

S-102 PT14 Minutes

4 September 2023: 1100-1300

5 September 2023: 1100-1400

VTC (all times UTC)

Agenda Item	Subject	GitHub Issue	Actions	Responsible for action	Target date
4 September 2023					
Topic A: Incidentals					
A.1	Welcome/ Housekeeping	N/A	N/A	N/A	N/A
A.2	Review of S-102PT13 Minutes/Pending actions	N/A	N/A	N/A	N/A
Topic 1: S-102 PS (Major Existing Topics)					
1.1	Review of Portrayal Catalogue Development	49, 51, et al.	Create a separate break-out group "Portrayal catalogue discussion 2".	Chair	ASAP
1.2	Review of Validation checks annex	50	Further work/feedback until PT15.	Raphael Malyankar (Portolan Sciences) and PT.	PT15
1.3	Procedural discussion of Validation checks annex	59	Distribution of link to Validation Annex via e-mail.	Chair	ASAP (completed during or shortly after the meeting)
1.4	Decide about <i>Uncertainty</i> as mandatory element at dataset level.	8 et al.	Decision. Uncertainty is being kept as mandatory in the PS. Editorial changes are needed, but this is connected to BSH's proposal and a GitHub branch is created for this. Will be presented at PT15.	Germany (BSH)	PT15
1.5	Progress review on SMA proposal for choosing area-based vs. cell-based structuring	29	Review period for any concurrence and other feedback.	PT	11 September
1.6	Progress review of QualityOfBathymetryCoverage change	13	The change has been submitted by Raphael Malyankar.	Raphael Malyankar and Chair	End of September.

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Topic B: Incidentals

B.1	Welcome/ Housekeeping	N/A	N/A	N/A	N/A
Topic 2: S-102 PS (Other topics)					
2.1	DCF for BathymetryCoverage and QualityOfBathymetryCoverage	56	Corrections will be made in the PS. It should be: BathymetryCoverage = DCF 2 QualityOfBathymetryCoverage/QualityOfSurvey = DCF 9	Germany (Daniel Rohde, BSH)	ASAP (completed during or shortly after the meeting)
2.2	Transparency for DUSK and NIGHT palette	55	Remove from PS.	Chair	ASAP (completed during or shortly after the meeting)
2.3	Consideration of user-defined horizontal datum	54	Remove and make appropriate text changes.	Chair	ASAP
2.4	Clause 5.1 Association Role	53	Continuing discussion in GitHub.	PT	ASAP
Topic 3: Task Requiring Assignment					
3.1	(Placeholder)	50	Pull request for Annex validation check. Integration and conflicts needs to be checked.	Chair	ASAP
		45	Change proposal S-100WG - Chair will send the background of the issue to Raphael Malyankar (Portolan) and Holger Bothien (SevenCs). Chair will then resubmit after review.		ASAP (completed during or shortly after the meeting)
		49, 51, et al.	Break-out group for Product Catalogue. - Next meeting on Monday the 16 th of October		ASAP
Topic 4: Discussion About GitHub/Metanorma					
4.1	Broad update on correcting MN issues	27, 38, et al.	Overall review and information from Chair regarding Metanorma, how to download the PS from GitHub, make changes.	N/A	N/A
4.2	Artifacts other than PS doc components	52	Implement Daniel's (BSH) suggestion.	Chair	ASAP (completed during or shortly after the meeting)
4.3	Quality of formatting of the standard document	57	Bring issue to Ribose.	Yong	ASAP
Topic 5: Test bed reports					
5.1	Demonstrations	N/A	The project <i>Baltic Sea E-Nav</i> has been approved by the EU.	N/A	N/A
Topic 6: Misc., next meeting					
6.1	Plans for Next Meeting	N/A	Break-out group for Product Catalogue.	Chair	16 October 2023
6.2	Present draft agenda for S-102PT15	N/A	Make a draft agenda. Plan for the next in-person meeting, Singapore 13-17 November.	Leadership of S-102	ASAP

Agenda Item A1 and A2.

