

## **Day 1**

A welcome and introduction from project organization SAMK / Antti

### **Overview of the piloting methodology – Presentation provided (Luis)**

Iterative process. At the part where we learn about the results.

Recap of value proposition canvas – presented at partner meeting in Helsinki

Dream feedback included

What did we measure?

Efficiency, Safety, Usability

Measure from User or the system. Has to match

Tasks: Plan a route and monitor a route.

Not dual fuel. Either S-57 or S-101 and S-102. S-104/111 is not included in this round. Will be included after summer.

### **S-100 simulation study end-user feedback – Presentation provided (Staffan)**

Presented what gain creators were seen.

User feedback – Planning Phase

Compare old and new products. Perceived differently? Different parameters that were looked into and compared.

Staffan presented some examples and differences that were noted.

Mikus: Which product would be created for which areas that would help influence the decisions? In the questionnaire it's only written S-100

Rainer: interesting to look at longer journeys further on. Port-port scenarios.

Caroline: Feedback in the report on how to design future test?

Thomas: Include more products so that it shows that the route planning is based on your specific vessel?

Staffan: That is something we should look at in the future to include more products.

Information about some bugs in the system – example crossing borders – depth contours not matching between countries.

Mariners' needs to know what to switch on and off in the ECDIS to see the correct picture. Example shown what discrepancies are shown. Needs to be data from same time.

Monitoring phase:

75% of end users in the test answered S-100 affected the way they monitored the route while sailing.

Cluttering – some examples how it is visualized at this stage.

Value:

Safety – more margins eg for course deviation

Efficiency – Ability to plan shorter routes.

Summary user experience presented. See presentation

Klas: Where there a possibility to leave a comment for each question? To better understand their answers.

Staffan: Not all of them. Some were 1-5 and some were open questions. Could have been more possibilities to leave a comment.

Luis: We will use the Excel file and export it and make it available for all in the project. (to do)

FMI and Estonia produced data, but navigation system is not available yet. Will be available after the summer. Second round testing. Will test all of the products in our next round.

Some extra tests before summer when some visual fixes are corrected? Would be beneficial for the project test results. Discuss this further and have an VTC meeting if so with results. (look into)

## Day 2

### Harmonization – Presentation provided (Luis)

Luis presented what issues they have noted.

- S-101

Usage bands – (Noted in the meeting: that is already solved)

Depth contour. All should decide on depth contours - what that should be? If we want to have it harmonized, we should have the same around Baltic Sea

- S-102

Grid size, overlap, no gaps, areas without S-102 data.

Everyone has holes, but they look different. Example because of grid size.

Discussions in groups within each standard. Afterwards it was discussed jointly.

S-101:

- Depth contours.

Klas: Older recommendation since 2006-8 agreed to harmonize bathymetry. Shallow contours different because different source data. Contains certain depths. Until all surveyed with modern methods it's impossible to do anything.

S-102 Data data coverage:

We agree multi beam high data is... (not sure

Test with a polygon. RISE

In the sounds, Sweden has marked the area where 102 data in certain way and Denmark in other way. Agreement this specific area: RISE will make suggestion about a certain area in The sound with certain Polygon. Test in other areas as well. Different HO's explore if this is possible or not. Otherwise put it in wish list in future development. Agreed in the meeting

- Tiling:

Discussed different coordinator systems: RISE suggested geographic, one part in operability standard should be solved by original manufacturer. Conclusion was keep on doing as you please. The OEM's to solve this.

- Extent /area convert:

RISE suggest these polygons. The size of the S-102 in this polygon is open question

Rainer: BS has certain survey plan. Certain polygons with multi beam, could this be started point of this polygon qualification? Original commission. Survey cat 1 polygon areas already and good coverage there.

Luis: Sounds like a great place to start.

- Holes:

Everybody agrees holes not good, at least not in harbors. HO's try to eliminate as much holes as possible.

Mikus: Also includes the boarders at the datasets. Cannot be sparse. If more data around its spare. Cut of nicely. If you have too few data points it should not be included.

