

## 1<sup>st</sup> Surface Current Working Group Meeting

29 - 31 May 2013, NOAA, Silver Spring, Maryland, USA

### Report to the 5<sup>th</sup> meeting of the Hydrographic Services and Standards Committee

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

#### 1 Opening

- 1.1 The Chair, Mr Kurt Hess (NOAA-USA), opened the meeting at 0905. He thanked the Office of Coast Survey (OCS) for the meeting arrangements, particularly the availability of internet in the meeting room. He then thanked all participants for coming and gave a brief background to the setting up of the SCWG. All participants – representing Canada, France, Netherlands, Spain and USA (NOAA and NGA) – introduced themselves. Administration and security arrangements were detailed.
- 1.2 On behalf of the National Oceanic and Atmospheric Administration, Mr Dave Enabnit, Technical Director of OCS, welcomed all participants and wished them a successful meeting. He provided a brief outline of OSC activities and the particular challenge set for SCWG. He highlighted the importance of the work to be addressed by SCWG and he expressed his hope that a tangible output could be achieved within a 5 year timescale.
- 1.3 David Wyatt (IHB), on behalf of the Directing Committee thanked NOAA and OCS for hosting the meeting and providing a high level of support and excellent facilities. The outcomes from HSSC 4 were highlight along with the extensive set of tasks set for the SCWG. He stressed the importance of liaison with other IHO bodies and the appropriate engagement with industry to progress the work items, noting that the SCWG contained limited experience of S-100 issues.

The Chair endorsed these sentiments and he highlighted a need for active engagement by the SCWG members during and between meetings to progress action and Work Plan (WP) items.

#### 2 Administrative Arrangements

- 2.1 The Chair introduced the Agenda which was adopted. See Annex B. He reported that apologies for non-attendance had been received from Japan.
- 2.2 The timetable was agreed, and it was explained that this was intended for guidance only and was not intended to be a rigid structure. Where necessary time spent on individual topics would be amended to allow an appropriate discussion.

#### 3 Presentations

- 3.1 Mrs Julia Powell (NOAA-USA) gave a comprehensive presentation on ‘S-100, focusing on Product Specifications’. This generated numerous questions and detailed explanations. IHO Resolution 2/2007 was highlighted as a requirement, which detailed a number of actions to be followed by SCWG during the development of a S-10x Product Specification including a User Requirements Survey. Details of the IHO Registry were requested, IHB to e-mail the URL to all SCWG members (<http://registry.iho.int>). **Action IHB**

- 3.2 Louis Maltais (CHS-Canada) gave a presentation on ‘The proposal for Surface Currents in S-100’. This presentation highlighted the activities of the CHS and the products and information already available.

#### 4 **Programme matters**

- 4.1 A detailed discussion developed on the items which needed to be highlighted in the HSSC-mandated User Requirements Survey and the level of detailed to be presented. It was suggested not to give users simple surface current values but to give the necessary information on which to make informed decisions. It was noted that users need to know whether the data was predicted or a real-time observation. It was also highlighted the importance of looking at all the data available and deciding what was required in what format and detail by the user without information overload of bridge personnel or pilots.

It was understood that some user requirement input has been obtained but the currency and breadth of the sample was unknown. It was agreed it was important to gain end user views but the SCWG should provide a basic outline product on which to focus user input and comments. It was also agreed that all user groups should be canvassed to glean a broad picture of user needs and product requirements.

France provided examples for the display of currents or tidal streams (<http://data.shom.fr> and <http://www.previmex.org>). It was highlighted that most information for the creation of new products had been gained from direct questioning and demonstration of capabilities to the user. It was noted that often the user does not know or understand, generally due to a lack of subject knowledge or experience.

It was suggested there was a need to consider a wider community other than strict navigation; the requirements for SAR, Environmental monitoring, Anti-pollution operations and Recreational users may need to be considered, either at the outset or in the future. It was also recognised the need to consider a broad geographic spread of users. However, it was decided that the primary purpose of the Product Specification would be for use in an ECDIS with ENC's to support navigation.

Development of a glossary of relevant term was identified, noting those already defined in the IHO Hydrographic Dictionary (HD) and those for which Product Specifications had already been created. In accordance with the wording of the ToRs and HSSC direction, it was agreed to confine work to surface currents, herein defined as the top 25 metres of the water column (the draft of the Chinamax class of vessels) in all geographic areas but with allowance for future expansion should be considered.

