Version 2

S-101PT – Portrayal subWG

Summary report

S-101PT11 September 2023

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KEY POINTS

- **S101 PC 1.1.1 was released in April 2023** *(available from the IHO Product Specification registry)*
- PC 1.1.2 is available from PC GitHub space *(16 changes applied to 1.1.1)*
- The PsWG last met in mid May 2023. **Next meeting** planned for **mid October 2023** to process FC 1.2.0 changes and finalise pending issues.
- Activity:
  - PsWG GitHub: 148 issues – 46 Open *(**15** for PC 1.2.0 & **9** for 1.2.0 **or later**).*
  - PC GitHub: 254 issues - 28 open *(**1** is for PC 1.1.2 & **27** for 1.2.0 or later).*
- The goal is for NIWC to publish PC 1.2.0 by the end of 2023.
- 12 issues need S-101 Test Datasets.
- 5 issues identified the need for a new S-164 test.
- NIWC continues developing S100 Viewer and On-Shore ECDIS. Have incorporated new Loading/Unloading logic for testing.
- Portrayal proposals continue being uploaded and processed via GI Registry.

ISSUES REQUIRING S-101PT ATTENTION

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1 Independent Mariner Selectors

https://github.com/S-101-Portrayal-subWG/Working-Documents/issues/18

- *There is evidence that different type approved ECDIS have implemented IMS differently.*
- *There is currently no S-64 test available to check IMS performance.*
- *Key principles that seem to be in agreement among OEMs:*
  - ✓ *Selecting a Display Category loads a preset group of VG/VGL*
  - ✓ *IMS won't turn a feature ON when it's not currently shown due to Display Category or VGL settings (i.e. When on Base Display, Full Light Lines will not turn on LIGHTS)*

- *Different OEM approaches were noted around IMS like:*
  - *Accuracy (31010 for M_QUAL)* ***Other***
  - *Highlight Date (31032 – New in S-101)* ***Other***
  - *Highlight Info (31030 & 31031)* ***Other***
  - *Shallow Water Pattern (23010)* ***Standard***

How?

Some will not allow turning ON *Highlight Info* when on '**Standard Display**' as an extra (Standard +) layer. To see the 'I' symbol mariners have to switch to '**Other**'. This action turns on all VGL that were off at the time (unnecessary clutter); then, the user has to deselect all the unwanted VGL to get to the view their originally wanted to see.

Others, allow switching on/off VGL as wanted by the user. This implementation allows things like visualizing *Shallow Water Pattern* in **Base display** or CATZOC symbols when on **Standard Display**.

1. Behavior needs standardization; requirements clarified in S-98 and a new S-164 test developed to ensure requirements are met by OEMs.
2. Recommend updating/adding to the relevant S-64 tests to ensure consistent implementation for every IMS

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2 ECDIS Chart 1

https://github.com/S-101-Portrayal-subWG/Working-Documents/issues/20

- *A need for an S-101 ECDIS Chart 1 was confirmed by several stakeholders*

1. *Is this task allocated to anyone?*
2. *Should be approved and released alongside S101 Ed 2.0.0 ?*

