

## Paper for Consideration by HSSC

### Update on activities of S-124 Correspondence Group

<b>Submitted by:</b>	S-124CG Chair (Eivind Mong, Canadian Coast Guard)
<b>Executive Summary:</b>	This paper reports on the work of the S-124 CG since HSSC9.
<b>Related Documents:</b>	On IHO/IRCC/WWNWS-SC/S-124 CG web pages
<b>Related Projects:</b>	E-navigation, Modernization of GMDSS, S-100

### Introduction / Background

#### Membership

The members of S-124CG are: Australia, Brazil, Canada, China, Denmark, France, Greece, Japan, New Zealand, Norway, Republic of Korea, Sweden, Turkey, United-Kingdom, United States, CIRM, Furuno, KRISO, INMARSAT, IRIDIUM, and TRANSAS.

Furuno has joined in April 2018.

Yves Le Franc (France) has lead the CG since it has been created in October 2013. As he is now much less available for this task, he asked to be replaced. Eivind Mong (Canada) took over as Chair in February 2018. Yves will continue to represent France within the Correspondence Group.

#### Analysis/Discussion

Data model review has concluded and comments adjudicated to update the data model. This has resulted in an updated model; Annex A of this report includes the abbreviated version for information. The new model is now out for review by the CG membership.

Significant changes include;

- Improvements to facilitate the shared mechanism for managing the NWs status (in-force or cancelled) on the client side according to the information provided by the Coordinator.
- Implementation of the MRN concept as the globally unique identifiers (GUID).
- Ability for short legends to be displayed on ECDIS.

New version has added definitions to every component of the data model and has enhanced annotations in the model to attempt to better explain the use of the various model parts.

The collaboration with STM Validation and SMART Navigation projects continue, these two projects have gracefully offered to test the S-124 data model. Therefore, there have been regular meetings with both project teams to discuss model modifications. There has also been cooperation with them in modifying their GML schema to align to the S-124 data model. This schema is specifically created for the two projects and is therefore deviating in some minor areas from the S-124 data model. The overall concepts should be identical and ready for testing and future reports.

Several members of the CG, including the Chair, attended NIPWG5 where the development of S-124 was reported on as well as a demonstration of the Canadian Navigational Warning (NAVWARN) Issuing System was given. This demonstration also highlighted the value in the exchange of lessons learned between similar projects in Denmark and France. Many synergies were observed in the discussions, such as experiences from data modelling, the use of GML for data exchange, the review of IHO Resolution 7/2009 (time reference), the discussions into a need for a XML format to exchange NtM information for paper products, which in many ways resembled a variation of S-124 NW. Such discussion items highlighted the close relationship between NIPWG and S-124CG.

Several members of the CG, including the Chair, attended S-100WG3. A status report of S-124 development was given. A joint paper with NIPWG chair was submitted requesting change in S-100 Metadata to better accommodate S-124 and other product specifications. Many of the papers presented have direct impact on the ongoing development of S-124, such as GI Registry updates and infrastructure developments supported by KHOA. Direct discussions with ECDIS OEMs were valuable. Lessons learned will be used in the S-124 development going forward.

### **Upcoming Plans of the Correspondence Group**

With the data model reaching a more mature stage, the S-124CG can start working on the other parts of the development of the S-124 Product Specification.

Continue work on writing the S-124 Product Specification documents utilizing the template available in S-100 Part 11. This will include a feature catalogue and some form of portrayal guidance. It is the intent of the Chair to utilize the IHO Registry infrastructure and those modifications being planned are being followed with keen interest.

More revisions to the data model are to be expected following the recently started review of the new version of the data model, as well as, from the feedback and lessons learned after the STM Validation and SMART Navigation test beds.

It is noted that the feedback from these test beds will be essential for the S-124CG to continue developing the Navigational Warning information maintenance routine.

S-124CG will also work on the design of standardized Technical Services for S-124 data delivery (machine to machine) within the envisioned Common Shore-based System Architecture (CSSA), and here too it is hoped that work in the test beds can be leveraged.

