

5<sup>th</sup>IHO-HSSC Meeting

## Report of the Surface Currents Working Group

<b>Submitted by:</b>	Chairman, SCWG
<b>Related Documents:</b>	Report of SCWG1 meeting (available from IHO web site).
<b>Related Projects:</b>	None

<b>Chair:</b>	Kurt Hess, USA
<b>Vice-Chair:</b>	Louis Maltais, Canada
<b>Secretary:</b>	David Wyatt, IHB
<b>Member States:</b>	Canada, France, Japan, Netherlands, Spain, USA
<b>Expert Contributor Organisations:</b>	Briana Sullivan(Center for Coastal and Ocean Mapping, University of New Hampshire, Durham, NH, USA)
<i>see Annex A for full details</i>	

**Meetings Held During Reporting Period**

SCWG1 29 - 31 May 2013, Silver Spring, MD, USA

**Next Meeting**

SCWG2 3-5 June 2014, tentatively planned for Quebec City, QC, Canada

**Work Program**

The 1<sup>st</sup> meeting of the SCWG took place at the Office of Coast Survey (OCS), Silver Spring, MD, USA from 29 – 31 May 2013 and was hosted by the National Oceanic and Atmospheric Administration (NOAA). The meeting was attended by 12 representatives from 5 IHO Member States and the IHB.

SCWG received a comprehensive presentation on 'S-100, focusing on Product Specifications' which generated numerous questions. IHO Resolution 2/2007 was highlighted as a requirement, which detailed a number of actions to be followed by SCWG during the development of an S-10x Product Specification including a User Requirements Survey. A further presentation on 'The proposal for Surface Currents in S-100' was given; this highlighted the activities of the Canadian Hydrographic Service and the products and information already available.

Examples for the display of currents or tidal streams were demonstrated (<http://data.shom.fr>, <http://www.previmar.org> and [http://tidesandcurrents.noaa.gov/ofs/cbofs/currents\\_nowcast.shtml](http://tidesandcurrents.noaa.gov/ofs/cbofs/currents_nowcast.shtml)). 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 what is available or can be created, generally due to a lack of subject knowledge or experience.

The SCWG built a draft questionnaire to survey the user community on their needs and requirements. It was suggested there was also a need to establish individual Member States' capabilities and products as well as user requirements. It was also highlighted that the information model needs to display what the mariner requires to navigate safely and needs to know to make decisions. The user survey also needed to identify additional uses of the data and how the data are to be received.

The SCWG drafted a submission for consideration and comment by TSMAD on the work achieved and the proposed future work direction.

The SCWG reviewed the ToRs and RoPs provided by HSSC 4 and proposed to a number of amendments for submission to HSSC 5 for endorsement. It was proposed the ToRs should be amended to include mention of ENC's and ECDIS, see Annex B.

The SCWG then developed a draft Work Plan (WP) covering the period 2013-2017 for submission to HSSC 5 for endorsement, see Annex C.

**Progress on HSSC Action Items**

N/A

**Problems Encountered**

N/A

**Any Other Items of Note**

N/A

**Conclusions and Recommended Actions**

N/A

**Justification and Impacts**

N/A

**Action Required of HSSC**

The HSSC is invited to:

- a. note this report
- b. approved the suggested amendments to the Terms of Reference and Rules of Procedure, Annex B
- c. re-appoint the SCWG to continue its work under its current Terms of Reference
- d. endorse the draft Work Plan at Annex C
- e. approve the User Survey questionnaire for publication in September 2013

**IHO Surface Current Working Group (SCWG)  
MEMBERSHIP and CONTACTS**

<b>MemberState</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
France	Coastal Hydrodynamic Department - SHOM	Gwenaële Jan	gwenaele.jan@shom.fr
Japan	JapanHydrographic and OceanographicDept.	Tatsuo Komori	ico@jodc.go.jp
Spain	OceanographyDivision, Instituto Hidrográfico de la Marina (IHM),	SalvadorMoreno Soba	smorenos@fn.mde.es
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
IHB	IHB	David Wyatt (Secretary)	david.wyatt@iho.int
Expert Contributor	Centre for Coastal and Ocean Mapping, University of New Hampshire, Durham, NH, USA	Brianna Sullivan	Briana@ccom.unh.edu

## 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	
			Get SCWG feedback	2013	2014	P	All	
			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)**

<b>Date</b>	<b>Location</b>	<b>Activity</b>
29 – 31 May 2013	Silver Spring, USA	1 <sup>st</sup> Meeting
3 - 5 June 2014	Quebec, CA	2 <sup>nd</sup> Meeting

Chair: Kurt Hess

Email: kurt.hess@noaa.gov

Vice-Chair: Louis Maltais

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

Secretary: David Wyatt

Email: adso@iho.int

## 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, ~~for~~ navigationally relevant currents;
  - (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; may meet, although face to face if required 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.