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D2.3. – Report on the implementation of Short Duration training toolkit

ATI2: Preparation of short-duration training
units

Simsea

Partner 4

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Operador do programa Crescimento Azul / Blue Growth Programme operator:



ON THE
WAVE



Innovating in the maritime sector through upskilling and reskilling

Working together for a green and competitive Europe

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1 Background

This document was prepared in the scope of activity 2 *Preparation of short-duration training units* and presents the main results related to the implementation of these units in the formal context of learning in Portugal.

The three objectives of ATI2 were:

1. To map the needs and demands of digitalization and adoption of sustainable practices in the maritime sector.
2. Create short-duration training toolkit matching the needs and trends of competences in the maritime sector.
3. To implement and validate the short-duration training toolkit.

First, several key stakeholders were invited to establish facts about the current needs and demands for digitalization and sustainability skills among seafarers. These were members of the industrial fisheries, marine tour operators, merchant and inland maritime transport all of whom participated in group meetings. In total were promoted 3 sessions, gathering 41 professionals (see [Annex I – Report on the working groups sessions](#)). In these meetings, the stakeholders ranked which competencies and skills that were most needed in their respective fields (see D2.1 – On The Wave – Competency Framework for an in-depth view of the results of that process). The evaluations of those meetings led to the understanding that a toolkit, comprising of four short-duration training units, should be produced on the following topics:

- Whale watching by maritime tour operators
- Ocean conservation
- Basic digital skills for seafarers
- English language – Communication on board

These training units were made during the spring of 2023 and were later implemented during the summer and autumn of the same year.

2 Process of implementation of the short-duration toolkit

Seafarers, maritime and professionals, participated in four short-duration training units during July and August 2023:

- Whale watcher was held between 18th of July to 01st of August with 12 trainees.
- Ocean conservation was held between 24th of July to 11th of August with 11 trainees.
- Basic digital skills for seafarers was held between 28th of July to 09th of August with 21 trainees.
- English Language – On Board Communication was held between 01st of August to 21st of August with 4 trainees.

In total, the short-duration toolkit was distributed to a total of 45 trainees, who were also given an invitation to participate in surveys to evaluate the courses.

Participation overview				
Course	Number of trainees enrolled	Number of trainees who completed the training	Survey 1 participation	Survey 2 participation
English language	8	4	3	1
Ocean conservation	19	11	10	1
Digital competences	23	21	15	2
Whale watcher	12	12	12	4

Table 1. Participation overview.

3 Findings from the surveys

The participants of the courses answered a total of two surveys:

1. Survey 1 – Immediately after taking the course – The trainees evaluated the quality of the training, its resources and contents, and the quality of the trainer who held the course immediately after taking the course.

2. Survey 2 – 1.5 months after taking the course – The trainees evaluated to what extent the course was relevant for their current work situation.

Sadly, a weakness in longitudinal surveys and research, in general, is the potential for participant drop-out during the second survey.

Each of the questions were evaluated on a 7-Point Likert-scale where 1 stated low and 7 stated high agreeableness to the statements (see [Annex II – Evaluation form to assess implementation](#)).

3.1 Whale watching by maritime tour operators survey (N=12) Survey 1

In the following survey the course participants answered three questions evaluating the quality of the training, its resources and contents. There were in total 14 participants who filled in the survey, giving an attendance rate of 100 %.

