

**9<sup>th</sup> MEETING OF THE IHO-INTER REGIONAL COORDINATION COMMITTEE  
IHO IRCC-9**

**PARAMARIBO, SURINAME - 12-14 JUNE 2017**

**Input from HSSC-8**

<b>Submitted by:</b>	Secretary, HSSC
<b>Executive Summary:</b>	This liaison report outlines the outcomes from the eighth meeting of the Hydrographic Services and Standards Committee (HSSC-8) of interest to the IRCC.
<b>Related documents:</b>	Minutes of HSSC-8 IHO CL 08/2017 – <i>Outcome of HSSC-8</i>

**General**

1. The eighth meeting of the Hydrographic Services and Standards Committee (HSSC) took place from 14 to 18 November 2016 at the IHO Secretariat in Monaco. The meeting was attended by 74 representatives from 22 Member States, nine international organizations accredited as observers and the IHO Secretariat.
2. The minutes of HSSC-8, together with the list of actions arising from the meeting and their current status, are available from the HSSC page of the IHO website ([www.iho.int](http://www.iho.int) > Committees & WG > HSSC), at section HSSC 8. The consolidated HSSC Work Plan 2017-2018 is also available from that page, at section "Miscellaneous".
3. The 9<sup>th</sup> HSSC meeting (HSSC-9) will be held from 6 to 10 November 2017 in Ottawa, Canada. The timing of the subsequent meetings will be adjusted in order to provide timely input to the IHO Council which is expected to meet annually in October. Accordingly, HSSC-10 is expected to take place in Rostock, Germany in May 2018.

**Status of the working groups of the HSSC**

4. The HSSC decided to disband the Data Protection Scheme Working Group (DPSWG) and:
  - to transfer to the S-100WG the development of the protection scheme (component equivalent to S-63 - IHO Data Protection Scheme) of S-100 based-products;
  - to task the ENC Standards Maintenance WG for the maintenance and monitoring of the existing S-63 standard.

The Committee endorsed the continuation of its other working groups.

5. The Committee established a Project Team on the Standards for Hydrographic Surveys (HS PT) whose main task would be to conduct a comprehensive review of IHO Publication S-44 - *IHO Standards for Hydrographic Surveys* in order to develop and propose to the Committee recommendations on the way forward, with the possible creation of a hydrographic surveys working group in the future (see IHO CL 26/2017).

**Consideration of the outcome of IRCC-8**

6. The IRCC Chair reported on the main outcome of the IRCC-8 meeting that were of interest for the HSSC. He highlighted in particular the increasing developments of S-57-based products and charts for the non-SOLAS market and encouraged IHO Member States to share their experience on this matter.

**Issues of interest to the IRCC**

***Ecological Marine Units***

7. In relation with the development of S-122 - *Marine Protected Areas*, the Committee noted the concept of Ecological Marine Units being developed through a public-private partnership led by Esri and the US Geological Survey (USGS) and invited the MSDIWG to consider further the concept.

## **Data Quality**

8. The Committee noted that a major source of discontent from mariners in relation with ENC quality indicators was caused by the fact that many HOs were not populating CATZOC (Category Zone of Confidence) values in the ENCs. The Committee invited the IRCC to remind IHO Member States of the importance of populating ENCs with assessed CATZOC values (1 to 5), noting that the concept of CATZOC values will remain valid for future S-101 ENCs.

## **S-124 - Navigational Warnings**

9. France reported on the activities of the S-124 Correspondence Group (CG) on Navigational Warnings. The Committee noted the report and reiterated its views that the that S-124 is not intended to become an interim solution for providing “equivalent” T&Ps in ENC updates.

## **Undersea Feature Names**

10. HSSC endorsed the TORs of the Undersea Feature Name (UFN) Project Team submitted by the Sub-Committee on UFN (SCUFN) and included liaison with this Project Team as work items in the Work Plans of the NCWG, HDWG and S-100WG.

