S-124 progress

Development of a S-100 Product Specification for Navigational Warnings

| Submitted by: | Leader of the S-124 Correspondence Group (Mr Yves Le Franc – France) |
|---------------------------|---|
| Executive Summary: | The S-124 CG is a subsidiary group of the IRCC/WWNWS-SC. |
| - | The objective is to develop a S-100 PS for Navigational Warnings (NW) to improve |
| | dissemination and integration within bridge systems and shore systems via a digital |
| | format. This paper reports on the work of the S-124 CG since HSSC6. |
| Related Documents: | On IHO/IRCC/WWNWS-SC/S-124 CG web pages |
| Related Projects: | E-navigation, Modernization of GMDSS, Maritime Service Portfolio (MSP). |

Membership

The Korea Research Institute of Ships and Ocean Engineering (KRISO) and Turkey joined the CG. The members (13) are: Australia Denmark (Danish Maritime Authority - DMA) France Greece Japan New-Zealand Norway, Swed

Australia, Denmark (Danish Maritime Authority - DMA), France, Greece, Japan, New-Zealand, Norway, Sweden, Turkey, United-Kingdom, United States, CIRM and KRISO.

Activities since November 2014 - points to be considered

The CG carried out its works according to the program announced.

The background of the modernization of the GMDSS has been considered in addition to the e-navigation background. On the basis of these elements, the CG reviewed the users' needs and the gaps analysis for each actor. This will insure that the design of the S-124 is in-line with IMO background expectations. The results of the quality survey conducted by the WWNWS-SC among the mariners in 2013-2014 was also taken into account.

The detailed scenario¹ of the current processing on board of the NWs received via NAVTEX (what the devices do, what the user does) was established. This allows a better understanding of the users' problems and their origins.

It is also used to imagine solutions. So, the first version of a new scenario² based on digital NWs and new functionalities was written. The goal is to identify some particular requirements to refine the NW UML model for the implementation of the solutions (ongoing). The new scenario of the processing of S-124 NWs would also contribute to the draft of future standards for systems on board (Integrated Navigation System).

Early in 2014, the DMA brought an initial NW model developed within the ACCSEAS project. KRISO and Jeppesen has also developed a NW model. KRISO joined the CG in November 2014. DMA and KRISO-Jeppensen worked together to harmonize their models. The objective of this important task is to obtain a unique model that responds to the requirements and expectations identified. The completion of the first draft version of the harmonized model was announced during NIPWG1 (July 2015).

¹

http://www.iho.int/mtg_docs/com_wg/CPRNW/S100_NWG/2014/Shipboard%20detailed%20scenario%20relat ed%20to%20Navtex%20NW%20VI.pdf

² <u>http://www.iho.int/mtg_docs/com_wg/CPRNW/S100_NWG/2015/S-124NW-CG-05_2015-Shipboard_detailed_scenario_with_solutions.pdf</u>

This model, named "S-100 KRISO-Jeppesen harmonized model with input of DMA"³ is now the model on which the S-124 CG works for NWs (review with test data samples, review of the inclusion of the requirements...). Some of the testing will take place in EfficienSea2.

The model is a combined model for NWs and T&P NMs. Such a model is justified by the similarities between the information contained in NWs and in T&P NMs which contribute to the same purpose: give notice to the mariners of an uncharted event, even if these products correspond to different data flows.

The S-124 CG is in favor of this combined model which needs to be considered by other appropriate WGs of the IHO.

The combined model and its context suggest a global approach for the review of the provision of nautical information in the perspective of a combined hydrographic MSP.

Thus, the NIPWG (NIPWG1) took the action to consider how to implement this global approach.

The S-124 CG is in contact with IALA WGs developing S-100 PS related or potentially related to NWs (S-201 - Aids to Navigation, S-230 Application Specific Messages...).

Way ahead

The group's work will continue schematically on the following topics:

- Refine requirements and NW modelling.
- Define the portrayal of the NW in relation with other relevant organizations.
- Provide outputs toward other relevant organizations (INS performances standard, Guidelines for the provision of NWs, consistency with others products and services...) and exchange.
- Draft the PS
- Proceed to test-beds in relationship with projects.
- Reach a consensus on the draft S-124 by demonstrating its contribution to the development of solutions and its feasibility (impact on the stakeholders) including the scenario of transition.
- Submit S-124 PS for endorsement.

The tentative schedule in Annex gives the approximate periods during which the work will focus on the different items.

Action Required of the HSSC

The HSSC is invited to note the report.

³ <u>http://www.iho.int/mtg_docs/com_wg/CPRNW/S100_NWG/2015/S-124NW-CG-15_2015-S-100%20KRISO-Jeppesen%20harmonized%20model%20with%20input%20from%20DMA.pdf</u>

Tentative schedule

| Work Item | Date start | Date end | Comments |
|-----------------------------|------------|-----------|-------------------------|
| Define a work program | | | done |
| Review needs, gaps and | Feb. 2014 | Nov. 2014 | done for shipboard user |
| requirements | | | |
| Identify basic functions | Dec. 2014 | Dec. 2015 | on going |
| Improve UML model | Feb. 2015 | Jul. 2016 | on going |
| Define the portrayal of the | 2016 | 2016 | |
| NW | | | |
| Tests | 2015 | 2017 | |
| Contribute to draft | 2016 | 2017 | |
| performances standards | | | |
| Reach a consensus | 2016 | 2017 | |
| (impact on | | | |
| stakeholders,) | | | |
| Submit S124 for | | 2017 | |
| endorsement | | | |

Annex A