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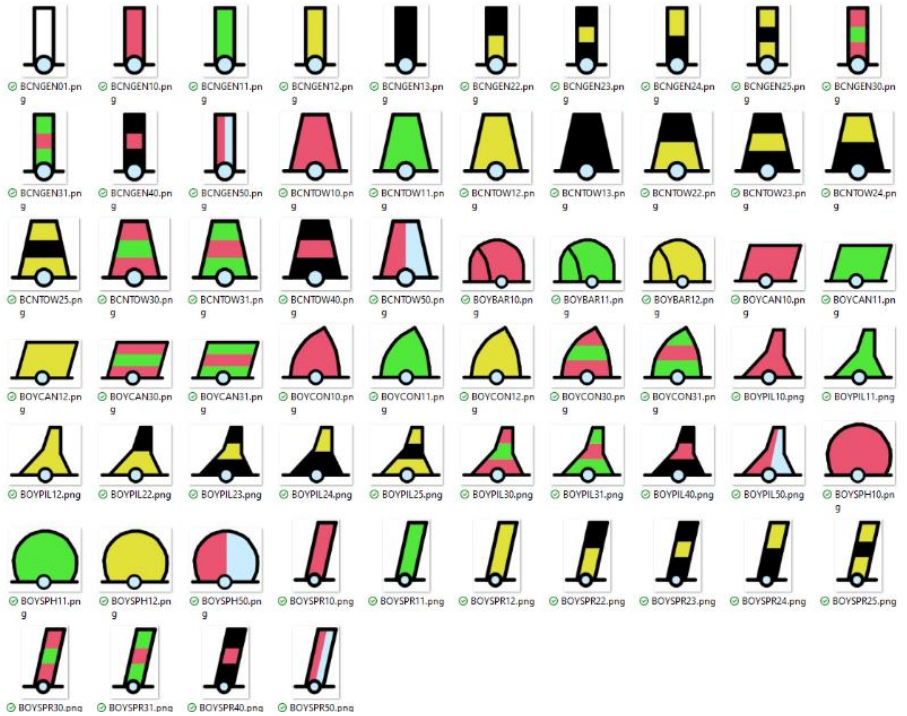
Introduction of color filled paper chart symbols for buoys and beacons

https://github.com/S-101-Portrayal-subWG/Working-Documents/issues/117

- The PSWG has decided to implement colored symbols for ‘Traditional/Paper Chart’ portrayal of buoys and beacons

1. For S101PT awareness and formal endorsement of this decision



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Mariners Objects

https://github.com/S-101-Portrayal-subWG/Working-Documents/issues/126

https://github.com/S-101-Portrayal-subWG/Working-Documents/issues/135

Reminder that we are moving ahead with:

- The removal of some Mariners Objects (and all references to ‘Mariners’ display category) from S101 PC.
  - alert highlights will need to remain since they are referenced from the alert catalog
- ‘Mariners’ display category is currently registered in the GI Registry.

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List of Mariners' objects removed from the S101 PC