Chair (Lawrence Haselmaier) welcomed everyone to PT14. The agenda for the day was presented.

The S-102 PT13 minutes was reviewed and there were no further comments. A few of the items are now closed and a few are still part of continuing work in PT14.

Agenda Item 1.1 Review of Portrayal Catalogue Development.

Lawrence presented the notes from the last Portrayal Catalogue (PC) meeting.

A link to the PC package made by NIWC is available for download in GitHub ([NIWC Portrayal Catalogue Data Package Available · ihohi/S-102-Product-Specification Wiki \(github.com\)](https://github.com/ihohi/S-102-Product-Specification-Wiki)). It should be noted that it was produced many years ago, but it can still give a general idea.

Lawrence still has for action to investigate if sun-illumination is accommodated in S-100, keeping in mind that all S-100 changes are major at this point. Adding additional illumination modes to S-100 could be placed in part 9 and 9a. It is not yet clear if OEMs would be able to implement it and this would have to be tested thoroughly. An opinion was that other non-fixed illumination modes can be more effective. A link was posted for those interested to read more about the topic [Ambient occlusion - Wikipedia](#). It was expressed in the meeting that it would be up to the end-users investigate.

During the meeting it became clear that a separate discussion is needed, only directed to the PC. Lawrence has for action to create a break-out group in the near future. Among the items that need to be discussed are sun-illumination, which language to use in the PC (XSLT vs Lua) and Pick Reports. There are still some pending actions left from the last PC meeting that needs to be addressed.

Another discussion occurred regarding alternate portrayals for OEMs and if two portrayal catalogues are possible. An input to this was that it is strictly denied for S-101 PS to have two PC. Another comment was that one motivation for the use of S-102 in ECDIS is that both pilots and masters have the same chart image, i.e. it should not be too many different portrayals. Regardless, the Project Team need to focus on producing one initial Portrayal Catalogue.

Agenda Item 1.2 Review of Validation checks annex.

Raphael presented the annex of the validation checks. He described how there are two types of validation checks:

- S-100 validation level checks.
- S-102 validation level checks, which is the one posted in GitHub.

There are some discussions in the GitHub issue and more comments are expected until next PT15 meeting. The annex is also in the Pull Request which can be accessed through GitHub to an Excel file: https://docs.google.com/spreadsheets/d/11T7MtfRE0q8Nzer7QLv0ZUuzQb2b_w1W/edit?usp=drive_link&ouid=112418400259975980265&rtpof=true&sd=true .

It is important that these checks do not duplicate the S-100 validation checks.

Raphael has also created a developing page in a new Fork.

Agenda Item 1.3 Procedural discussion of Validation checks annex

For easy access and continuing progress in the work, Lawrence will distribute the link through e-mail to the PT group.

Agenda Item 1.4 Decide about Uncertainty as mandatory element at dataset level.

The element *Uncertainty* is mandatory at dataset level. What could be needed is a clarification in the PS that it is mandatory at dataset level.

Some questions were raised. Is it one value for the whole dataset or values for each data point? The response was that it is Optional at the data point level, but at the dataset level it has to be mandatory. Where would the dataset uncertainty be encoded? The answer was that Uncertainty is already in *BathymetryCoverage/BathymetryCoverage.01/Group_001/maximumUncertainty* and *BathymetryCoverage/BathymetryCoverage.01/Group_001/minimumUncertainty* today. If the value is the same (equal) at every data point, an opinion is that it is unnecessary to fill every point. A proposal how to solve this will be presented at the next PT15 meeting by BSH.

The proposal will include textural changes, and BSH will also prepare test data.

Agenda Item 1.5 Progress review on SMA proposal for choosing area-based vs. cell-based structuring.

