

### **3<sup>rd</sup> Meeting of the Nautical Information Provision Working Group (NIPWG) Busan, Republic of Korea, 5 – 9 December**

The 3<sup>rd</sup> meeting of the Nautical Information Provision Working Group (NIPWG) took place in Busan, Republic of Korea, from 5 to 9 December, hosted by the Korea Hydrographic and Oceanographic Agency (KHOA).

The NIPWG is the IHO working group reporting to the Hydrographic Services and Standards Committee (HSSC) that is responsible for the development of specifications in support of the e-navigation services that are intended to provide mariners with harmonized up-to-date information on integrated displays in the future.

The meeting was chaired by Mr Jens Schröder-Fürstenberg (Germany). Thirty-one delegates from 13 Member States (Finland, France, Germany, Italy, Japan, Netherlands, Norway, Republic of Korea, Russian Federation, Spain, Sweden, United Kingdom, United States) and four stakeholder organizations (Anthropocene Institute, Korean Hydrography and Research Association, Korean Research Institute of Ships & Oceans Engineering, University of New Hampshire) attended the meeting. The IHO Secretariat was represented by Assistant Director Yves Guillam. Mr Lim Chaeho, Director of KHOA Nautical Chart Division, welcomed the participants on behalf of the Director General of KHOA, stressing the importance of the activities of the NIPWG for developing future e-navigation products and services.



*Participants of the NIPWG-3 Meeting*

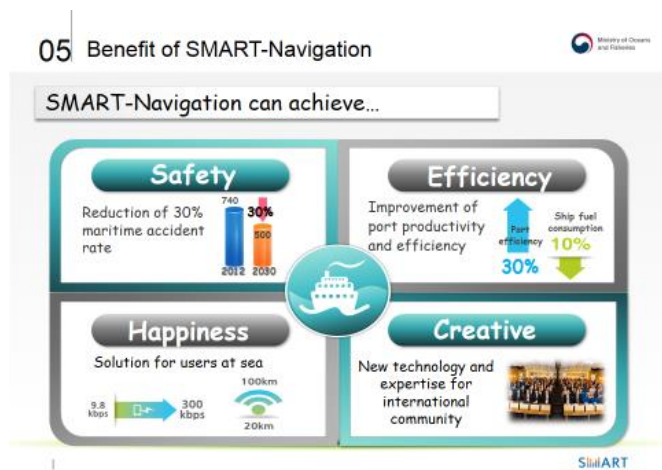
The meeting considered the continuing development of S-100 based product specifications assigned to the NIPWG. The course of actions was adjusted in accordance with the decisions made, and priorities given at the eighth meeting of HSSC two weeks earlier. It was agreed to put on hold and benchmark S-126 (*Physical Environment*) with existing features of physical characteristics of other product specifications such as S-111 (*Surface Currents*), S-411 (*Ice Information*) and S-412 (*Weather Overlay*) which are developing at a faster pace. It was also decided to speed up the finalization of S-122 (*Marine Protected Areas*) and S-123 (*Radio Services*) product specifications through out-sourcing, due to the lack of resources and expertise available in the group since some expert contributors from industry had been obliged to step down recently.

Following a presentation on the test strategy for S-100 based products, the working group decided to develop and maintain a matrix of interoperability issues based on the results of testbeds and experimentations such as the sea trial of S-101 (*Electronic Navigational Charts*), S-124 (*Navigational Warnings*), S-111 and S-112 (*Dynamic Water Level Data Transfer*) conducted by KHOA in October 2016. The NIPWG also started to review the IHO Resolutions in M-3 that are under its remit. Proposals to amend them will be made through the normal procedure via the HSSC except for IHO Resolution

4/1967 as amended (*Submarine Cables*). Noting the vital importance of submarine cables, a revised text developed through the efficient relationship established by NIPWG with the representative of the International Cable Protection Committee (ICPC) will be submitted directly by Germany, as Chair of both the NIPWG and the HSSC, as a proposal to the 1<sup>st</sup> Session of the Assembly.

The NIPWG considered the objectives and the preparation of the workshop on the visualization of nautical information that will be kindly hosted by the University of New Hampshire, United States, from 22 to 26 May 2017. The meeting agreed that it would be a good opportunity to enlist representatives from the Nautical Cartography Working Group (NCWG) so they can share their expertise on portrayal issues. Practical examples illustrating of the problem of depicting uncertainty in some nautical information (“fuzzy” areas) will be collected prior to the workshop.

During the meeting, several members provided top level presentations of development in their countries that have direct links to the development of e-navigation. Norway provided an update on the development of the digital application named “the Norwegian Pilot”, while the Republic of Korea introduced the SMART project, which aims to demonstrate the benefits of the e-navigation concept.



NIPWG Members were also invited to liaise with their national International Maritime Organization (IMO) representatives to seek support for the activation of the IMO/IHO Harmonization Group on Data Modelling. All agreed that more guidance was required to ensure the proactive development of the IMO’s Maritime Service Portfolios within the NIPWG.

All the documents considered at the meeting are available on the IHO web site at: [www.iho.int](http://www.iho.int) > Committees & WG > NIPWG > NIPWG-3.

The 4<sup>th</sup> meeting of the NIPWG is scheduled to be held in conjunction with the workshop on the visualization of nautical information at the University of New Hampshire, Durham, NH, United States from 22 to 26 May 2017.