paragraph numbering is the same as the Agenda Item numbering and does not necessarily reflect the order in which matters were discussed.)*

### **Opening**

1.1 The Chair, Jean Laporte, welcomed the participants and provided a brief background and history to the Hydrographic Dictionary. He highlighted the history of the use of languages, noting how English and French became the IHO two official languages in 1921 and Spanish, although more widely spoken, being added only after as a working language. The Chair highlighted the challenges of using three languages, particularly the expenditure of resources. It was noted the increasing importance of the Far East and therefore the need to recognise and service these languages which share a lot in common, e.g. Chinese characters used both by China and Japan.

It was suggested the HD needed to be expanded to include Eastern languages, as well as the traditional European languages. It was further questioned whether the IHO would have any form of legal liability in a multi-lingual country such as Canada if it tolerated differences between the English and French versions. It was finally recognised that focusing on a unique IHO S-32 Hydrographic Dictionary Registry with translations generated by individual national HOs under their responsibility would both comply with the liability issue and the need to economise the IHO resources.

All participants, see Annex A, introduced themselves, highlighting their interest and that of their organization in the development of the IHO Hydrographic Dictionary.

1.3 IHO highlighted the importance of this first meeting of the HDWG in 16 years. It was hoped that it would encourage greater engagement and representation by more language groups, including regional variations. The difficulty of handling non-Roman characters, which cannot be sorted by alphabetical order, has been recognised. The technical experts developing the database will have to create a simple interface or table of correspondence between terms written both in Roman alphabet and non-Roman characters. It was recognised that each Member State wishing to use non-Roman characters will have to propose the method of entries that go with their version.

### **Administrative Arrangements**

The agenda was adopted, see Annex B, and the Chair explained how he proposed to conduct the meeting. See Annex C for a list of meeting documents.

### **HD Update**

3.2 The Chair provided a comprehensive brief on his presentation to HSSC8 and background discussions with a number of HO representatives. The Chair highlighted that the HD was neither a standards nor a technical publication; he noted that the users reached beyond the traditional hydrographic and cartographic users and this characteristic had to be maintained in the interest of the IHO reputation. The Chair explained the process for gaining agreement of new definitions or terms, including the inputs on circulated translations to Member States for approval. Approval was in practice discussed in English and only applied to English terms. Although accepted without formal votes, Spanish translations were fairly equivalent to the English terms whilst French version equally accepted without votes could sometimes offer different definitions. The Chair highlighted the need to implement these main new principles:

- Unique IHO reference;

- Recourse to National HO translations thus no liability beyond official IHO version;
- Optional translations into unlimited number of languages which would be under national control and responsibility;
- Ingestion of all unambiguous terms contained into the IHO Geospatial Information Items (GII) registry without interference from the HDWG i.e. the S-32 Hydrographic Dictionary Registry and the GII S-100 Registry would in future share the same DB structure without interfering with one another
- Member states may decide to develop a full synoptic dictionary in their national language, or only keep a list of terms associated to the IHO definition, or be content with the IHO S-32 Hydrographic Dictionary Registry even if it is not in their national language.

The Chair explained the principles in detail; see HDWG1-03.2-HSSC8.

ARG highlighted the published listed of members was out of date and needed to be updated. **Action IHO** IHO noted an action requested of HSSC9 should be to direct the IHO Secretariat to issue a circular letter requesting new active nominations to the HDWG. It should be highlighted what skills and technical knowledge is required to develop the proposed database structure. **Action Chair**

ARG further identified the need to characterise the S-32 Hydrographic Dictionary Registry content into themes belonging unquestionably to hydrography, i.e. falling under the IHO sole responsibility, themes relevant to other techniques and terms that need to be discarded for not being relevant or appropriate for inclusion in the S-32 Hydrographic Dictionary Registry. A list of Specific knowledge will be established for each category. **Action ARG and Chair**

IHO to draft an email for the Chair to NGA (John Lowell) in support of the continued direct active participation of Al Armstrong, whilst the proposed database structure is developed and for him to identify a suitable individual to undertake the specialist technical input. **Action Chair/IHO** It was noted a vital message to HSSC9 should be the need to revitalise the HDWG and ensure participation by multiple language groups and multiple representation of each language group. To make it more convincing to the international community, this should be best presented at HSSC9 by a non-English native speaker, ideally by CDR Allignani with the chair support. **Action Chair**

The Chair highlighted the tasks set by HSSC8 for the HDWG. It was recognised that there was a strong link between work on the HD and its use and the revisions of S-44 – *Standards for Hydrographic Surveys* – and C-13 – *IHO Manual on Hydrography*. The importance of various language backgrounds were identified when further developing the contents, terms and definitions to ensure the variations and limitations of translation are recognised and acknowledged.

