13th Meeting of the Hydrographic Services and Standards Committee

Report of the S-124 Project Team
Eivind Mong (chair), Canada
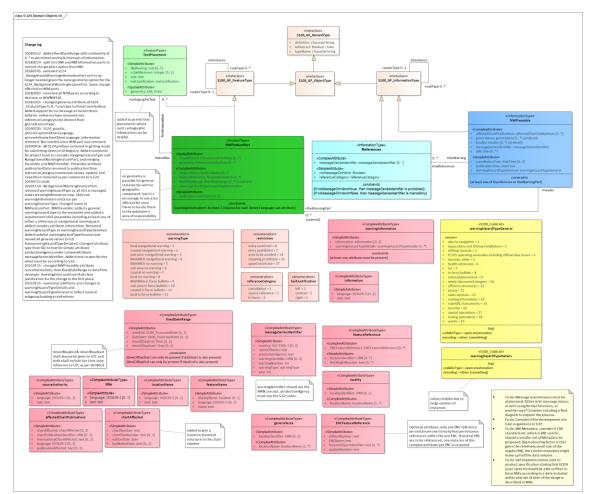
Agenda Item 07.1B

HSSC-13, VTC Event, 3 – 7 May 2021

- Focus is on finalizing the data model, Feature Catalogue and GML schema.
- Specifically the definitions of the model elements are being drafted and made ready for Project Team review.
- A large number of warning type additions were made to the data model and it is taking time to work through these.
- Doing such work by VTC is tedious and takes several rounds of discussions to finish the draft.

- Definitions must be finalized before a feature catalogue and next version of GML schema can be created.

- Looking for help within membership to start drafting portrayal catalogue, but anticipate that work is dependent on Feature Catalogue for rules creation.

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- List is a recommended grouping of general to detailed warning types intended for information providers.

- Should serve as a filter for what options should be available once a general category has been chosen.

TypeGeneral	TypeDetails
	object adrift
newly discovered dangers	sandspit
	shallow depth reported
	shoal
	submerged fish net
	submerged object
	uncharted rock
	dangerous wreck
	subsurface mooring
	subsurface pipeline
TypeGeneral	**TypeDetails**
offshore structures	drill rig on location
	drilling site operations
	renewable energy device/farm
TypeGeneral	**TypeDetails**
ECDIS operating anomalies including official data issues	nil
TypeGeneral	**TypeDetails**
piracy	nil
TypeGeneral	**TypeDetails**
radio services	EGC MSI service
	HF service
	MF service
	MSI Services
	NAVTEX
	VHF service
TypeGeneral	**TypeDetails**

	light operating properly,
	sector light, sector obscured
Beacon	
beacon missing	
beacon damaged	
lighted beacon, light unlit	
lighted beacon, light unreliable	
lighted beacon, light not synchronized	
lighted beacon, light damaged	
beacon topmark missing	
beacon topmark damaged	
beacon daymark unreliable	
floodlit beacon, unlit	
beacon restored to normal	
Leading lights and beacons	
front leading/range light, light unlit	
rear leading/range light, light unlit	
front leading/range light, unreliable	
rear leading/range light, unreliable	
front leading/range light, light range reduced	
rear leading/range light, light range reduced	
front leading/range light without rhythm	
rear leading/range light without rhythm	
leading/range lights out of synchronization	
front leading/range beacon, unreliable	
rear leading/range beacon, unreliable	
front leading/range light is operating properly.	
rear leading/range light is operating	

- The Project Team is investigating multi language options for S-124 datasets.
- It has been noted that main product language being English has been a sort of convention in IHO S-xx products, although no IHO resolution was found to officialise this.
- Local Navigational Warning services around the world may only issue warnings in local language, for example French.
- This has potential impacts on S-124 development and what constitute a compliant S-124 dataset.

- Datasets contain all relevant languages, means;

  - Bigger files and a more complex data model.
  - Benefits include only one dataset per NAVWARN and a simpler distribution model.
  - Easy to say that all S-124 can be used in ECDIS.
  - This approach may add additional work to local warning services if English is required.

- Datasets contain only one languages, means;

  - Smaller files and a simpler data model
  - More files and more complex distribution model where language must be selected and remembered for the specific user (to support push delivery), at least during the entire voyage.
  - Impacts on ECDIS and ECS are unclear and being investigated.
  - An option is that non-English local Navigational Warning service may not be usable for ECDIS.

➢ S-124PT2 VTC is scheduled for June 29-30 and will include a discussion on this topic with the aim of formulating a recommendation for WWNWS to endorse as the way forward.

S-100 ED. 5.0.0

- There are several dependencies on S-100 Ed. 5.0.0 for the S-124 product specification.
  - Metadata
  - Portrayal
  - feature catalogue changes.
- Chair is participating in the work to keep S-124 product specification aligned.

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MARITIME CONNECTIVITY PLATFORM

- Supported by IALA eNAV committee, Maritime Connectivity Platform (MCP) Consortium and OFFIS, a S-124 technical service description has been drafted in line with IMO Maritime Services and IALA G1128.

- The draft documents are in form of a service specification, a technical design and an information exchange instance description for a web service.

- Documents can be a useful example for other S-100 based services.

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SECURE EXCHANGE AND COMMUNICATION OF S-100 BASED PRODUCTS (SECOM)

- Chair is participating in the IEC TC80 Working Group 17, in the development of IEC 63173-2 Maritime navigation and radiocommunication equipment and systems – Data interface – Part 2: Secure exchange and communication of S-100 based products (SECOM).

- Chair is support the work of creating an example Navigational Warning service within the SECOM documentation.

- SECOM is viewed as a very promising candidate solution for the distribution of S-124 Navigational Warnings since it is a communication function ships will likely have anyhow for route exchange.

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CONCLUSION

- S-124 development is progressing but has slowed due to ongoing pandemic.

- S-124 is on target for a version 1.0.0 in late 2022.

- HSSC is invited to note this report and comment as appropriate.