IHB provided an explanation on the creation and use of a Work Plan and Action List, both of which would be fundamental outputs from the meeting.

It was proposed the ToRs should be amended to include mention of ENC's and ECDIS. It was agreed to re-visit this under item 4.2.

The Chair asked Julia Powell to guide the WG in the direction it needed to take to build a Product Specification. She suggested that the WG build a questionnaire to survey the user community on their needs and requirements, as there must have been a clear identified need for HSSC to create the SCWG. It was suggested there was also a need to establish individual Member States' capabilities and products as well as user requirements.

IHB highlighted the need for a single common standard product rather than one independently created without IHO engagement. It was also highlighted that the model needs to display what the mariner requires to navigate safely and needs to know to make decisions.

The user survey needs to identify how the data will be primarily used. Julia Powell volunteered to provide the WMO Met-Ocean Forecast Product Specifications. **Action Julia Powell** It was also suggested a gridded rather than a vector product may be more suitable. It was later suggested a streamline based approach, as opposed to fixed grids of arrows, could also be considered.

Julia Powell walked through the S-10x Product Specification Template, providing detailed comment and guidance on each section. She agreed to build a Product Specification Template for gridded data. **Action Julia Powell**

After further discussion the headline topics and subject matter for a User Questionnaire was generated, a copy of which was e-mailed to all participants. It was agreed the next stage was to refine these into a questionnaire which could be published on the IHO website. It was highlighted that it was a fundamental necessity for the questionnaire to clarify how the data/product will be used by the mariner.

The Chair noted there remained a requirement to review the SCWG ToRs and RoPs in addition to creating the User Survey questionnaire and Work Plan. IHB suggested that a Circular Letter (CL) could be issued to highlight the survey to Member States and request HOs advise mariners of the questionnaire through NtoMs.

The Chair divided the WG into 2 sub-groups to address the main subject areas of the User Questionnaire. He directed them to refine the previously listed topics into a series of appropriately worded questions for further WG consideration and creation of a final publishable User Survey Questionnaire.

Initial refined questions were collated into an initial questionnaire and provided to all participants for further discussion. It was agreed a definition of 'navigationally significant' should be included at the beginning of the questionnaire.

Thomas Loeper (Chief, Coast Pilot Branch-NOAA, [thomas.loeper@noaa.gov](mailto:thomas.loeper@noaa.gov)) gave a demonstration of a recently completed a NOAA sailing directions application, called My NOAA Charts, created for android tablet users, which combines raster charts with the appropriate Coast Pilot information.

The WG further refined the draft questionnaire to elicit comments on distribution/delivery methods.

The following actions were decided:

Provide appropriate graphics for the User Survey questionnaire by 28 Jun. **Action Russ Ives**

Provide indicative pricing brackets of surface current product for inclusion in the User Survey by 28 Jun. **Action Dave Enabnit**

Provide comments on draft questionnaire, including nil comments, by 28 Jun. **Action All**

Pass collated draft questionnaire to the Chair for comments by 12 Jul. **Action Bodo de Lange Boom**

Circulate collated draft questionnaire to SCWG members for review and comment by 26 Jul. **Action Chair**

Provide final comments on collated draft questionnaire by 9 Aug. **Action All**  
 By 26 Jul advise the Chair of next stage in publication process for User Survey questionnaire and provide to the Chair a draft IHO CL advising member states on survey and requesting assistance raising awareness. Detail start and end date of 3 month availability period and provide URL link on IHO website. **Action IHB**

- 4.2 The SCWG reviewed the ToRs and RoPs provided by HSSC and agreed to a number of amendments for submission to HSSC 5 for endorsement. Changes included the discussion of ENCs, ECDIS and ECS (see item 4.1). The Chair directed the final draft version of the amended ToRs and RoPs should be circulated as Annex E with the draft meeting report. **Action IHB**
- 4.3 IHB gave a brief on Work Plans, their creation and use. The SCWG then developed a draft Work Plan (WP) covering the period 2013-2017 for submission to HSSC 5 for endorsement. The Chair directed the draft version should be circulated as Annex F with the draft meeting report. **Action IHB**
- 4.4 Jenny Thacker (Observer–USA) displayed the draft report document to TSMAD 26 and DIPWG 5. The SCWG refined the draft scope requirement wording to better articulate the general vision of the final deliverable and product specification. The Chair agreed to complete the document for submission to secretary of TSMAD by 7 Jun. **Action Chair**

## 5 Any other business

- 5.1 None.