3.3 ADDT and TSSO demonstrated a potential new structure and database application for the HD. It was agreed that this approach would allow expansion into an unlimited number of languages whilst maintaining the cross-reference link between languages via a unique term ID. These concepts were articulated in a paper submitted to the HDWG1, HDWG1-03.3\_corr1-Proposal.

### **HD new format**

4.1 Assistant Director Anthony Pharaoh (ADDT) demonstrated a proposed future databased digital format for the S-32 Hydrographic Dictionary Registry.

4.2 It was agreed that a review of the current HD contents should be conducted and a list of terms be proposed for removal. **Action ARG/Chair**

4.3 ADDT and TSSO (Jeff Wootton) discussed the relationship between the S-32 Hydrographic Dictionary Registry and the S-100 Registry.

### **Terms of Reference**

5. The participants conducted a comprehensive review of the Terms of Reference and Business Rules, generating proposed revisions for consideration by HSSC9, see HDWG1-04.2 and Annexes E and F.

### **Any other Business**

7.1 The participants reviewed the List of Actions generated at the meeting, Annex D.

7.2 It was agreed any decisions for a further meeting (HDWG2) should be taken after the outcomes of HSSC9 were known.

7.3 The participants reviewed the Work Plan for 2018-2019, proposing amendments for consideration by HSSC9, see HDWG1-06.3 and Annex G.

### **Close**

8. The Chair thanked everyone for coming to the meeting and for the effort and enthusiasm towards the task; he wished them a safe journey home.

The meeting closed 1415.

Annexes:

- A. List of Participants
- B. HDWG1 – Agenda
- C. HDWG1 – List of Documents
- D. HDWG1 – List of Actions
- E. HDWG1 – Draft revised ToRs
- F. HDWG1 – Draft revised Business Rules
- G. HDWG1 – Draft Work Plan 2018-2019

**1<sup>st</sup> meeting of the IHO Hydrographic Dictionary Working Group**  
**List of Participants HDWG1**

<b>Member State</b>	<b>Organization</b>	<b>Name</b>	<b>E-mail</b>
Argentina	Servicio de Hidrografia Naval	Maria Alejandra Allignani	mallignani@hidro.gov.ar
France	Service Hydrographique et Océanographique de la Marine	Jean Laporte ( <b>chair</b> )	JLaporte@argans.co.uk/jlaporte@shom.fr
USA	National Geospatial-Intelligence Agency	Al Armstrong	Albert.E.Armstrong@nga.mil
IHO	IHO	David Wyatt ( <b>secretary</b> )	adso@iho.int
*IHO	IHO	Anthony Pharaoh	addt@iho.int
*IHO	IHO	Jeff Wootton	tsso@iho.int

\* Remote participation for selected agenda items.

**Hydrographic Dictionary Working Group**  
(1<sup>st</sup> Meeting – 25/26 July 2017 – IMarEST, London, UK)

**Agenda – (HDWG 1) – V1.1**

**Day one (09:15 – 17:00)**

**1 Opening**

**1.1 Opening address**

Chairman

**1.2 Welcome address by Host**

Lorraine Small will replace Charlotte Lord (Lorraine.small@imarest.org)

**The Institute of Marine Engineering, Science and Technology**

1 Birdcage Walk • London • SW1H 9JJ • United Kingdom

**Tel:** +44 (0)20 7382 2624

**Mob:** +44 (0)7500 081 307

**www.imarest.org**

**1.3 Welcome address by the IHO**

David Wyatt, HDWG Secretary

**2 Administrative Arrangements**

**2.1 Adoption of the Agenda**

Changes have been made to the original agenda to make space for the IHO Secretariat's presentations (Tony Pharaoh and Jeff Wooton).

**2.2 Conduct of the Sessions**

- Morning session; 09:00 (or 09:15 on the first day) till 12:00, with tea breaks as appropriate.
- One hour lunch break around 12:00
- Afternoon session: 13:00 till 17:00, with tea breaks as appropriate.