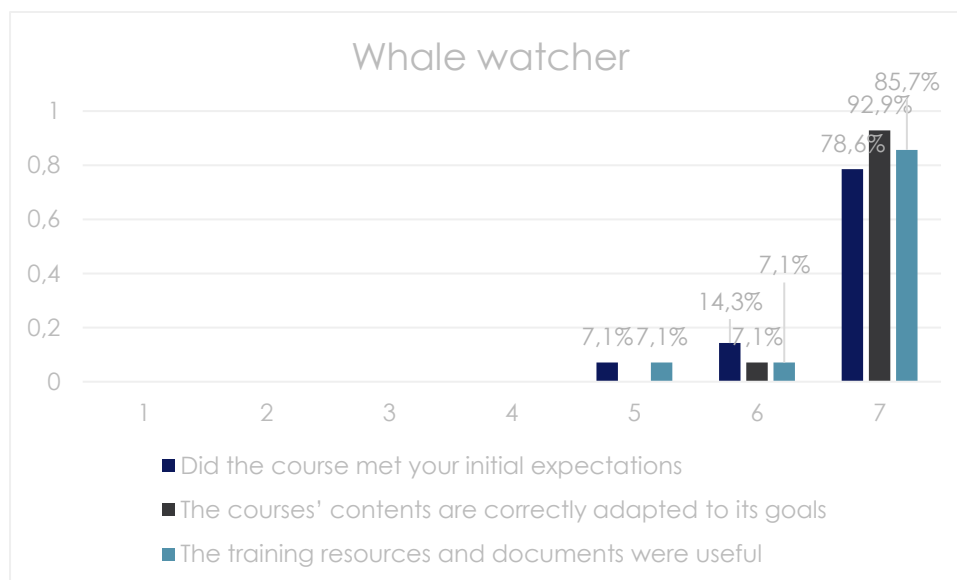


Figure 1. Whale watcher trainees' perspective survey 1.

On the first question, to which level the course met the initial expectations, 78.6 % percent gave top score, 14.3 % gave the next highest score and 7.1 % gave 5 out of 7, which is above the average perception. On the second question, whether the courses' content was adapted to its goals, 92.9 % rated the highest possible score, while 7.1 % rated the second highest score. On the third question, whether the training

resources and documents were useful, 85.7 % rated the highest score, 9.2 % rated the second highest score, and 7.1 % rated the third highest score, 5 out of 7.

The following survey and figure present the results of five questions in which the trainees rated the quality of their trainer.



Figure 2. Whale watcher survey trainees' perceptions of trainer survey 1.

All participants rated the trainer 7 out of 7 on all the closed-ended questions as shown in the figure above.

There was also an opportunity for the trainees to provide ideas for the improvement of the content, installation, equipment and resources in an open answer format.

- "The time of year was not adequate for training, because July and August is the time with more touristic inflow" (mentioned 3 times).
- "More tests and quizzes to trainees".

The open answers show some potential for improvement in the training unit, despite the fact that the closed ones were top score.

3.2 Whale watching by maritime tour operators survey (N=4) Survey 2

In this survey the course participants answered three questions evaluating the relevance of the course and improvement of competences.



Figure 3. Whale watcher survey trainees' perspectives survey 2

As can be seen in the figure above, all four individuals who participated reported the highest level of satisfaction on the three questions.

There was an open question where the participants could provide additional information on the adequacy of the units and their relevance for their professional role:

- "All contents have application in my work tasks".
- "Very useful for my daily tasks to perform the right approximation maneuvers".
- "Useful for daily walks for whale watching".
- "Useful for increasing respect for marine wildlife and the right way to approach".

Answers on the close-ended and open-ended questions in the second survey are equivalent to each other.

3.3 Whale watching by maritime tour operators (N=1) - trainer's perspective - Survey 1&2

Trainers were also asked to evaluate the courses in 2 surveys. Answers in survey 1 and 2 correlates 100% and are therefore presented in only one figure.