## 6 Review of Action Items

- 6.1 A draft list of Action Items from the meeting were reviewed and agreed. All Action Items are marked in this report and are collected together at Annex D. It should be noted that the list of action items does **NOT** include tasks that are in the SCWG Work Plan. An updated list of the Action Items will be maintained on the SCWG 2 web page and all those who have actions to complete should keep the IHB informed of any progress. **Action ALL**

## 7 Venue and dates of the 2<sup>nd</sup> SCWG Meeting

- 7.1 It was suggested there would be a necessity to hold a meeting once the questionnaire replies had been received and initial analysis had been conducted. It was agreed 17-19 June 2014 was a suitable period. The Chair agreed to discuss with the Vice-Chair on a suitable venue in North America in view of the demographics of the SCWG members.

**(Post meeting note:** IMO have indicated the first meeting of the new Sub-Committee on Navigation, Communications and Search and Rescue (NCSR 1) will be held in the 3<sup>rd</sup> or 4<sup>th</sup> week of June 2014, therefore to avoid a clash the SCWG 2 meeting dates will be amended after discussion between the Chair, the Vice-Chair and other members.)

## 8 Draft Report to the HSSC / Draft Agenda for SCWG 2

- .1 It was agreed that the IHB would circulate a draft meeting report to all attendees by 7 June. **Action IHB** Attendees were requested to provide any

comments by 21 June. **Action ALL** It was intended the final meeting report would be published by 28 June. **Action IHB**

.2 The IHB, the Chair and the Vice-Chair would prepare the final report to HSSC 5 using the format required by HSSC. Representation of SCWG at the HSSC 5 meeting would be discussed between the Chair and the Vice-Chair. **Action IHB, USA & Canada**

.3 The Chair requested IHB to generate a draft Agenda and include as Annex G to the report. The draft Agenda may require further amendment following the outcome of HSSC 5.

## 10 Closing remarks

.1 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. He also thanked the OCS NOAA for their excellent support and organization, both of which helped greatly in the success of the meeting.

.2 Dave Enabnit thanked all participants on behalf of OCS for their input and hard work over the 3 days. He also thanked the Chair for his thoughtful leadership and control at keeping all focused on the task in hand.

.3 The meeting closed at 1450.

The following Annexes are attached:

- A. List of Participants.
- B. SCWG 1 – Agenda
- C. SCWG 1 – List of Documents
- D. SCWG 1 – List of Actions
- E. SCWG 1 – Draft revised ToRs and RoPs
- F. SCWG 1 – Draft Work Plan 2014-2015
- G. SCWG 1 – Draft Agenda for SCWG 2

**IHO Surface Current Working Group (SCWG)  
List of Participants SCWG 1**

<b>Member State</b>	<b>Organization</b>	<b>Name</b>	<b>E-mail</b>
Canada	Canadian Hydrographic Service	Bodo de Lange Boom	Bodo.deLangeBoom@dfo-mpo.gc.ca
Canada	Canadian Hydrographic Service	Louis Maltais (Vice-chair)	Louis.maltais@dfo-mpo.gc.ca
France	Coastal Hydrodynamic Department - SHOM	Ronan Pronost	ronan.pronost@shom.fr
Spain	Oceanography Division, Instituto Hidrográfico de la Marina (IHM),	Salvador Moreno Soba	smorenos@fn.mde.es salmoreno.ihm@gmail.com
Netherlands	Netherlands Hydrographic Service	Ronald Kuilman	RB.Kuilman@mindef.nl
USA	National Oceanic and Atmospheric Administration	Dave Enabnit	Dave.enabnit@noaa.gov
USA	National Oceanic and Atmospheric Administration	Peter Stone	peter.stone@noaa.gov
USA	National Oceanic and Atmospheric Administration	Kurt Hess (Chair)	kurt.hess@noaa.gov
USA	National Geospatial-Intelligence Agency	Russ Ives	Russell.C.Ives@nga.mil
USA	National Oceanic and Atmospheric Administration	Julia Powell	julia.powell@noaa.gov
USA	National Oceanic and Atmospheric Administration	Erich Frey	Erich.Frey@noaa.gov
USA	National Oceanic and Atmospheric Administration	Jenny Thacker	jenny.thacker@noaa.gov
IHB	IHB	David Wyatt (Secretary)	adso@iho.int
Expert Contributor	Centre for Coastal and Ocean Mapping, University of New Hampshire, Durham, NH, USA	Brianna Sullivan	Briana@ccom.unh.edu