Some work on the issue has been done during the summer, where SMA investigated the topic further. It was divided into three parts: Part 1. Impact on related specifications (S-100, S-98, S-104), part 2. Node-based to cell area-based product and part 3. Bounding box. These were all presented in GitHub.

There has been very little feedback in the GitHub issue and it was unclear during the meeting if any decisions could be made. Lawrence suggested a review period until 11 of September. Until then PT members can go in to issue #29 and give concurrence and other feedback.

Agenda Item 1.6 Progress review of QualityOfBathymetryCoverage change.

The change has been submitted by Raphael. It takes about 2 months and it is still one month to go. If it is much delayed after the end of September, Raphael will let Lawrence know.

Agenda Item B1.

Chair (Lawrence Haselmaier) welcomed everyone to day 2 of PT14. The day's agenda items were presented.

Agenda Item 2.1 DCF for BathymetryCoverage and QualityOfBathymetryCoverage.

There was an agreement that the encoding in the PS was incorrect. It should be:

$BathymetryCoverage = DCF\ 2$

$QualityOfBathymetryCoverage/QualityOfSurvey = DCF\ 9$

The corrections will be made by Daniel (BSH) for the 2.3.0 draft.

Agenda Item 2.2 Transparency for DUSK and NIGHT palette.

It was decided to remove this part from the PS. Lawrence has for action to remove it.

Agenda Item 2.3 Consideration of user-defined horizontal datum.

The PT agreed to remove the projection parameters from Table 8. It was also stated that more information could be removed, since the EPSG CRS code defines everything sufficiently. Also, further changes to the describing text of the coordinate systems could be made.

It was confirmed that the attributes are Optional in S-100.

Lawrence will make the appropriate changes after checking with Holger and Raphael first.

Agenda Item 2.4 Clause 5.1 Association Role.

It was suggested to remove the last sentence of the paragraph in clause 5.1 and to reword the rest. The PT group have for action to propose a new wording in the GitHub issue.

It was also suggested, in table 8 for Vertical Datum, to have a list of values rather than referring to a living document.

Agenda Item 3.1 (Placeholder)

Raphael informed that he has completed the changes that BSH pointed out and BSH have approved them. Lawrence will check that they are integrated and that there are no conflicts, then merge into the draft 2.3.0.

Lawrence presented a change proposal submitted to S-100WG. Some input from the S-102PT group was that the change is at the wrong place. Lawrence will send the background of the issue to Raphael and Holger. After the review, Lawrence will resubmit the proposal.

Next, the Portrayal Catalogue discussion 2 (and related subjects) was discussed.

It was asked what needs to be accomplished at the meeting? What are the deliverables? When should the group meet?

Topics to be discussed during the meeting:

- Sun-illumination.
- Choice of XSLT vs Lua (what is best for long term maintenance? XSLT more capable?)
- Get feedback from the OEMs. Identify particular questions.
- Pick reports.

Lawrence informed that March 2024 is the goal to have edition 3.0.0 of the PS ready. This item is highly prioritised and it is encouraged for everyone to contribute.

A question was raised if it would be possible to only describe the portrayal in textual form and to leave the implementation for the OEMs. It was also mentioned that S-98 too talks about rules how to portray it. The Secretariat investigated if a PC is mandatory, which it is not. The alternative to have it in textual form will therefore also be discussed at the next PC meeting.

It was decided to have the Portrayal Catalogue meeting on Monday 16th of October. Lawrence will send out an e-mail to the PT, wait for response and then book a suitable time.

Agenda Item 4.1 Broad update on correcting MN issues.

This agenda item was used to review GitHub and Metanorma, ask questions, discuss the functionalities.

Lawrence went through issue #27. One question in the issue was if it is possible to add an explanation/confirmation of how to generate documents in a fork of the repository. The answer that it is not possible in a fork.

There was some information regarding Issue #38 Figure sizes and page width. Some changes have been made but they have not yet been reviewed. Daniel (BSH) was asked to make the update on a local computer and test the change. Although, it was emphasized that this issue has low priority.