**2.3 Social event (modest)**

18:15 – 20:15 Drink and Informal dinner in a local pub offered by the HDWG Chairman (DMN-14478502715)

**Buckingham Arms, 62 Petty France, Westminster, London SW1H 9EU; Téléphone : 020 7222 authority 3386**



### 3 HD update

#### 3.1 Current state of IHO Hydrographic Dictionary.

Chairman: Review of latest HSSC presentation (HDWG1-02)

#### 3.2 Demonstration of potential new database format

Tony Pharaoh/Jeff Wooton: presentation: IHO Secretariat proposals for a new HD structure and database application (HDWG1-03)

### 4 HD new format

#### 4.1 Future format and structure of HD

Tony Pharaoh/Jeff Wooton: IHO Secretariat proposals for a new HD structure and database application (HDWG1-03)

#### 4.2 Maintenance of future dictionary

Chairman: Discussion on IHO Secretariat, S-100 Registry Manager, HDWH and Member States future responsibilities based on HDWG1-02, slide 12/16.

#### 4.3 Relationship with S-100 Registry and S-100WG

Tony Pharaoh/Jeff Wooton (HDWG1-03)

\*\*\*\*\*

### **Day two (09:00 – until completion of the agenda)**

### 5 Review and revision of ToRs

The WG is invited to review and eventually amend the proposed new TORs before submission to HSSC9 (Ottawa 6/10 November 2017).

### 6 Open discussion on the HDWG language policy

The point of this discussion is to examine if the HDWG, as the potential cultural interface between the International Hydrographic Organisation *de facto* working language, the IHO two official languages, and the Member States' most spoken languages, has the vocation to set forth pragmatic recommendations to improve the IHO current practices, with a view to broaden the Organisation influence and fairness, and reflect the changes affecting the Hydrographic Community, whilst simplifying the translation burden.

### 7 Any Other Business

7.1 Review of Action Items

7.2 Venue and dates of the 2<sup>nd</sup> HDWG Meeting

7.3 Draft Report to the HSSC

7.4 Recommendations and Draft Agenda for HDWG2

### 8 Closing remarks

**HDWG1 - List of Documents**

<b>Document No</b>	<b>Document Title</b>
HDWG1-CL03/2017	<a href="#">Letter of Invitation</a>
HDWG1-CL04/2017	<a href="#">Meeting Logistic Information</a>
HDWG1-02.1	<a href="#">HDWG1 Draft Agenda</a> v1.1
HDWG1-03.2	<a href="#">Report to HSSC8</a>
HDWG1-03.3	<a href="#">IHO Secretariat Proposals</a> corr1
HDWG1-04.2	<a href="#">ToRs and RoPs</a>
HDWG1-06.4	Proposed draft agenda for HDWG2
HDWG1-Presentations	Presentations.zip
HDWG1-Participants	<a href="#">HDWG1 List of Participants</a>

**LIST OF ACTIONS** – Updated 22 August 2017

Agenda Item	Subject	Status/Date	Comments	Action
3.2	List of HDWG members	4 Aug Complete	<del>Generate revised list of HDWG members and upload to HDWG web page</del>	IHO
3.2	HDWG membership	HSSC9	Highlight the skills and technical knowledge required by HDWG members to develop the proposed database structure	Chair
3.2	<del>HDWG membership</del>	1 Sep Complete	<del>Draft email in support of continued membership by USA and ARG representatives</del>	<del>IHO/Chair</del>
3.2	HDWG membership	HSSC9	Highlight to HSSC9 the need to revitalise the HDWG and ensure participation by multiple language groups and multiple representations of each language group	Chair
4.1	Structure and database application	29 Dec	Work with IHO Secretariat to develop the content architecture for the S-32 Hydrographic Dictionary Registry proposed new structure and database application	USA
4.2	S-32 Hydrographic Dictionary Registry new content	HSSC9	Help defining the S-32 Registry new structure by distributing the existing content along the four following categories: 1/ Themes exclusively relevant to Hydrography 2/ Themes significant to Hydrography but relevant to other branches of science or knowledge 3/ Content no longer in usage that must be retired but retained for historical research 4/ Terms not relevant or appropriate for inclusion and should be removed	Chair/ARG
6.1	Action List	HDWG2	Keep IHO informed of progress with allocated actions	All
6.1	<del>HSWG1 Draft Report</del>	4 Aug Complete	<del>Draft to be circulated for comment</del>	<del>IHO</del>
6.1	<del>HSWG1 Draft Report</del>	18 Aug Complete	<del>All to provide comments on draft report to IHO</del>	<del>All</del>
6.1	<del>HSWG1 Final Report</del>	25 Aug Complete	<del>Publish final report</del>	<del>IHO</del>
6.2	HDWG2 venue and dates	1 Dec	Circulate an initial letter of invitation	IHO