**Surface Current Working Group**

(1<sup>st</sup> Meeting 29 – 31 May 2013 – NOAA, Silver Spring, Maryland, USA)

**Agenda – (SCWG 1)**

The meetings will start at 9:00 AM and be held in Rm. 6836, SSMC 3, 1315 East-West Hwy (it's the building with the large 'hand' sculpture in front). Please take the elevator up to Level 1 and go to the guard desk. Jenny Thacker will be available to escort you, as a group, so please try to be there at 8:45 AM. Ms. Thacker can be reached at 304-702-0118. Be aware that cameras and portable computers carried by foreign nationals will NOT be allowed into the building; phones are permitted. Material for presentation must be either e-mailed or stored on a CD/DVD, not a USB flash drive.

**1 Opening**

- .1 Opening address by the Chairman – Kurt Hess
- .2 Welcome address by *Host* - Dave Enabnit
- .3 Welcome by the IHB - David Wyatt

**2 Administrative Arrangements**

- .1 Adoption of the Agenda
- .2 Conduct of the Sessions

**3 Presentation**

- .1 Presentation on S-100, focusing on Product Specifications – Julia Powell
- .2 Presentation of the proposal for surface currents work item – Louis Maltais

**4 Programme Matters**

- .1 Scope of work to be undertaken as detailed in HSSC 4 report and paper presented to TSMAD 25 and HSSC 4 on Surface Current S-100 product specification requirement.
- .2 Determination of ToRs and RoPs.
- .3 Creation of WP for period 2013-2017.
- .4 WP monitoring, including milestones, engagement with other IHO bodies (TSMAD/TWLWG/DIPWG) and reporting to HSSC.

**5 Any Other Business**

- .1 Methods of work, including engagement with industry.

**6 Review of Action Items****7 Venue and dates of the 2<sup>nd</sup> SCWG Meeting****8 Draft Report to the HSSC / Draft Agenda for SCWG2****9 Closing remarks**

**TWLWG 5 - List of Documents**

<b>Document No</b>	<b>Document Title</b>
TWLWG 5 Letter 1	<a href="#">TWLWG 5 Invitation, Registration Form and Logistics Information Letter</a>
TWLWG 5 Registration Form	<a href="#">TWLWG 5 Registration Form</a> (Word Format)
TWLWG 4 Actions	<a href="#">TWLWG 4 List of Action</a> - 17 April 2013
TWLWG 5 Participants	<a href="#">List of Participants</a> - 14 May 2013
TWLWG 5	<a href="#">Agenda</a>
TWLWG 5	<a href="#">Programme</a>
TWLWG 5-2.3-1	<a href="#">Extract from HSSC 4 Report</a>
TWLWG 5-3.1.1	<a href="#">Chile National Presentation</a>
TWLWG 5-4.1	<a href="#">Standard Constituent List Presentation</a>
TWLWG 5.4.3	<a href="#">S-100 Presentation</a>
TWLWG 5-4.4-1	<a href="#">Dynamic Tides in ECDIS</a>
TWLWG 5-4.6-1	<a href="#">Resolution 3-1919 Version 12 October 2012+Australia+Brazil</a>
TWLWG 5-4.6-2	<a href="#">Resolution 3-1919 Finland Comments</a>
TWLWG 5-4.6-3	<a href="#">Resolution 3-1919 BSHC CDWG Comments</a> (track change on 5-4.5-1)
TWLWG 5-4.8-1	<a href="#">Long-term Variations in Amplitudes and Phases of Harmonic</a>
TWLWG 5-4.10-1	<a href="#">EC Submission on Establishment and Maintenance of VRF for High Resolution Bathymetric Surfaces</a>
TWLWG 5-4.10.2	<a href="#">University of Southern Mississippi Paper</a>
TWLWG 5-4.11-1	<a href="#">IHO Resolutions</a>
TWLWG 5-4.12-1	<a href="#">Review of Relevant IHO Charting Specifications</a>
TWLWG 5-4.18-1	<a href="#">Work Programme 2013-2014</a>