Lawrence presented how to generate documents. On the S-102 Main page (<https://github.com/iho-ohi/S-102-Product-Specification>), you can scroll down and click on S-102 HTML page (<https://iho-ohi.github.io/S-102-Product-Specification/>). It takes you to a page where you will find the rendered PS (in-force Edition 2.2.0 at present). It can be downloaded in a few different formats (PDF, Word, etc.). The idea is to have a second line at this page, one for the draft PS Edition 2.3.0. This solution would replace the old way of using a redline version in Word, where changes could be made simultaneously. At the moment this solution is achievable but not complete. Because this method is not operational yet, Lawrence will describe how to download the draft development version in an editable format.

To download the draft development version:

1. Navigate to the [S-102 Product Specification GitHub repo](https://github.com/iho-ohi/S-102-Product-Specification) (<https://github.com/iho-ohi/S-102-Product-Specification>)
2. Click on **Pull requests**, and then click on the particular Pull requests from which you want to make the document (e.g., **2.3.0**)
3. Click on the **Checks** tab
4. Click on the **Artifacts** pulldown
 - a. If **github-pages** appears, click on it to download it (and skip to Step 5)
 - b. If the artifacts have expired:
 - i. click **Re-run all jobs** and then wait for about 6 minutes
 - ii. Repeat Steps 1-4 and download **github-pages**
5. Open github-pages.zip and extract the contents
6. Open artifact.tar (with 7-zip, PowerShell, WinZip, etc.) and extract the contents
7. The files will be found in the directory structure (e.g., **documents\2.3.0\document.doc** would be the Word version of draft 2.3.0)

Agenda Item 4.2 Artifacts other than PS doc components.

The S-102PT agreed to use Daniel's (BSH) suggestion described in GitHub issue #52, see also below. Lawrence has for action to create the directories.

sources/ *edition* /FC -> e.g. sources/2.2.0/FC
sources/ *edition* /PC
sources/ *edition* /ValidationChecks

Agenda Item 4.3 Quality of formatting of the standard document.

This issue affects all S-100 standards since they are all styled the same way. The document appearance requirements should be addressed to the Metanorma developers, Ribose. Yong (Secretariat) has for action to bring this issue to Ribose.

Agenda Item 5.1 Demonstrations.

It was informed by Sweden (SMA) that the project *Baltic Sea E-Nav* has been approved by the EU. The project is planned to start in November 2023. Some more information can be found here: https://iho.int/uploads/user/Inter-Regional%20Coordination/IENWG%20and%20EC%20-%20IHO%20Cooperation/IENWG13/IENWG13_2023_04A%20S-100%20Implementation%20in%20European%20projects.pdf

No other demonstrations were presented.

Agenda Item 6.1 Plans for Next Meeting.

Lawrence will send out an e-mail to the S-102PT group regarding the Portrayal Catalogue break-out group.

Agenda Item 6.2 Present draft agenda for S-102PT15.

There is ongoing planning for the next in-person meeting (PT15), which will be held in conjunction with S-100WG8 in Singapore, the 13th to the 17th of November 2023. It is likely that the 17th will be fully dedicated to S-102.

For the S-100WG8 meeting, streaming may be possible but not as a hybrid meeting. Although, for S-102PT it may be possible to have a GoToMeeting. Lawrence will look into this option.

A question regarding PT15 was if S-102PT members only are required for the 17th of November. The answer was that a number of S-100 agenda items are also important for S-102 and as S-102PT member it is highly encouraged to participate during the S-100WG8 meeting.

It was informed that for the S-100WG8 submission, the deadline is the 15th of October. This also means that a draft for S-102 PS edition 2.3.0 should be sent at the latest 15th of October. However, another edited version may be submitted later through a circular letter to the S-100WG.

The minutes and actions for PT14 were presented by the Secretary. The meeting was then closed by the Chair.