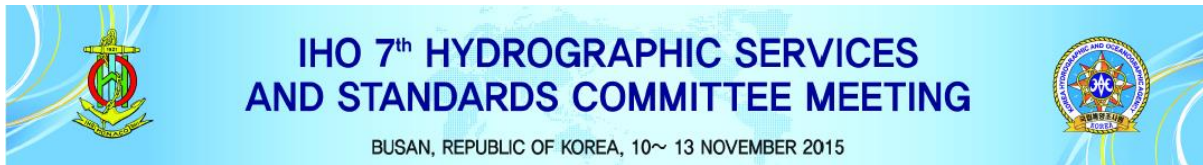


7th MEETING OF THE IHO HYDROGRAPHIC SERVICES AND STANDARDS COMMITTEE (HSSC)

Busan, Republic of Korea, 10-13 November



The seventh meeting of the Hydrographic Services and Standards Committee (HSSC) took place in Busan, Republic of Korea, hosted by the Korea Hydrographic and Oceanographic Agency (KHOA), from 10 to 13 November 2015. Mr Hyun Jung, Director of the Nautical Chart Division, welcomed delegates on behalf of Mr Jae-hyung Ryoo, Director General of KHOA, who could not be present due to unforeseen circumstances.



Welcoming address by Mr Hyun Jung, Director of the Nautical Chart Division, KHOA

The meeting was chaired by Dr Mathias Jonas, National Hydrographer of Germany, and attended by 48 representatives from 20 Member States, the IHB, and six international organizations accredited as observers. Director Gilles Bessero and Assistant Directors Yves Guillam and Tony Pharaoh represented the IHB. As agreed at the previous meeting, a half-day IHO Stakeholders' Open Session was included in the agenda of the meeting and attracted eight additional participants who attended all or part of the HSSC sessions as observers.

The Chair Group, composed of the Chairs of the HSSC and of its subordinate bodies, met on 9 November to discuss the major items on the agenda and prepare consolidated proposals for the further consideration of the Committee.

The Committee reviewed the activities, proposals, and work plans of its subordinate bodies and the decisions of other organs and organizations affecting its work and decided on a number of outcomes. The Open Session, which was held on 12 November, focussed on new survey techniques and crowd-sourced bathymetry and on issues related to the development and implementation of the S-100 framework.



HSSC-7 participants

A summary of the main outcomes is described below:

S-100 and related activities

The Committee acknowledged the work of the S-100 working group (S-100WG) and welcomed the progress in developing and implementing the S-100 framework, noting:

- the publication of Edition 2.0.0 of S-100 - *IHO Universal Hydrographic Data Model*;
- the on-going preparation of supporting documents (including the S-100 interoperability specification for ECDIS, UML models, and data quality models);
- the on-going development, test and implementation of S-100 product specifications both within the IHO and within partner organizations;
- possible additional requirements related to the provision of data services and to the establishment of an S-100 domain for Additional Military Layers (AMLs).

The Committee welcomed in particular the announcement that most operational ice charts will be available in S-411 format by December 2015 and that the first S-411 capable commercial ECDIS is expected to enter service in mid-2016.

The Committee established a project team that will report to the S-100WG to consider the development of a new product specification for the display of under keel clearance management information. The Committee endorsed the revised Edition 1.1 of the S-100 Master Plan, further upgrades of the S-100 Registry and the plan to publish an extended Edition 3.0.0 of S-100 in 2017. The Committee urged the IHO Member States to strengthen their support to the S-100WG and the associated project teams in order to meet the milestones of the work plan.

Noting the current limited expertise in the IHO concerning the portrayal of features in an S-100 based environment, the Committee tasked the Nautical Information Provision Working Group (NIPWG) and the Nautical Cartography Working Group (NCWG) to investigate further portrayal issues, through the use of test bed opportunities.

The Committee noted the intention of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) to submit a proposal for developing a maritime resource name scheme under the S-100 framework.

The Committee agreed that the IHO should take the initiative for developing further the maritime service portfolios (MSP) related to hydrographic services in the e-navigation environment.