- Resolution:

We don't want to have S-102 in very core resolutions, but high. Are we going to be able to produce s-102 for the whole sound? Have not decided on a clear solution. Should agree that we should have the highest resolution as possible. To provide a good value. S-102 10-15 m at the harbors is not necessary when S-101 is available. If cannot produce high resolution should skip it.

- Any other issues?

Liz: S-102 replacing S-101. Talk to S-98 group to discuss if it can replace the depths.

Large file sizes, any complications when loading?

Luis: Yes, all the time. At the moment the NSP is underpowered as it's a prototype so not easy to say how it will be later. Less than 152 mb, what standards says. It's the OEM to solve this issue.

Timo: Do not make them too big so we can load the whole cell and make route checks.

Luis: Sweden has produced and uploaded "lagom" sized cell.

Timo: Nemo scale is more important.

Anni: Better for S-104/111 to have more and smaller areas? To make the files smaller for us. Smaller areas with all the time steps. With time duration, maybe two days.

Mikus: Unexplored data types to be used in the ecdis. Needs to be looked at more. What helps for the end users so it can be used to operate? High different resource demand for S-57 and S-100 products. End user doesn't cope with everything yet.

Liz: Important to remember other WG working with ENC a long time. WG 102, No one wants to restrict the data sets. Needs to be restricted somehow otherwise it's not going to work. Get this input back to the working groups.

Klas: The finding that narrowing needling is needed is better to reply than nothing.

Luis: Expect GPS not being used in the future for ECDIS manufactures?

Timo: Cannot speak for others.

RISE will investigate if they can look into this matter and find some colleagues that can provide with any assistance in this matter regarding data sizes and file features. (to do)

### **Harmonization progress overview – Presentation provided (Jarmo)**

Jarmo presented an overall view on the WG and what has been done and discussed within the working groups.

S-101 Endorsement May, Approval BSHC30 Sept 2025

Concluded that the main issue for the harmonization from the tests were that the harmonization was not followed for the prototypes.

S-104/111 – email sent out. Currently discussions. TICWIG meeting, CDWCWG meeting discussed harmonization document is needed and was discussed in Tallinn meeting. Could it be the same process with endorsement and approval under 2025? If it is too early at least report status. Communicate that this is a work we will do and our plan. It's on the CDWCWG action list to do.

- S-102 harmonization, MariSofia:

Discussions and input to the guidelines. New version will be provided by MariSofia. (to do)

More precise recommendation of the exact values of the scales. Will not be followed now but prepared for the future. Manufactures might follow, might not.

How to proceed from here?

Continue on these discussions in a follow up meeting that is planned on Monday after this week.

### **Summary of A1.1 and future works within WP3 – Upscaling and outputs delivering BS e-Nav Base package. – Presentation provided (Oskar)**

- Any specific learnings from A1.1?

S-101: That we were confirmed in things. Seeing the data together. Assumptions that we had was confirmed.

- What way can this project help its partners?

Identifying the issues with the test data and conversions we have done. What challenges. Main concern is the exporting. Doing that and feeding back we can correct our data and help upscale our production.

- How will WP2 feed in to production readiness?

Sharing our roll-out plans. Doing in similar ways and when?

- Any tools needed?

Validation software. Signing software

Validation across S-57 and S-101.

- Signed or no signed:

Not concluded on when we have to do it but decided on it will be done. Don't know how and the consequences, especially on not doing it. S-101

Klas: There has been a question that hasn't been discussed in the whole community. Should have been addressed since we are now coming to a production stage to get a common understanding if we need to and what it means? If it's mandatory or not. If ECDIS can decide if its official data or not when signed. At this stage a deal breaker how the implementation will fit hard requirement or not.

More of a management issue than technical. Avoid people doing it manually.

DK: S-102: Mainly talking about how we are implementing. New product. A lot of approaches to it. Sharing how mirror designing works. Internally how to create these products.

S-101: even if we can start production it has a big impact to switch. The whole majority. A lot of organization questions that needs to be in place before starting, even though technical things in place. Cannot go back. Triple production. Complexity of that transition that we touched a bit around.

DE: already converted database and producing S-101. Finland as well, but some bugs that has to be solved before actual production conversion database. Aug-sept start production S-101.