**LIST OF ACTIONS**

<b>Agenda Item</b>	<b>Subject</b>	<b>Status/Date</b>	<b>Comments</b>	<b>Action</b>
SCWG 1				
3.1	Presentations	<del>31 May</del> Complete	<del>Provide details of the IHO Registry and e-mail the URL to SCWG participants</del>	IHB
4.1	Programme matters	<del>31 May</del> Complete	<del>Provide WMO Met-Ocean Forecast Product Specifications</del>	Julia Powell
4.1	Programme matters	31 Aug	Build a Product Specification Template for gridded data	Julia Powell
4.1	User Survey Questionnaire	28 Jun	Provide sample graphics	Russ Ives
4.1	User Survey Questionnaire	<del>28 Jun</del> Complete	<del>Provide indicative costing brackets</del>	<del>Dave Enabnit</del>
4.1	User Survey Questionnaire	28 Jun	Provide comments and amendments, including nil comments, to BLB (CHS)	All
4.1	User Survey Questionnaire	12 Jul	Pass amended version to chair for review	Bodo de Lange Boom
4.1	User Survey Questionnaire	26 Jul	Circulate final draft version for final review by SCWG	Chair
4.1	User Survey Questionnaire	9 Aug	Provide comments on final version to BLB (CHS)	All
4.1	User Survey Questionnaire	9 Aug	Provide draft CL to chair for comment and advise on next actions for publication of questionnaire	IHB
4.2	ToRs and RoPs	<del>7 Jun</del> Complete	<del>Circulate final amended version for comment with draft report</del>	IHB
4.3	Work Plan 2013-2017	<del>7 Jun</del> Complete	<del>Circulate final amended version for comment with draft report</del>	IHB
4.4	Submission to TSMAD and DIPWG	<del>7 Jun</del> Complete	<del>Provide SCWG scope requirement to TSMAD 26 and DIPWG 5</del>	Chair
6	Action List	SCWG 2	Keep IHB informed of progress with allocated actions	All
7	SCWG 2 venue and dates	30 Sep	Circulate an initial letter of invitation	IHB
8	SCWG 1 Draft Report	<del>7 Jun</del> Complete	<del>Draft to be circulated for comment</del>	IHB

8	SCWG 1 Draft Report	21 Jun Complete	All to provide comments on draft report to IHB	All
8	SCWG 1 Final Report	28 Jun Complete	Publish final report	IHB
8	Report to HSSC 5	30 Jun	Draft report for review and amendment by USA and Canada	IHB
8	Report to HSSC 5	30 Jul	Comments back to IHB	Chair, Vice Chair

## **SURFACE CURRENTS WORKING GROUP**

### **Terms of Reference (ToR)**

#### **1. Objective**

To develop standards for the delivery and presentation of navigationally significant surface current information. This information will be used with Electronic Navigational Charts (ENCs) in an Electronic Chart Display and Information Systems (ECDIS) or in an Electronic Charting System (ECS) as an aid to navigation.

#### **2. Authority**

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

#### **3. Procedures**

- a. The WG should:
  - (1) develop S-100 based product specifications for navigationally significant currents, including definitions and content, and display requirements with technical characteristics,;
  - (2) advise IHO on matters concerning the exchange, distribution, display, and use of navigationally significant current data;
  - (3) liaise with relevant IHO WG's to ensure technical feasibility and compatibility of relevant developed proposals.
- b. The WG should work primarily by correspondence, although face to face meetings at the project start is desirable, and thereafter may be convenient when held in conjunction with another convenient IHO forum.
- c. The WG should liaise with other international bodies as appropriate.

### **Rules of Procedure (RoP)**

#### **4. Composition and Chairmanship**

- a. The WG shall be comprised of representatives of IHO Member States (MS), Expert Contributors and accredited Non-Governmental International Organization (NGIO) Observers, all of whom have expressed their willingness to participate, and a representative of the IHB.
- b. Member States, Expert Contributors and accredited NGIO Observers may indicate their willingness to participate at any time. A membership list shall be maintained and confirmed annually.
- c. Expert Contributor membership is open to entities and organizations that can provide a relevant and constructive contribution to the work of the WG.
- d. The Chair and Vice Chair shall be a representative of a Member State. The election of the Chair and Vice-Chair should normally be decided at the first meeting following each ordinary session of the Conference (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.

- e. Decisions should generally be made by consensus. If votes are required on issues or to endorse proposals presented to the WG, only MS may cast a vote. Votes shall be on the basis of one vote per MS represented. In the event that votes are required between meetings or in the absence of meetings, including for elections of the Chair and Vice-Chair, this shall be achieved through a postal ballot of those MS on the current membership list.
- f. If a secretary is required it should normally be drawn from a member of the WG.
- 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 Chair.
- i. Expert Contributor membership may be withdrawn in the event that a majority of the MS 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 Chair 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 Chair may restrict attendance by inviting Expert Contributors to act through one or more collective representatives.

