

**11<sup>th</sup> MEETING OF THE HYDROGRAPHIC SERVICES AND STANDARDS  
COMMITTEE (HSSC-11)  
Cape Town - South Africa  
6-9 May 2019**

Contribution to the IHO Work Programme 2019	
Task 2.1.1	Organize, prepare, and report annual meetings of HSSC

The 11<sup>th</sup> meeting of the Hydrographic Services and Standards Committee (HSSC) took place in Cape Town, South Africa from 6 to 9 May 2019. The meeting was hosted by the South African Navy Hydrographic Office (SANHO). The HSSC Chair, RAdm Luigi Sinapi (Italy) opened the meeting and invited Captain Theo Stokes, National Hydrographer of South Africa to provide the opening address. After welcoming delegates to the Mother City in all eleven official languages spoken in South Africa, Captain Stokes emphasized South Africa's commitment to providing standards based on hydrographic products and services. He reported on the new rejuvenation programme being undertaken by the SANHO which will include the acquisition of a new hydrographic survey vessel, 3 organic survey motor boats and major upgrades to the production and training facilities within SANHO.

Sixty-three participants representing twenty-four IHO Member States and eleven stakeholder organizations participated in the meeting. The IHO Secretariat was represented by Director Abri Kampfer, Assistant Directors Yves Guillam and Anthony Pharaoh.

Following the resignation of the HSSC Vice-Chair, Mr. Michael Prince (Australia), the Committee elected Mr. Magnus Wallhagen (Sweden) as his replacement. The HSSC Chair congratulated Mr Wallhagen and expressed his appreciation to Mr. Prince for the significant contribution he had made during his term in office.

The Chair of the Strategic Plan Review Working Group (SPRWG) of the IHO Council, Ingénieur général Bruno Frachon (France), reported on the draft Revised IHO Strategic Plan currently under development and the links to be established with the IHO Work Programme of the HSSC through Performance Indicators. Subsequent suggestions were made by the HSSC Chair. The meeting also discussed the format and content of a showcase presentation on S-100 based products and test bed systems to be presented at the 3<sup>rd</sup> session of the IHO Council.



*The participants of the 11<sup>th</sup> Hydrographic Services and Standards Meeting.*

Reports were provided by the Chairs of the HSSC Working Groups and Project Teams. The S-100WG Chair reported on new documents under development which include a guidebook for product specification developers (S-97), the “Interoperability Specification” for S-100 based navigation systems (S-98) and a proposal to implement an “S-100 Technical Readiness Levels” concept for controlling and monitoring the development of S-100 based products. Reports were also provided on the status of the S-101, S-102, S-121 and S-129 Product Specifications. PRIMAR reported on their implementation of the S-100 based security system for the distribution of S-102 and other product data.

The Chair of the ENCWG reported on the S-58 test datasets (available on Github), progress with developing guidance on producing high density bathymetric ENC’s and extensions to the S-63 (IHO Data Protection Scheme) required to address cyber security concerns.

The NIPWG Chair reported on the product specifications that have recently been completed, and those still under development. He reported on the outcomes of the joint IMO/IHO Harmonization Group on Data Modelling (HGDM) meeting (IMO, London – October 2018) and the discussions on the IMO e-Navigation Maritime Service descriptions that fall under the IHO responsibility.

The NCWG Chair reported on the status of IHO publications under its remit, and highlighted issues and options reported in a paper entitled “Future of the Paper Chart”. A survey is proposed to Member States and its outcome will be incorporated into the final version of the report on the future of the paper chart.

The Chair of the DQWG reported on the new data quality indicators under development and highlighted a data quality “decision tree” that is intended to provide guidance on achieving a harmonized implementation of quality parameters for hydrographic data under the S-100 framework. The DQWG was also commended for the development of a new conditional visualization methodology of quality of bathymetric data which now needs to be experimented.

Canada reported on an “S-100 cloud distribution pilot project” which has demonstrated the ability to store S-102 data on a cloud repository, combine it with S-57 data and make it available for use as a web services.

Following a proposal made by the USA, the meeting had fruitful discussions on the possible implementation of MARPOL regulations into a new S-100 based product, still to be developed. A two-step process was agreed to speed up the service to mariners, firstly a revision of the S-57 catalogue of objects and then to consider at a later stage, whether it is appropriate to move forward with a new S-100 based products covering IMO-type regulations.

Reports were also provided on the activities of the Hydrographic Survey Project Team (HSPT), the Tides - Water Level and Current Working Group (TWCWG), the Hydrographic Dictionary Working Group (HDWG) and Advisory Board on Law of the Sea (ABLOS) activities. The HDWG provided a demonstration of the prototype online hydrographic dictionary applications which includes English, French, Spanish and Chinese terms and definitions.



*Towards a multilingual IHO Hydrographic Dictionary using unique reference number for definitions*

All reports and presentations given by the Working Groups are planned to be used in preparation of a strategic paper covering the S-100 Implementation Strategy aiming to provide some guidance to Member States on their transition plans to prepare the future production of S-100 based products.

Presentation on the activities of the following relevant external liaison organizations were provided by the International Maritime Organization (IMO), Comité International Radio-Maritime (CIRM), International Organization for Standardization (ISO/TC211), International Association of Light house Authorities (IALA), Open Geospatial Consortium (OGC), International Cable Protection Committee (ICPC) and Defense Geospatial Information Working Group (DGIWG). There were information papers presented on the phase II of the INToGIS project, the NOAA surface currents reporting facility and increases in the shifting of the magnetic north pole.

The 12<sup>th</sup> HSSC meeting will take place in Bristol, United Kingdom from 11-15 May 2020.