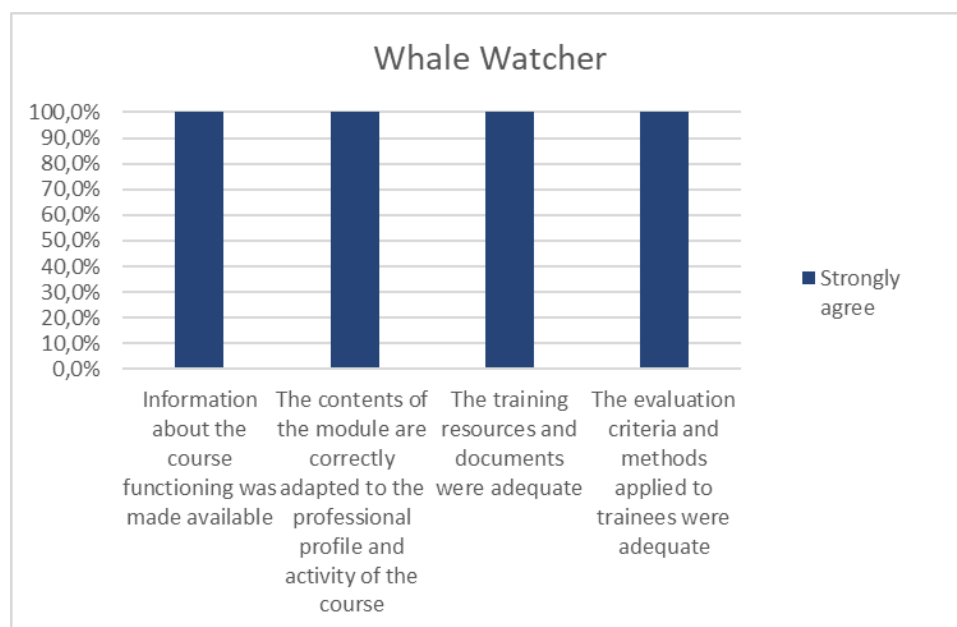


Figure 4. Whale watcher survey trainer's perspective survey 1 and 2.

The trainer in Whale watching by maritime tour operators strongly agreed with all the statements. These results show similarities between the trainees and the trainer's perception of the training unit as a whole. In unison, there is high satisfaction with the course.

Furthermore, trainers had the opportunity to give open answers to the following question "Highlight any aspect of the training (i.e. content, installation, equipment, resources, trainer) that you consider to be improved". This resulted in the answer below.

- *"The essays delivered by the trainees were accomplished in the short time the trainees had available because of the high workload of this time of the year".*

This answer correlates with the trainees' answers to the open-ended questions in the first survey.

3.4 Whale watching by maritime tour operators (N=1) – Coordinator's perspective - Survey 1&2

In addition to trainees' and trainers' perspectives. This research also includes the coordinators' perspectives of the training units.

The coordinators were asked the following question: "Highlight other aspects about the training process or improvement suggestions you would like to make as coordinator" and answered:

- "Better communication between HQ and Training Centers".
- "Better calendar planning, not overlapping this activity's high workload month".

The second answer correlates with trainees' and trainer's answers to the open-ended questions. As a result, this strengthens the finding. In conclusion, the whale watching by maritime tour operators training unit should not be conducted during tourist season.

3.5 Ocean Conservation (N=11) Survey 1

In the following survey the course participants answered three questions evaluating the quality of the training, its resources and contents.

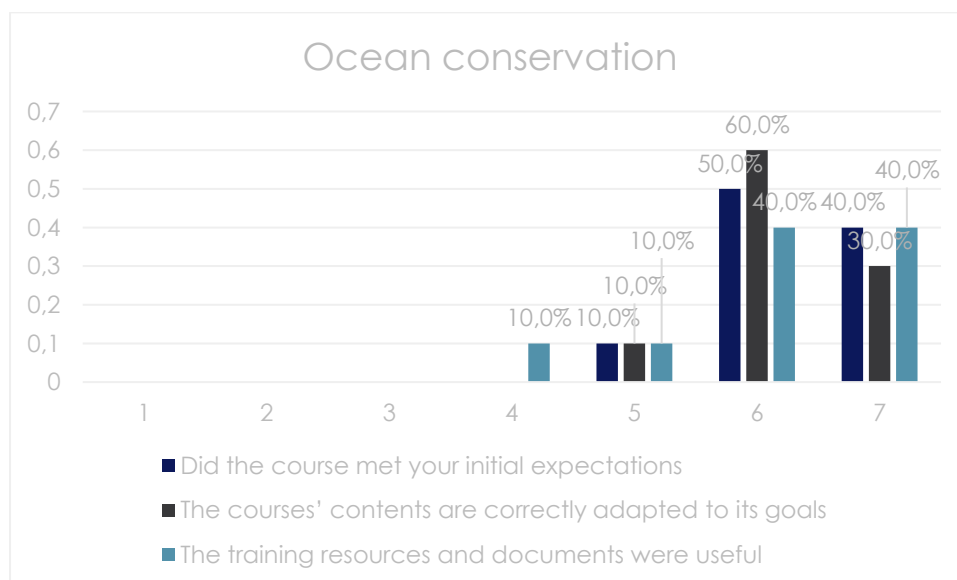


Figure 5. Ocean conservation trainees' perspectives survey 1.