## **Cooperation with the IHO Stakeholders**

11. The Committee invited the Open Geospatial Consortium (OGC) to report to HSSC and to the MSDIWG on the development of the Discrete Global Grid Systems (DGGS) aiming to replace Coordinate Reference Systems (CRS) and its possible impact on the IHO standards, products and services. The HSSC invited the MSDIWG to continue liaising with the OGC Marine Domain WG on behalf of the IHO.

12. The Comité International Radio-Maritime (CIRM) informed HSSC of its plan to develop and assess a comprehensive, non-generic e-navigation training programme with certification that can be offered to the shipping community. Noting the wide scope of e-navigation, in relation in particular with the provision of Maritime Service Portfolios (which include hydrographic services), the HSSC recommended that the IBSC is informed of the initiative and of its developments in order to investigate the impacts, if any, on standards of competence for hydrographic surveyors and cartographers.

13. The IHO Secretariat reported to the HSSC on the activities of the Technical Committee (TC) 211 - Geographic Information / Geomatics of the International Organization of Standardization (ISO/TC211). The IHO is a Class A liaison member and participates in its standards development and maintenance activities. The ISO/TC211 19100 series of standards and specifications underpins S-100. The Committee noted the report on ISO/TC211 activities affecting HSSC and invited the IHO Secretariat to ensure the liaison with the MSDIWG on this matter. The following activities may be of particular interest to the MSDIWG:

- the development of standards related to geospatial web services (web map, feature, catalogue and tile services) in relation with the OGC;
- activities related to the development of the “Semantic Web” (or Web 3.0) which implies a shift from a “Web of (human readable) documents” to a “Web of (machine readable) data”. ISO 19150-1 provides rules for developing ontologies in the Web Ontology Language (OWL)<sup>1</sup>. ISO 19150-2 supports the semantics of geographic information as part of the Geospatial Semantic Web. In response to this requirement, ISO/TC211 maintains a GitHub repository at <https://github.com/ISO-TC211/GOM> where harmonised OWL files can be downloaded;
- activities related to land administration management, which have led in particular to the agreement that there is a need to review the ISO 19152 Standard - *Land Administration Domain Model (LADM)*.

## **HSSC actions of interest to IRCC**

14. Annex A lists the actions agreed by HSSC-8 that are relevant to the IRCC.

15. Annex B lists the items of the HSSC Work Plan 2017-2018 which are related to IRCC activities.

## **Action required of the IRCC**

16. IRCC is invited to

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<sup>1</sup> Web Ontology Language (OWL) is a Semantic Web language designed to represent rich and complex knowledge about things, groups of things, and relations between things.

- a. **Note** this report;
- b. **Take** any actions as it considers appropriate.

## Annex A

## Status of HSSC actions of interest to IRCC

SUBJECT	ACTION No.	ACTIONS (in bold, action by)	TARGET DATE / EVENT	STATUS
Ecological Marine Units	HSSC8/31	<b>MSDIWG</b> invited to consider the concept of Ecological Marine Units promoted by ESRI.	<b>HSSC report to IRCC-9</b>	This report. See MSDIWG8-01.7h
CATZOC	HSSC8/38	<b>HSSC</b> to invite IRCC to remind IHO Member States the importance of populating ENC's with <u>assessed</u> CATZOC values (1 to 5)	<b>HSSC report to IRCC-9</b>	This report
Coordinate Reference Systems	HSSC8/49	<b>IHO Sec on behalf of HSSC</b> to monitor the development of the OGC Candidate Standard through the Marine Domain WG.	<b>HSSC-9</b>	On-going
Coordinate Reference Systems	HSSC8/50	<b>OGC</b> invited to report to HSSC (and MSDIWG) on the development of the Discrete Global Grid Systems (DGGS) aiming to replace Coordinate Reference Systems (CRS) and its possible impact on the IHO standards, products and services.	<b>HSSC-9</b>	Planned
ECS	HSSC8/52	<b>HOs</b> (NHC Members, USA, ...) to keep HSSC informed on the development of chart services and specifications for non-SOLAS users (leisure market).	<b>HSSC-9</b>	Planned
E-navigation training	HSSC8/60	<b>CIRM</b> to consider informing the IBSC through IRCC on the development of e-navigation training	<b>IRCC-9</b>	
Monitoring of ISO/TC 211 activities	HSSC8/63	<b>HSSC</b> invited the IHO Sec. to continue monitoring ISO/TC211 activities and to inform the MSDIWG of relevant developments.	<b>Permanent</b>	This report
Outreach of marine geospatial information	HSSC8/64	<b>HSSC and MSDIWG</b> invited to pass wider geospatial research topics to the OGC Marine Domain WG for inclusion in its work programme	<b>HSSC report to IRCC-9</b> <b>HSSC-9</b>	This report
MSDIWG and OGC	HSSC8/65	<b>HSSC</b> to invite MSDIWG to liaise with OGC Marine Domain WG	<b>HSSC report to IRCC-9</b>	This report. See MSDIWG8-01.7d

