

**6th Meeting of the Nautical Information Provision Working Group (NIPWG)
and
IHO Digital Nautical Publications Stakeholders' Forum
Rostock, Germany, 28 January -1 February 2019**

Contribution to the IHO Work Programme 2019	
Task 1.4.4	Conduct biennial IHO stakeholders' forums (Digital Nautical Publications)
Task 2.1.2.5	Organize, prepare and report meetings of NIPWG
Task 2.5.2	Support the development and implementation of Maritime Services
Task 2.8.1	Maintain S-12, as appropriate - <i>Standardization of List of Lights and Fog Signals</i>
Task 2.8.3	Maintain S-49, as appropriate - <i>Standardization of Mariners' Routeing Guides</i>



The 6th meeting of the Nautical Information Provision Working Group (NIPWG) took place in Rostock, Germany, hosted by the Federal Maritime and Hydrographic Agency (BSH) from 28 January to 1 February. A stakeholders' forum on nautical digital publications with the theme *Presentation of Nautical Publication Information on future S-100 based ECDIS* took place at the Penta Hotel, Rostock, on 29 January.

Mr Thomas Dehling, National Hydrographer of Germany, welcomed the participants and gave an opening address stressing the importance of NIPWG activities for the evolution of navigational concepts and systems. The meeting was chaired by Mr Jens Schröder-Fürstenberg (Germany). Twenty-seven delegates from 15 Member States (Brazil, Canada, Denmark, Estonia, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Republic of Korea, Spain, United Kingdom and United States) and seven expert contributors (Anthropocene Institute, IEC, KRISO, National Taiwan Ocean Centre, Portolan Sciences, United Navigation, University of New Hampshire) attended the meeting. Nine other stakeholders (Bimco¹, CIRM², Furuno, ICS³, IHMA⁴, Intertanko⁵, SevenCs, Chartworld, HS-Wismar⁶), participated in the forum, either being physically present or through video teleconference links. The IHO Secretariat was represented by Assistant Director Yves Guillam.

The NIPWG Chair opened the stakeholders' forum introducing the challenges, such as data quantity, data portrayal, data access, data governance and data interoperability, which the working group are facing before being able to move forward and test the initial provision of digital nautical information under the S-100 framework. In response, all the presentations delivered by the stakeholders provided a better understanding on how the provision of S-100 based products should be done and could enable the evolution of navigational concepts (front-of-bridge ECDIS folio versus electronic back-of-bridge folio, overlays, autonomous shipping, etc.). The need for the regulations to evolve in parallel was acknowledged as well as the obstacles faced by the industry if a consistent system "package" (standards, updated nautical products to be used in conjunction with S-101 updated ENC's and data governance and dissemination) was so far not proposed by the IHO.

The meeting reviewed the good progress made on the development of the S-12x product specifications that are under the remit of NIPWG. The support provided by the IHO Special Projects Fund was acknowledged, without which no progress could be done due to the complexity of these products. It was subsequently agreed that it would now be useful to initiate prototyping the implementation of existing S-12x products in a S-100 based environment in order to explore data flows, governance architecture and service delivery mechanism. This bottom-up approach would also be very beneficial to the development of the implementation strategy for the regular and harmonized production and

¹ Baltic and International Maritime Council.

² Comité International Radio-Maritime.

³ International Chamber of Shipping.

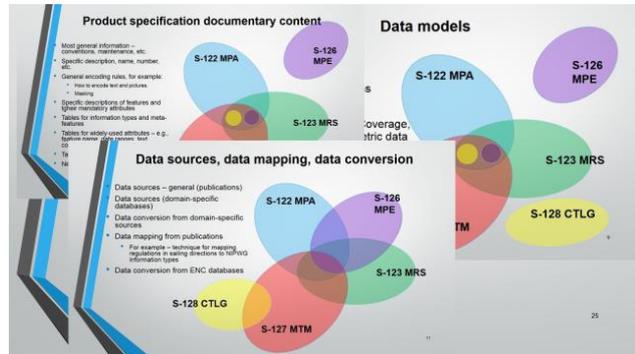
⁴ International Harbour Masters Association.

⁵ International Association of Independent Tanker Owners.

⁶ University of Applied Sciences, Technology, Business and Design.

dissemination of S-100 based products. An architectural display of S-100 based products was presented and will be refined for further discussions at HSSC.

While addressing the various complex issues relating to these product specifications whether they are in progress, under development or adopted, questions were raised on the similarities and differences between them and the subsequent need for some wise harmonization process for both the product specifications and data sets. An initial comparison was also made between S-121 and S-122 data sets and encoding concepts. A couple of options were also discussed to ensure alignment and synchronization, without duplication, between products and features contained in S-201 versus S-125 and S-101.



The representative of Canada, also Chair of the S-124 Correspondence Group (Navigational Warnings), gave a status report of the development of the product specification, presented the tests carried out in Canada, both by the Hydrographic Service and the Coast Guard.

The participants were informed on the outcomes of the workshop on the development of the XML structure for Notices to Mariners (NtM) that took place in Genoa, Italy in September 2018. It was agreed that INT-1 symbols should be available in SVG format with a unique identifier and a text description in a symbol registry.

The 7th meeting of the NIPWG is scheduled to be held in Saint-Petersburg, Russian Federation, from 25 to 29 November 2019, and the 8th meeting, in September 2020 in France.



NIPWG-6 participants in Rostock, Germany