## 10 SCWG Work Plan 2014-2015

## 10.1 SCWG Tasks

A	Define user requirements (IHO Task 2.13.4 refers)
B	Create specification outline and prototype (IHO Task 2.13.4 refers)
C	Liaise with Industry experts on the development of a Product Specification for Dynamic Application of Navigationally Significant Surface Currents in ECDIS (IHO Task 2.13.4 refers)
D	Liaise with TSMAD on surface current matters and develop, maintain and extend a Product Specification for Dynamic Application of Navigationally Significant Surface Currents in ECDIS (IHO Task 2.13.4 refers) and a Product Specification for the transmission of real-time surface current data (IHO Task 2.13.3 refers)
F	Conduct the 2014 and 2015 meetings of SCWG (IHO Task 2.13.1 refers)

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard
A.1	Develop a user survey on needs for surface currents	H	Complete final draft	2013	2013	O	*de Lange Boom All	IHO Resolution 2/2007
A.2	Publish user survey	H	Advertise survey through IHO circular letter	2013	2013	P	*de Lange Boom All	IHO Resolution 2/2007
			Convert draft to survey monkey	2013	2013	P	*Hess	
A.3	Analyse user needs based on survey	H	Produce report with summary of results	2014	2014	P	*Kuilman, Hess, Moreno	
B.1	Create spec outline	H	Create initial outline	2013	2014	P	*Maltais, Ives, Stone, Pronost All	
			Get SCWG feedback	2013	2014	P		
			Make appropriate revisions and produce final outline	2013	2014	P	*Maltais, Ives, Stone, Pronost	

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard
B.2	Build prototype	H	Develop dynamic mock-up of possibilities	2013	2014	P	*Maltais, Ives	
			Demonstrate mock-up to TSMAD and DIPWG	2014	2015	P	*Maltais, Ives	
			Develop dynamic prototype of possibilities	2015	2017	P	*Maltais, Ives	
C	Liaise with industry experts	M	Contact appropriate product developers	2013	2017	P	All	
			Receive feedback	2013	2017	P		
			Revise standards according to feasibility	2013	2017	P		
D	Liaise with TSMAD and DIPWG on surface current matters relevant to the Dynamic Application of Surface Currents in ECDIS	H	Prepare draft scoping requirements.	2013	2013	P	*Hess, All	
			Prepare draft Product Specifications (S10x) for surface current data in S-100.	2013	2016	P	All	

## 10.2 SCWG Meetings (IHO Task C)

Date	Location	Activity
29 – 31 May 2013	Silver Spring, USA	1 <sup>st</sup> Meeting
17 – 19 June 2014	tbd	2 <sup>nd</sup> Meeting

Chair: Kurt Hess

Vice-Chair: Louis Maltais

Secretary: David Wyatt

Email: kurt.hess@noaa.gov

Email: Louis.maltais@dfo-mpo.gc.ca

Email: adso@iho.int

**Surface Current Working Group**  
(2<sup>nd</sup> Meeting June/July 2014 – ???)  
**Agenda – (SCWG 2)**

**1 Opening**

- .1 Opening address by the Chairman – Kurt Hess
- .2 Welcome address by *Host* -
- .3 Welcome by the IHB - David Wyatt

**2 Administrative Arrangements**

- .1 Adoption of the Agenda
- .2 Conduct of the Sessions
- .3 Report on Intercessional Activities including HSSC 5
- .4 Matters arising from SCWG 1/Review of Action Items

**3 Presentation**

- .1 Presentation on

**4 Programme Matters**

*Note:{xx} indicates SCWG Work Plan reference*

- .1 Report on analysis of User Survey questionnaire. {A.3} (Ronald Kuilman)
- .2 Creation of Product Specification outline. {B.1} (Louis Maltais)
- .3 Development of prototype model. {B.2} (Louis Maltais)
- .4 Liaison with industry experts update and future engagement. {C} (Kurt Hess)
- .5 Report on engagement with other IHO bodies (TSMAD and DIPWG). {D} (Kurt Hess)

**5 Any Other Business**

- .1

**6 Review of Action Items**

**7 Venue and dates of the 3<sup>rd</sup> SCWG Meeting**

**8 Draft Report to the HSSC 6 / Draft Agenda for SCWG2**

**9 Closing remarks**