## IHO WORKING GROUP ON THE HYDROGRAPHIC DICTIONARY (HDWG)

## Terms of Reference-Rev56

Ref: 1st HSSC Meeting (Singapore, October 2009)

## 1. Objectives

- To provide to all users a unique definition of hydrographic terms with a unique identifier validated by the IHO.
- To review and update systematically the hydrographic definitions which fall within the IHO technical and scientific domain.
- To incorporate all unambiguous terms contained in the IHO Geographical Information Items (GII) registry for the digital use by nautical cartographers.
- To facilitate the consultation use of the Hydrographic Dictionary by IHO Member States, regardless of language issues by use of by allowing the creation of additional languages versions connected by the unique identifiers (ID).
- To offer the dictionary users additional definitions of technical terms that do not fall within the IHO technical and scientific domain, but are nonetheless relevant to hydrographic sciences and activities.

## 2. Authority

The HDWG is a subsidiary of the Hydrographic Services and Standards Committee (HSSC) and its work is subject to HSSC approval.

## 3. Operating principles

- Each hydrographic definition should be unique and expressed in one of maintained as the IHO languages reference from which other language versions will be derived.
- Unambiguous definitions used in digital cartography are provided under the responsibility of the custodians of the IHO GII registry.
- Additional non-hydrographic definitions are provided as a convenience and are only the result of the HDWG best effort, without guaranteeing exhaustivity either of the definition or of the sources.
- Each hydrographic term will be associated with a unique identifier to facilitate further multilingual cross-comparisons.
- Whilst the format of multilingual individual language versions of the HD dictionary is defined by the HDWG, the content and details of translations, either complete or simplified, shall remain under the responsibility of the Member States wishing to develop their national versions at their own expense.
- Member states will be encouraged to liaise with the Wikimedia Foundation to contribute to the Wiki worldwide hydrographic database with their national definitions based on the translation of IHO reference terms and definitions.
- HD national versions will comprise a table database structure format generated by the HDWG, which should contain as a minimum the unique identifier and the IHO reference term of cross-comparisons between the following entries: Identifier, IHO reference term and definitions, National term.

➤ ~~These principles will be implemented progressively with the assistance of the Wikimedia Foundation. In the meantime, the existing Wiki versions will continue being used and maintained.~~

#### 1<sup>st</sup> Example (Spanish Hydrographic Dictionary – future version):

IHO Definition		TEST-v 1.0		Language	
Search in Term or in ID: <input type="text" value="control point"/> <input type="button" value="Search"/> <input checked="" type="checkbox"/> substring-search Found: 1 / 5				Español 中文 Deutsch English Français Etc.	
ID: <input type="text" value="1035"/> Old ID: <input type="text" value="1025"/> Type: <input type="text"/> Genre: <input type="text"/> Plural: <input type="text"/> en-BE/AE: <input type="text"/> Deleted: <input type="checkbox"/> Save Date: <input type="text"/> Last full check: <input type="text"/>	Term: <input type="text" value="control point"/> Definition(s): (1). A point on the ground whose position (horizontal and vertical) is used as a base for a dependent survey. Also referred to as control station. (2). In photogrammetry, any point in a horizontal and vertical control system that is identified on a photograph and used for correlating the data shown on that photograph. More specific terms are photocontrol point, picture control point and ground control point. IHO GII registry: id.		ID: <input type="text" value="1035"/> Old ID: <input type="text" value="1025"/> Deleted: <input type="checkbox"/> Save Date: <input type="text"/> Last full check: <input type="text"/>		Term(s): <input type="text" value="punto de control, punto de apoyo"/> Definition(s): (1). Punto en el terreno, cuya posición (horizontal y vertical) se utiliza como base para el levantamiento en cuestión. También se hace referencia a él como a la estación de control. (2). En Fotogrametría, cualquier punto en un sistema horizontal y vertical de control identificado sobre una FOTOGRAFÍA y utilizado para correlacionar los DATOS que aparecen en esa FOTOGRAFÍA. Términos más específicos son punto de control fotogramétrico, punto de control de la imagen y punto de control terrestre. IHO GII registry: id.