On the first question, to which level the course met the initial expectations, 40.0 % rated the highest score and strongly agreed, while 50.0 % rated the next highest score, and 10.0 % rated the third highest score 5 out of 7. The second question, to which level the courses' contents were adapted to its goals, 30.0 % rated the highest score and strongly agreed. 60.0 % percent of the participants rated the second highest

category, while 10.0 % rated the third highest and agreed. On the third question, whether the training resources and documents were useful, 40.0 % rated the highest category and strongly agreed. 40.0 % rated the second highest category. A small amount of the surveyed individuals (10.0 %) rated the third highest category and either agreed or were neutral.

The following survey and figure present results on the five questions where the trainees rate the quality of their trainer.

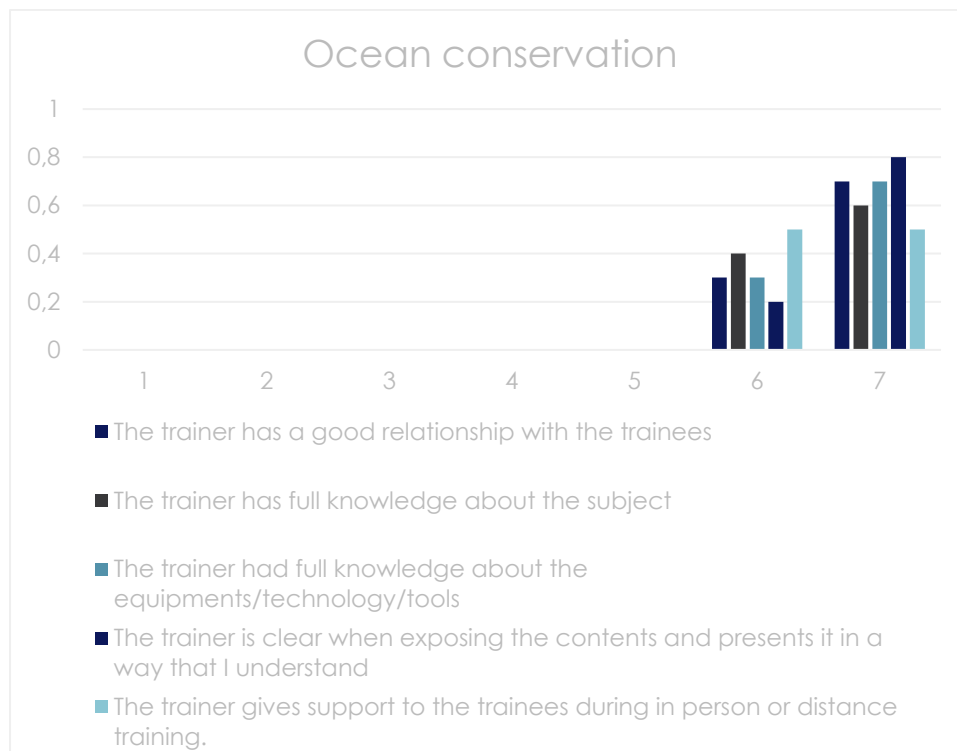


Figure 6. Ocean conservation survey trainees' perspective on their trainer survey 1.

All participants rated the trainer either 6 or 7 out of 7 on all the close-ended questions as shown in the figure above, showing a strong positive perception with trainer.

There was also an opportunity for the trainees to provide ideas for improvement on content, installation, equipment and resources in an open answer format:

- "Add hours to the course to deepen some subjects" (mentioned two times).
- "Release all pedagogical resources in the beginning of training so that trainers can progress training accordingly to their availability".
- "Reduce complexity of the contents to make training accessible to trainees with less background knowledge".