FI: For the Enav project so far converted S-57 – 101 but not how we want to work later.

Roll-out discussions. Bilateral meetings.

Production will organize harmonization of production within their activity.

Discussions about the needs what to do and how the project can help continuing these discussions.

### **Sea trial area? – presentation provided (Caroline)**

Caroline presented what it is and how it could work for BS E-NAV. What possible benefits to be a sea trial area.

Questions from the meeting:

- How does the data protection sharing look like? A lot of restrictions already.
- How big would the area be? – our test areas and test data.
- Which OEM's approached us? - Seven C's and OSI

It's not a strict requirement that everyone participates from the project but it would look better, especially with the test scenarios.

Should be open for all OEM's to use our data, but have to look at the data protection.

Some questions to take into consideration:

1. Anticipate the work loads, which partners, protection of test data and an agreement should be made. If we get 100 participants quite a lot of work load. IC-ENC, Time.
2. What kind of time frame would this be between? – Depends on when we start.
3. Do we need to provide products when official products available? – We can decide this.
4. Oct -25 – June 26? Suggestions. - Then we have official products available (FI, SE for example).

### **Day 3**

#### **Stakeholders & Out-reach – presentation provided (Mona)**

The project will be at EMD in Cork with PA SAFE. But will be presenting the project itself.

Some are going to Sjöfartens Dag. Bringing some information from the project.

Corrections: The roll-up is corrected and uploaded in Git Hub. Corrected the flyer and it doesn't include any people in it now.

Will send out two options for the flyer so we can decide what option we prefer.

Send information to Mona if you have any information to be shared from the project's perspective.

Mini workshop to talk about activities to engage our stake holders. Mona collect the input and there will be a VTC meeting about communication separately. Mona will send invitation (to do)

#### **Future Partnership (Caroline)**

Caroline gave a brief update about current calls for next project periods. One issue is that there is no founding that seems to cover the same current partner area. What are the options? What are everyone's internal plans for the next steps after E-Nav ends.

FI – Discussed port information, S-131. What is coming next phase in that point of view. Interest to continue S-100 implementation somehow. Co-operation with ports is next phase. Discussed with Sweden in other forums.

SE – Sweden are looking into implementing next phase 104/111 and S-124.

Central Baltic open for applications already. Probably starting in spring already. Too soon? Not everyone in this project can be included as partners in that project. Until September open. Reporting is a lot more work than BSR.

Even in the application phase we have to link to each other and set aside budget for cooperation.

South Baltic – maybe for Germany to look into?

Simulations might be performed together even though we have different founding's.

### **20250411 BS e-nav Mid-term evaluation (Marlene)**

Asked everyone in the meeting to discuss our current status and what to focus on in the future:

We need to better to communicate within the project. Hear about each other's progress and share experiences. If we only talk to each other during partner meetings, we always find ourselves in a "waiting position"

- Suggestions: more frequent online meetings

Lacking the general/overall progress from the project MGMT. Wants "overview documents" and updated timelines. Need better feedback on their work. The partner asks: "have the expected work been delivered"

Want better structure in regards to presentations of activities during partner meetings. Go through all WP's and activities

Concerns are being raised about harmonization, and that we aren't fully harmonized yet.

- More discussions to sync our work

Concerns are being raised about the software developers.

We need to get names of people who are interested in S-104/S-111 harmonization. Document on harmonization for 104/111 won't be ready for partner meeting in Riga. Looks forward to the workshop

The project seems to progress well and the timing is right.

We see some concerns in our own HO's: lack of multibeam, lack of resources, poor economic times. A bit unclear who/which the market is and how we will sell these products.

More activity meetings are requested

Important with updated timelines and deadlines asap

Test leaders feel a bit squeezed between late deliveries of data and delays in development of ECDIS.

For all partners: if the HO's want more feed-back on their products: just contact RiSE! But please keep the products/datasets to a minimum.

Regarding the NSP that Furuno will send to SMA with delivery during this meeting: delayed until May. Other HO's are also very interested. GST asks to be invited to SMA and for test of their products. Would be good as an alternative to ship the NSP around. SMA will discuss this and get back to everyone interested.