#### 2<sup>nd</sup> Example (Chinese Hydrographic Dictionary – future version):

IHO Definition		TEST-v 1.0		Edit	
Search in Term or in ID: <input type="text" value="acceleration"/> <input type="button" value="Search"/> <input checked="" type="checkbox"/> substring-search Found: 1 / 4				中文 Deutsch Español English Français Etc.	
ID: <input type="text" value="14"/> Old Number: <input type="text" value="14"/> Type: <input type="text"/> Genre: <input type="text"/> Plural: <input type="text"/> en-BE/AE: <input type="text"/> Deleted: <input type="checkbox"/> Save Date: <input type="text"/> Last full check: <input type="text"/>	Term: <input type="text" value="acceleration"/> Description: <input type="text" value="The rate of change of VELOCITY."/> IHO GII registry: id.		ID: <input type="text" value="14"/> Old Number: <input type="text" value="14"/> Deleted: <input type="checkbox"/> Save Date: <input type="text"/> Last full check: <input type="text"/>		Term: <input type="text" value="加速度"/> Description: <input type="text" value="速度變化率"/> IHO GII 籍: 相同的

## 4. Procedures

a. ~~The HDWG should conduct its business mainly by correspondence. The WG should work by correspondence, teleconferences and group meetings. The WG should meet about once a year. Meetings will be held whenever deemed necessary by the HSSC but should be at least once between Conferences Assemblies (Conference to be replaced by Assembly when established).~~ When meetings are scheduled, and in order to allow any WG submissions and reports to be submitted to HSSC on time, WG meetings should not normally occur later than nine weeks before a meeting of the HSSC.

~~b. The HDWG may establish individual language sub-groups as necessary. These sub-groups should work by correspondence only and their work will be coordinated by a leader appointed by the HDWG.~~

c. The HDWG should liaise with other IHO bodies developing publications containing glossaries to ensure consistency. 'Terms and Definitions' should be a standing agenda item for meetings of all HSSC subordinate bodies.

d. The WG should liaise as appropriate with other organisations developing dictionaries and/or glossaries.

e. The WG should develop a work programme for each year that includes target completion and dates where appropriate.

#### 4. Composition and Chairmanship

a. Membership of the HDWG is open to all Member States wishing to participate actively. The ~~International Hydrographic Bureau (IHB) IHO Secretariat ("the International Hydrographic Bureau (IHB)" to be replaced by "the IHO Secretariat" when the Secretariat is established)~~ will maintain a list of nominated members. Ideally the HDWG should have one representative from each relevant HSSC subordinate body.

b. The HDWG may invite expert contributors to participate in its deliberations during and between meetings. Accredited Non-Governmental International Organizations (NGIO) may also participate as observers in the work and meetings of the HDWG.

c. Expert Contributor membership is open to entities and organisations that can provide a relevant and constructive contribution to the work of the WG. ~~These may include, in particular, the Wikimedia Foundation in a position of permanent consultant.~~

d. The Chair and vice-Chair shall be representatives of Member States and be independent of any HSSC subordinate body. The election of the Chair and vice-Chair should normally be decided at the first meeting following each ordinary session of the ~~Conference Assembly ("Conference" to be replaced by "Assembly" when the revised IHO Convention enters force)~~ and, in such case, shall be determined by vote of the Member States present and voting. If no qualified candidates are members of the HDWG, the ~~(IHB) IHO Secretariat~~ will call for suitable volunteers from Member States and submit the list to HDWG members for election.

e. Decisions should generally be made by consensus. If a vote is required, only Member States may cast a vote. Votes shall be on the basis of one vote per Member State represented.

f. If a secretary is required it should normally be drawn from a Member State representative of the HDWG.

g. If the Chair is unable to carry out the duties of the office, the Vice-Chair shall act as the Chair with the same powers and duties.

h. Expert Contributors shall seek approval of membership from the Chairman.

- i. Expert Contributor membership may be withdrawn in the event that a majority of the M/S represented in the WG agree that an Expert Contributor's continued participation is irrelevant or unconstructive to the work of the WG.
- j. All members shall inform the Chairman in advance of their intention to attend meetings of the WG.
- k. In the event that a large number of Expert Contributor members seek to attend a meeting, the Chairman may restrict attendance by inviting Expert Contributors to act through one or more collective representatives.