Answers in the close-ended questions and open-ended questions match to some extent. Participants who rated the course to 6 might indicate their perception of possibility for improvement, however, all in all, the results show high satisfaction with the trainer and course.

3.6 Ocean conservation (N=1) Survey 2

In the following survey the course participants answered three questions evaluating the quality of the training, its resources and contents.

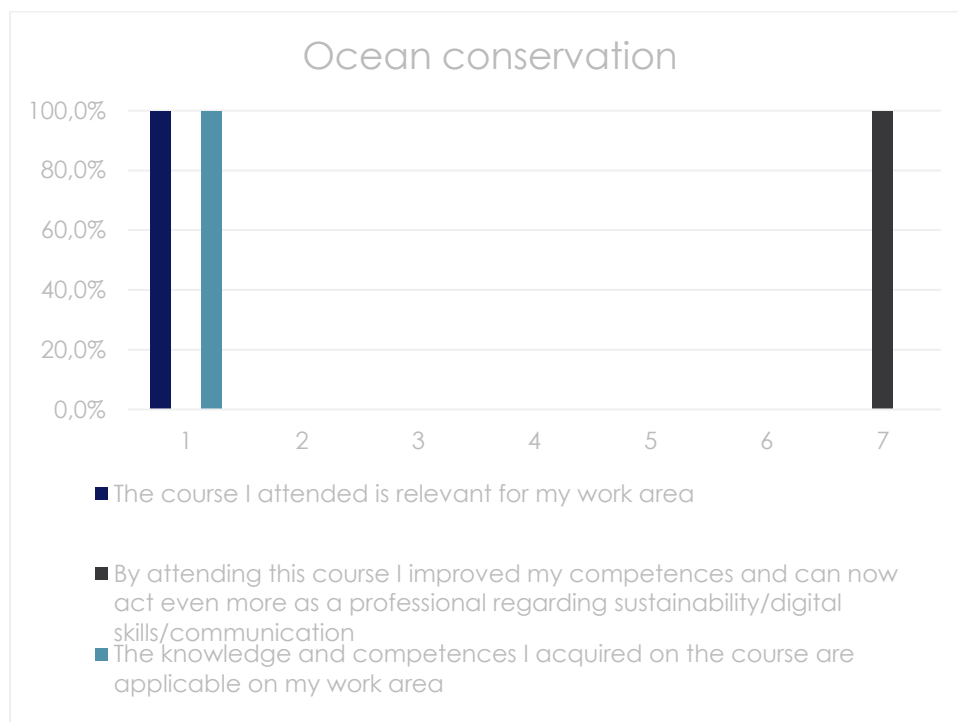


Figure 7. Ocean conservation survey trainees' perspectives survey 2.

The result shows the answer of only one participant. This participant does not agree that the course was relevant for the work area, and that the knowledge and competences acquired on the course helped in their current work area. However, the person gave the highest level of satisfaction to act more as a professional, which seems contradictory. Thus, this finding does not seem reliable.

No one replied to the open-ended question on the adequacy of the units and their relevance for their professional role.

3.7 Ocean conservation (N=1) - Trainer's perspective - Survey 1&2

Trainers were also asked to evaluate the courses in 2 surveys. Answers in survey 1 and 2 correlates 100% and are therefore presented in only one figure below.