### **Action Required of [HSSC] [Relevant HSSC WG]**

The HSSC is invited to:

- a. note this report

# Annex A – S-124 Data Model

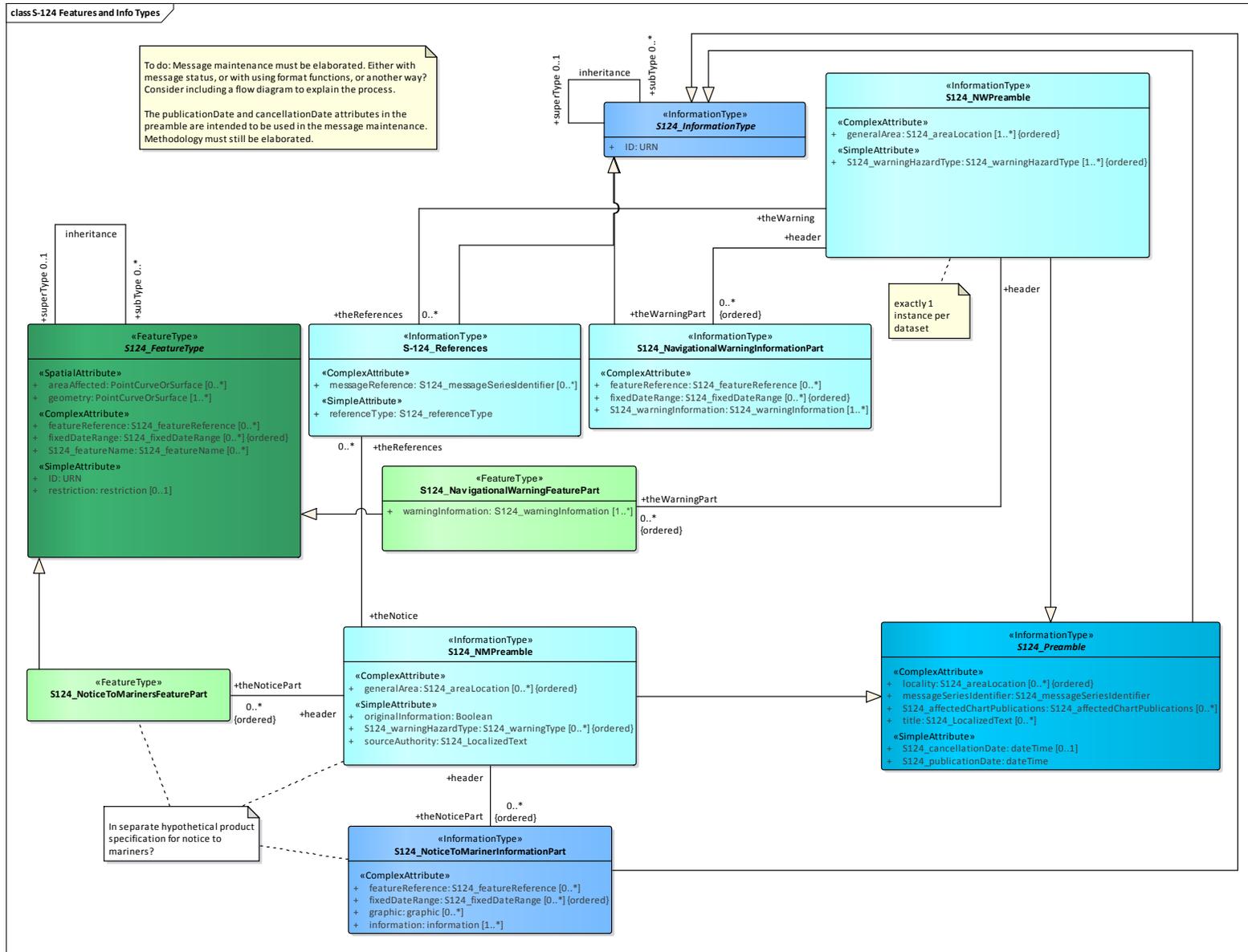


Figure 1 Abbreviated S-124 data model