## Business Rules for International Hydrographic Organization (IHO) Publication S-32

(See IHO Resolution 7/1929, as amended)

1. S-32 **Hydrographic Dictionary Registry** is maintained by the Hydrographic Dictionary Working Group (HDWG), a subsidiary body of the Hydrographic Services and Standards Committee (HSSC) of the IHO.
2. IHO Publication S-32 – “The Hydrographic Dictionary” provides definitions for terms commonly encountered within the areas of competence of the IHO.
3. Definitions included in S-32 are intended to cover:
  - Hydrography and Marine Cartography – extensively
  - Geodesy, Land Surveying, Law of the Sea, Mathematics, Navigation and Physics – to the extent required for clarity and to avoid ambiguity. Where possible duplication should be avoided and reference made to the relevant responsible organization.
  - Cartography – to the extent required for the digital use by nautical cartographers. These terms are provided under the responsibility of the custodians of the IHO Geographical Information Items (GII) registry.
4. Terms for inclusion in S-32 **Hydrographic Dictionary Registry** may be proposed by IHO Member States, IHO Committees and subordinate bodies and the IHO Secretariat. Following consideration by the HDWG, proposals for the inclusion of new definitions or the amendment / ~~deletion~~ retirement of existing definitions will be passed to the HSSC for endorsement prior to circulation to IHO Member States for adoption.
5. Where IHO Member States have adopted an IHO Publication which includes definitions (for example, S-53 – *Joint IMO/IHO/WMO Manual on Maritime Safety Information*) these definitions may, at the discretion of the HSSC, be included in S-32 **Hydrographic Dictionary Registry** without further reference to IHO Member States.
6. ~~To be revised in due time:~~ Since January 2010, S-32 has been available as an on-line “WIKI” dictionary in English and French. The preparation of a Spanish version and the interlinking of the three languages remain to be done. The English and French WIKIs contain those definitions previously published in the printed 5th Editions of S-32. **The HDWG will develop a structure and database application to support the IHO S-32 Hydrographic Dictionary Registry terms and definitions from which additional language versions may be created. The HDWG will maintain the contents of the IHO S-32 Hydrographic Dictionary Registry, submitting amendments to HSSC for endorsement and IHO Member States for approval.**
7. ~~To be revised in due time:~~ Where a definition has been added or amended since the establishment of the WIKI versions, the IHB Circular Letter reference or IHO Conference decision number is recorded under the WIKI “*Discussion Tab*”. This information is only accessible via a username and password login. This password and login is restricted to HDWG members and IHB staff. However any user of the WIKI can see the date on which an entry was last amended.

## 11. HDWG WORK PLAN 2018-19

### 11.1 HDWG tasks

A	Maintain and extend the definitions in the IHO <del>S-32 Hydrographic Dictionary Registry in French, English and Spanish</del> (IHO task 2.8.2 refers)
B	Liaise with other IHO bodies preparing publications containing glossaries (IHO task 2.8.2 refers)
C	Liaise with other organizations developing dictionaries and/or glossaries (IHO task 2.8.2 refers)
D	<del>Develop the Spanish language Wiki version of S-32 with commercial contract support</del> Develop a digital structure and database application to support the IHO S-32 Hydrographic Dictionary Registry on-line version(IHO task 2.8.2 refers)

Task	Work item	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs / Standard	Remarks
A	Review all terms currently included in S-32 for their relevance in accordance with the S-32 Business Rules and propose which definitions should be removed from S-32	M	a. Terms a – d b. Terms e – l c. Terms m – r d. Terms s – z	2018 2018 2018 2018	2019 2019 2020 2020	P P P P	Laporte	S-32	
D	Develop structure and database application to support the on-line dictionary	H		2017	2018	O	Armstrong	S-32	

### 11.2 HDWG Meetings (IHO WP task 2.8.2 refers)

Date	Location	Activity
25-26 July 2017	London, UK	HDWG1
tbc	tbc	HDWG2

Chair: Jean LAPORTE, France  
Vice-Chair: Vacant  
Secretary: David WYATT, IHO

Email: [jlaporte@shom.fr](mailto:jlaporte@shom.fr) or [JLaporte@argans.co.uk](mailto:JLaporte@argans.co.uk)  
Email:  
Email: [adso@iho.int](mailto:adso@iho.int)