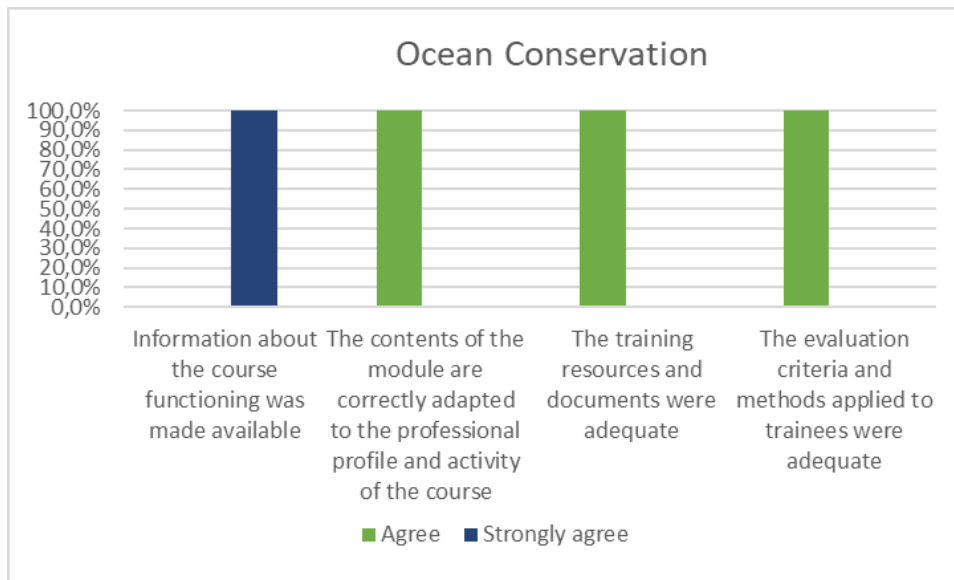


Figure 8. Ocean conservation survey trainer's perspective survey 1 and 2.

The trainer strongly agrees with one of the statements and agrees with three statements. All in all, this is relatively high satisfaction with the training unit, and it is little variance compared to the trainees' answers in the first survey.

Furthermore, trainers had the opportunity to give open answers to the following question "Highlight any aspect of the training (i.e. content, installation, equipment, resources, trainer) that you consider to be improved". This resulted in the answer below.

- "Add hours to the course to approach all contents to a full extent".

This answer by the trainer parallels the answers given by the trainees in the open-ended question.

3.8 Ocean conservation (N=1) - Coordinator's perspective – Survey 1&2

In addition to trainees' and trainers' perspectives. This research also includes the coordinators' perspectives of the training units.

The coordinators were asked the following question: "Highlight other aspects about the training process or improvement suggestions you would like to make as coordinator" and answered:

- "Course initiation without completion of the training development prevented trainees to have access to all resources and study at their pace".

- “Some subjects could have been ministered asynchronously to make learning adaptable to the trainees' calendar”.
- “The training hours were not suitable to some maritime professionals because sunset hours are busy”.

The coordinator's answers shed light on possible improvements that were not mentioned by the trainees nor the trainer. This shows the importance of inclusion of several perspectives in research.

3.9 Basic digital skills for seafarers (N=21) Survey 1

In the following survey the course participants answered three questions evaluating the quality of the training, its resources and contents.

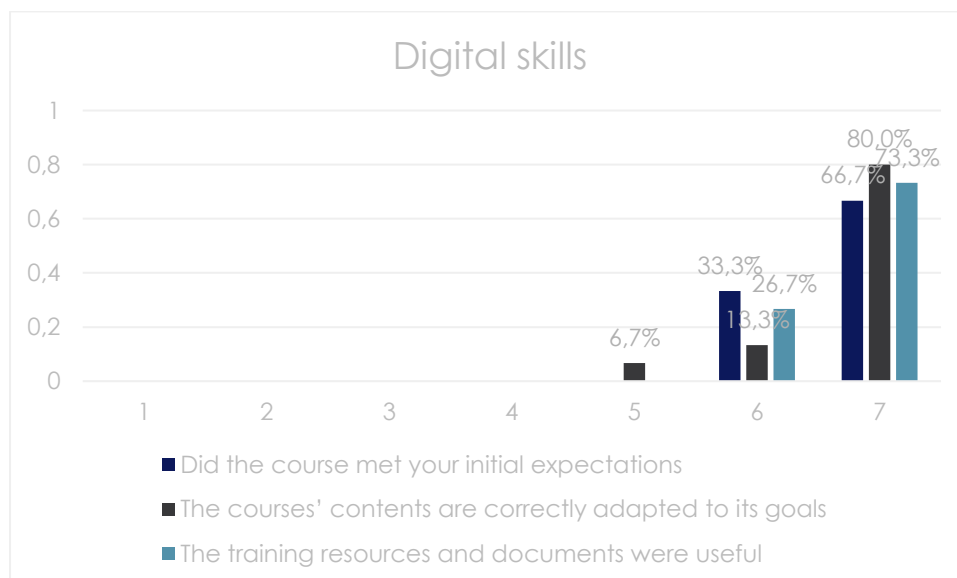


Figure 9. Digital skills survey trainees' perspective survey 1.