Combined S-52 Look-up tables information

Code of the object class	Geometry	S-52 Table	Attribute combination	Symbolization instruction	Display priority	Radar	IMO display category	Viewing group (optiona
dnghlt	Point	Simplified Points		SY(DNGHILIT)	8	O	MARINERS	53010
dnghlt	Point	Paper Chart Points		SY(DNGHILIT)	8	O	MARINERS	53010
dnghlt	Line	Lines		LS(SOLD,3,DNGHL)	8	O	MARINERS	53010
dnghlt	Area	Symbolized Boundaries		AC(DNGHL,3);LS(SOLD,3,DNGHL)	8	O	MARINERS	53010
dnghlt	Area	Plain Boundaries		AC(DNGHL,3);LS(SOLD,3,DNGHL)	8	O	MARINERS	53010
indhlt	Point	Simplified Points		SY(INDHLT01)	9	O	MARINERS	53010
indhlt	Point	Paper Chart Points		SY(INDHLT01)	9	O	MARINERS	53010
indhlt	Line	Lines		LC(INDHLT02)	9	O	MARINERS	53010
indhlt	Area	Symbolized Boundaries		LC(INDHLT02)	9	O	MARINERS	53010
indhlt	Area	Plain Boundaries		LC(INDHLT02)	9	O	MARINERS	53010
marfea	Point	Simplified Points		SY(CHINFO09);TX(OBJNAM,3,1,3,'15110',1,-1,CHBLK,50)	8	O	MARINERS	53050
marfea	Point	Paper Chart Points		SY(CHINFO09);TX(OBJNAM,3,1,3,'15110',1,-1,CHBLK,50)	8	O	MARINERS	53050
marfea	Line	Lines		LS(SOLD,2,NINFO);TX(OBJNAM,3,3,2,'15110',0,1,CHBLK,50)	8	O	MARINERS	53050
marfea	Area	Symbolized Boundaries		AC(ADINF,3);TX(OBJNAM,1,2,3,'15110',0,0,CHBLK,50);LS(SOLD,2,NINFO);LS(SOLD,1,CHBLK)	8	S	MARINERS	53050
marfea	Area	Plain Boundaries		AC(ADINF,3);TX(OBJNAM,1,2,3,'15110',0,0,CHBLK,50);LS(SOLD,2,NINFO);LS(SOLD,1,CHBLK)	8	S	MARINERS	53050
marnot	Point	Simplified Points		SY(CHINFO09);TX(usrmrk,3,1,2,'15110',0,0,CHBLK,50)	8	O	MARINERS	53040
marnot	Point	Simplified Points	catnot1	SY(CHINFO08);TX(usrmrk,3,1,2,'15110',0,0,CHBLK,50)	8	O	MARINERS	53030
marnot	Point	Simplified Points	catnot2	SY(CHINFO09);TX(usrmrk,3,1,2,'15110',0,0,CHBLK,50)	8	O	MARINERS	53040
marnot	Point	Paper Chart Points		SY(CHINFO09);TX(usrmrk,3,1,2,'15110',0,0,CHBLK,50)	8	O	MARINERS	53040
marnot	Point	Paper Chart Points	catnot1	SY(CHINFO08);TX(usrmrk,3,1,2,'15110',0,0,CHBLK,50)	8	O	MARINERS	53030
marnot	Point	Paper Chart Points	catnot2	SY(CHINFO09);TX(usrmrk,3,1,2,'15110',0,0,CHBLK,50)	8	O	MARINERS	53040

Retained in PC

Removed from PC

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FOR DISCUSSION

- All these symbols should be in the registry but probably under an IEC Domain. It shouldn't be the S101PT (IHO) responsibility to develop and register the portrayal for mariners' objects (some of which are linked to IMO requirements).
  An IEC representative should coordinate this activity and generate a dedicated (standardised) catalogue for Mariner's symbols.

- This approach aligns with the IHO's GI Registry foundational view and is up to the S100WG or HSSC to provide high level direction.

1. S101PT to endorse the escalation of this issue to S100WG8 for high level decision and direction.

2. S101PT to endorse the removal of Mariners' Objects in PC 1.2.0 (as per previous slide). The decision to be reviewed before 2.0.0 based on high level IHO direction and implementation status.

The alternative would be to include and distribute Mariners' symbols via S-101 PC so that they can be updated without OEM software changes.
For standardization, OEM's should be directed to use the objects provided in the PC and not their versions.

GENERAL INFORMATION

- Beginning to work through issues related to portrayal of **UpdateInformation** (particularly moved / deleted features)
- Awaiting registry update to ensure consistent usage of **xmlID values** across portrayal catalogs
- Investigating several new portrayal capabilities (alert on vertical clearance, visualize uncertainties, etc.)
- Working with UNHCCOM to investigate alternate portrayal options for **QoBD**

➢ Discussions around ‘duplication of sources’ (*i.e VG/VGL numbering and definitions*) between S-98 Annex C and IHO GI Registry / Catalogues. We need to work towards one point of truth.

HOW TO CONTRIBUTE TO THE WORK OF THE PSWG ?

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Join the team and actively participate in discussions during VTC meetings or via our GitHub spaces:

1. **S-101 Portrayal subWG** Github space: S-101 PsWG Link
   - Propose new symbology, mappings or A&I
   - Propose updates to existing symbology, mappings or A&I
   - Provide input to open issues.

2. **S-101 Portrayal Catalogue** Github space: S-101 PC Link
   - Report bugs or shortfalls on published PC rules or symbols
   - Provide input to open 'implementation' issues.
   - Access development versions of the S-101 PC – Review/Test and provide feedback

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