## Annex B

## Items of the HSSC Work Plan 2017-2018 related to IRCC activities

Organ	Work item	Title	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed S-Superseded	Contact Person(s)	Related Pubs / Standard	Remarks
S-100 WG	F1	Liaise with IHO subsidiary bodies and subordinate organs, e.g. WWNWS-SC, NIPWG, ENCWG, SCUFN, etc.	H			Permanent	O	Julia Powell (NOAA)		Establish joint project teams as required and support the UFN Project Team, see Doc. HSSC8-07.1C INF3
NIPWG	J4.1	Liaise with WWNWS Sub-Committee							S-124	Monitor developments of S-124 Correspondence Group
NCWG	A24	Provide guidance on the use of seals of non-IHO members on INT charts	M	Clarification to prevent non-IHO seals and logos being included on INT charts	2014	2017	P	Sec NCWG	S-4	HSSC6-05.5C & F refer NCWG1 Action 46 WG Ltrs 02 & 08/2015. Included in S-4 4.6.0 NCWG2 Action 36: further clarification needed
	B3	Develop guidelines for preparation & maintenance of small / medium scale ENC schemes.	H		2009	2017	C	Sec/Chair NCWG IHO Sec.	S-11A	HSSC7 Action 22 NCWG2 Action 37 Endorsed at HSSC-8 (Action HSSC8/35 refers)
	B4	Prepare a "basic quality assurance check-list template" for use by INT Chart Coordinators/ICCWG in support of the review of new INT charts.	M	Feedback from coordinators due 31/03/2017	2016	2017	P	IHO Sec. NCWG Chair/Sec		IHO CL 64/2015 NCWG2 Actions 38, 39
	H1	Liaise with IHO subsidiary bodies and subordinate organs, e.g. WWNWS-SC, NIPWG, ENCWG, SCUFN, etc.	L		2016	?	O		S-4, INT1, S-32	Support the UFN Project Team, see Doc. HSSC8-07.1C INF3

Organ	Work item	Title	Priority H-high M-medium L-low	Next milestone	Start Date	End Date	Status P-planned O-ongoing C-completed S-Superseded	Contact Person(s)	Related Pubs / Standard	Remarks
NCWG	H2	Prepare a single educative IHO authoritative document addressing the issue of "equivalent" T&Ps for ENCs, in view of its distribution to HOs, Port State Control authorities and mariners after approval.	M	NCWG-3, (ENCWG-2)	2016	2017	P	NCWG Chair and ENCWG Chair	S-66 Stage 2?	HSSC8/28
HDWG	B1	Provide support to NCWG, ABLOS, SCUFN	L	HSSC-9	2016	Permanent	P	Chair	S-32	Actions HSSC8/46, HSSC8/51
ABLOS	C1	Deliver standard training programmes for the CBSC	H		2011	Continuous	O	John Brown		Workshops planned in 2017 in the CBSC Work Plan.