HSSC in session

ECDIS matters

The Committee acknowledged the efficient coordination between the IHO and the International Electrotechnical Commission (IEC) in producing a coherent set of revised editions of the key ECDIS related standards thereby addressing the anomalies in the operation of some ECDIS.

The Committee tasked the ENC Standards Maintenance Working Group (ENCWG) to finalize the draft revised new editions of S-58 - *ENC validation checks* and S-66 - *Facts about Electronic Charts and Carriage Requirements* for review and endorsement by correspondence during the intersessional period.

The Committee noted the feedback from industry on the implementation of the new editions of S-52 - *Specifications for Chart Content and Display Aspects of ECDIS* and its Annex A - *Presentation Library for ECDIS*, and agreed to consider postponing the withdrawal of the previous editions, currently planned to occur on 31 August 2016 in accordance with the timeline reported to the International Maritime Organization. The Committee agreed on the benefits of holding an IHO-Industry ECDIS Forum in the context of the implementation of the revised ECDIS related standards and invited the IHB to liaise with the Secretariat of CIRM (Comité International Radio-Maritime) for the possible organization of such a forum.

The Committee expressed its support for the development of industry standards for software maintenance of shipborne equipment and invited the CIRM to coordinate with the ENCWG for the revision of the IHO check datasets for ECDIS and the possible introduction of an annual performance test for ECDIS.

Nautical cartography

The Committee endorsed the proposed changes to Edition 4.5.0 of S-4 - *Chart Specifications of the IHO* and tasked the NCWG to finalize the draft new edition 4.6.0 and forward it to the IHB which will then circulate it to IHO Member States for their consideration and approval. The Committee instructed the NCWG to develop a separate section on ENC schemes in the draft revision of S-11 Part A - *Guidance for the Preparation and Maintenance of International Chart Schemes*. The Committee invited the NCWG to address as a high priority the work item on the future of the paper chart.

Hydrographic Dictionary

The Committee requested the Hydrographic Dictionary Working Group to investigate options and associated resource requirements and timeline to produce and maintain a reference edition of S-32 - *Hydrographic Dictionary*. The S-100WG was tasked to specify its requirements regarding definitions included in the S-100 Registry.

Consideration of the need to establish a Hydrographic Surveys Working Group

The Committee considered the mixed responses from the Member States on the need to establish a Hydrographic Surveys Working Group, following the consultation initiated at its previous meeting. The Committee decided to establish a Project Team to investigate further the need for HSSC activities related to hydrographic surveys, define the scope and the possible tasks that may be considered in that respect and propose recommendations at the next HSSC meeting (HSSC-8).

Preparation of the International Hydrographic Conference or Assembly of the IHO in 2017

The HSSC Chair Group was tasked to prepare the contribution of the Committee to the revision of the IHO Strategic Plan and the preparation of the next pluriannual IHO Work Programme in accordance with the IHO Resolution on the planning cycle.

Relations with Stakeholders

The Committee acknowledged that the relations with stakeholders are a strategic issue to be considered by the HSSC Chair Group in its contribution to the revision of the IHO Strategic Plan.

The Committee noted the areas of common interest between the IHO and the International Cable Protection Committee (ICPC), and welcomed the possible contribution through the ICPC of bathymetric data to the IHO Data Centre for Digital Bathymetry, in the context of the development of trusted crowd-sourced bathymetry. The Committee supported the proposal of the ICPC to develop a Memorandum of Understanding between the IHO and the ICPC.

Contribution of the Republic of Korea

The Committee commended the significant contribution of KHOA to the development of IHO web services through the INTtoGIS project, which aims to develop a GIS-based version of S-11 Part B - *Catalogue of International (INT) Charts*, and the Digital Reference Tool for Cartographers (DRTC). The Committee also warmly thanked KHOA for the excellent meeting arrangements and the outstanding support provided to the participants.

Next Meetings

The next meeting of the HSSC (HSSC-8), will take place from 14 to 18 November 2016, in Monaco. HSSC-9 will take place in Ottawa, Canada in early November 2017. Germany offered to host HSSC-10 in Rostock in November 2018.

More Information

Further information is available on the IHO web site at [Home > Committees & WG > HSSC](#).