For NIPWG5

Report of the S-124 Correspondence Group of the WWNWS Sub-committee

submitted by Canada (CCG)

S-124 Product Specification progress since HSSC8



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S-100WG3, Singapore 10 – 13 April 2018

- China, INMARSAT and Iridium joined the CG during the period
- The members are Australia (AMSA), Brazil, Canada (CCG), China, Denmark (DMA), France, Greece, Japan, New-Zealand, Norway, Republic of Korea, Sweden, Turkey, United-Kingdom (UKHO), United States (NGA&USCG), CIRM, KRISO, INMARSAT and TRANSAS.



Introduction

- S-124 CG is focused on the development the S-100 ProdSpec for the Navigational Warnings (NWs) of the World Wide Navigational Warning Service (WWNWS)
- The WWNWS is part of the MSI service of the Global Maritime Distress and Safety System (GMDSS) – The WWNWS sub-committee monitors and guides the WWNWS, studies and proposes new methods to enhance the provision of Maritime Safety Information
- NAVAREA, Sub-area and coastal warnings produced by Coordinators and currently broadcast via SafetyNET and NAVTEX in a TELEX format
- S-124 should be also suitable for local NWs
- MET forecasts and MET warnings are not in the perimeter
- S-124 will be a technical component of the e-navigation and of the modernization of the GMDSS



Principal activities and achievements

- Modelling, following the encoding exercise in 2016 and the comments received:
 - Model explained in a better manner
 - Proposals to amend the draft S-124 Product Specification
 - Replies of members with various inputs, including
 - Authors backgrounds
 - DMA's contribution based on the NIORD implementation
 - Inputs of great value for clarifying some aspects and for progressing in the choice of modelling options.
 - Many points to be consolidated on the way to enhanced warnings
- →Other rounds are required to stabilize the model with the advice of the S-100WG.
- → The draft Product Specification will evolve



New version of the data model

 New version is out for review among the S-124CG membership, and testing in the STM Validation and SMART Navigation Projects.

- Hope to seek S-100WG input after initial CG review.





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Some of the points to be consolidated

- Use of the Maritime Resource Name (MRN) concept:
 - MRN for Unique Id of a NW
 - MRN for linking the NW and the object subject of the NW (e.g. A NW related to a dysfunctional AtoN identified by its MRN)
 - Need to consider how S-53 ID can be harmonized with S-124 ID.
- Use of HTML for a better presentation of the textual information (description of the danger), may require a new type in S-100.
- Harmonization of short legends to be displayed on ECDIS ("light unlit", "drifting container", "firing exercise"...)
- Shared mechanism for managing the NWs status (in-force or cancelled) on the client side according to the information provided by



the Coordinator

• S-124 should target ECDIS but also other clients (websites, apps, etc.)



- A NW will be issued simultaneously in S-124 and in the current form (S-53, likely generated from S-124 data)
- The S-124 form and the S-53 form should provide the same information to the end-user



EfficienSea2 and NIORD

- EfficienSea2 is testing S-124 NWs via the demonstration system <u>NIORD</u> (Nautical Information Directory) of the DMA
- NIORD's model for warnings is close to the draft S-124 (not strictly the same)
- DMA offered that coordinators of the S-124 CG use NIORD on the test server to explore the NWs production side
- A very good idea of what producing systems based on S-124 will be and so, the coordinators can better understand the S-124 model and its impacts on them
- The human interface is simple even if the data model is complex
- → NIORD demonstrates that producing solutions will be available



NIORD



Navigational Warnings



Denmark. The North Sea. EK R 53 Juvre. Firing exercises. Warning. 25 October 2017, hours 09:55 - 14:30. 26 October 2017, hours 09:55 - 14:30. 27 October 2017, hours 09:55 - 11:25. Firing exercises. Warning. In connection with firing practices, a temporary prohibited area is established on the sea off the firing practice area at position: • 55° 12'N - 008° 31'E. During firing practices, all navigation, anchoring and fishing are prohibited in the area. Information about firing practices is given by displaying the following signals on the signal masts at positions 1) - 5) from one hour before the start of the firing practice and until its end: a) By daylight, a sphere is hoisted on each of the signal masts and a white, flashing light is lit (60 flashes per minute) on the control tower at position 5). b) In darkness, a fixed, white light is lit on each of the signal masts. 1) 55° 10,26'N - 008° 30,54'E signal mast 2) 55° 10,49'N - 008° 32,29'E signal mast 3) 55° 11,00'N - 008° 33,62'E signal mast 4) 55° 11,54'N - 008° 33,62'E signal mast 5) 55° 11,45'N - 008° 33,58'E control tower Information about firing practices is available in the daily working hours from Firing Safety Element in Camp Oksbøl, tel. +45 7283 9550, or over VHF radio. Call name: Fly Rømø. Call channel: 16. Conversation channel: 11. The radio is open from one hour before the start of the firing practice and until its end. During firing practices the safety office can be contacted on tel. +45 7375 5219 / +45 2148 7290. 60, 94 (INT 1411), 93 (INT 1044). (DC DNK November 2016, Published 25 October 2017)



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- Other projects developing NW systems are ongoing (mainly web based systems), built on DMA's solutions; In Canada and France.
- → The S-124 CG will help in sharing experiences and solutions



- An objective of MSP is to reduce the load of work of the users and the risks of errors via digitalized information and services
- The delivery of data should be more machine-to-machine
- ➔ A domain where harmonization is also needed, in addition to the formatting of the data via ProdSpec (eg S-124)
- NWs services (MSI/MSP 5) will be implemented by Technical Services able to deliver S-124 data from the coordinator's system (machine) to clients systems (machines)



Technical Services





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E-navigation projects support

- The e-navigation projects are essential to the development of S-124. They provide the necessary experience in implementation and testing while the draft standards prepare the basis of harmonized solutions.
- Some experts involved in projects and in S-124 CG looked for ways to further help the S-124 development. They have come up with is a set tests that are important to verify some of the assumptions with S-124.
- Tests will verify the critical points along all the chain, from the production of the NW to its display in the navigation system. The SMART Navigation project and the STM Validation project have agreed to run the tests and to report the results to the S-124 CG.



Portrayal of NWs

- The CG was involved in the IHO response to the new IMO draft Module F of the Performance Standards for INS coordinated by China.
- MSC 98 gave the priority to the development of the "Guideline for the Harmonized display of information received via communication equipment".
- NIPWG coordinates the IHO contribution to the related correspondence group led by Norway. The S-124 CG was in liaison with the NIPWG on this important subject: S-124 and the Guideline should be aligned.
- These items will contribute to define the portrayal of the NWs. This matter will be addressed when the model is stabilized.



Yves Le Franc (France) has lead the CG since it has been created in October 2013. He is now much less available for this task, and therefore asked to be replaced. Eivind Mong (Canada) took over as chair in February 2018.



Thank you for your attention