S-102 Portrayal Catalogue Discussion

29 June 2023 1300-1400 UTC (VTC)

Summary

Several members of the S-102 Project Team met via VTC to discuss Portrayal Catalogue (PC) development and to determine our next steps in that process.

Attendees

Lawrence Haselmaier, USA, S-102 PT Chair Anna Wall, SWE, S-102 PT Secretary Andy Talbot, GBR Daniel Rohde, DEU Mathias Palm, DEU Odd Aage Føre, NOR Topi Fippula, FIN Anthony Klemm, USA Raphael Malyankar, Portolan Sciences Meredith Payne, Esri

Discussion Points

- Regarding prior efforts, where are we closest to a functioning PC?
 - O What further development is needed?

Raphael: Noted that he didn't see the working package from NIWC on the GI Registry. Lawrence has action to distribute.

(After it is distributed, we will be better able to assess how far along development has progressed/what else is needed.)

• Should we reach out to industry and solicit for what portrayals they are using?

Anthony: Yes, it would be valuable to leverage their work and to obtain their feedback. (Lawrence agrees.) Anthony has action to loop Lawrence into conversation with SealQ, Trelleborg, etc.

What decisions pending before S-102PT at-large could impact PC development?

Raphael: Uncertainty's effects on portrayal

Raphael: (not actually pending, but worth mentioning here) Sun-Illumination isn't accommodated in S-100. Lawrence has action to raise issue with S-102PT.

Topi: As an aside, when S-102 changed from negative down to positive down, it may have rendered sun illumination angles incorrect. Lawrence has actions to investigate/remedy.

Raphael: Pick Reports aren't defined in S-102. Lawrence has action to raise issue with S-102PT as to whether/how we should use Pick Reps.

• Julian (via correspondence): "One of the major concerns at the Shom is to base the portrayal of the S-102 on that of the S-101. If the S-101 is not updated as quickly as the S-102 (particularly in the case of moving bottoms), is it possible to have an overlap of 2 different portrayals that do not give the same information? Shouldn't these two aspects be separated?"

Anthony: Great question—it is important to clearly relate to the mariner which sources are most up-to-date.

Raphael: Two concerns are present here. (a) For the visual aspect, the S-98 interoperability catalogue could handle suppression of the (in this case, S-101) visual elements when appropriate. (b) Another concern is how such a situation might cause a shift in the safety contour. Such an issue would be much more pronounced at low resolutions than at very high ones.

Anna: SMA has the same thoughts and concerns about this issue.

Lawrence: Agrees that the production cycles would potentially make this issue appear frequently.

• Daniel: Will implementers be strictly limited to adhere to our PC, or will they be free to implement other portrayals to introduce value-added services?

Raphael: For the IEC/IMO mandatory use cases, there will be less flexibility. It is technically feasible to have 2 PCs. OEMS do not desire to have to make a bespoke implementation for every specification.

Daniel: If no flexibility exists, there will be very little (to no) incentive for competition. Every implementer will just be offering the same thing.

Anthony: PPU implementers do not like such strict constraints.

Lawrence: While it's most important to think about development of our (first, essential) PC, we will consider implementers' intent insofar as it impacts development.

Actions

- 1. Lawrence Distribute working package from NIWC to S-102 PT
- 2. Anthony Include Lawrence in discussions with SealQ, Trelleborg etc. asking for information on what PC they are (provisionally) using
- 3. Lawrence Raise issue before S-102 PT that Sun Illumination isn't accommodated in S-100 and that PicReps aren't accommodated in S-102 or in S-100 (With potential follow-on action to raise issue with S-100WG)
- 4. Lawrence Investigate whether the change from negative down to positive down makes the angles for sun illumination improper (and fix if necessary)