On the first question, to which level the course met the initial expectations, 66.7 % gave the highest rating and strongly agreed, while 33.3 % gave the second highest rating. The second question, to which level the courses' contents were adapted to its goals, were rated to the highest level by 80.0 %, the second highest level 13.3 %, and the third highest level 6.7 %. On the third question, whether the training resources and documents were useful, 73.3 % rated the highest level, and 26.7 % rated the second highest level.

The following survey and figure present results on the five questions where the trainees rate the quality of their trainer.

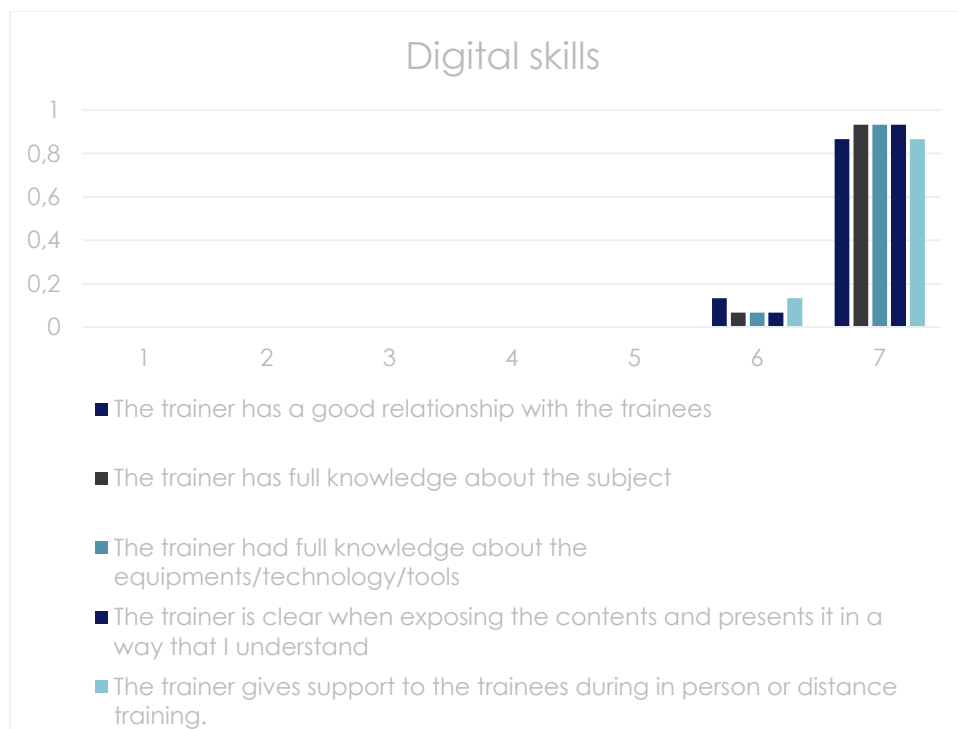


Figure 10. Digital skills survey trainees' perspective of their trainer survey 1.

The vast majority of the trainees rated their trainer 7 out of 7 on the 5 questions, however, a small number of trainees rated their trainer 6 out of 7.

There was also an opportunity for the trainees to provide ideas for improvement on content, installation, equipment and resources in an open answer format:

- "Internet was slow" (mentioned 9 times).

In short, the results show high satisfaction with the trainer in addition to

3.10 Basic digital skills for seafarers (N=2) Survey 2

In the following survey the course participants answered three questions evaluating the quality of the training, its resources and contents.

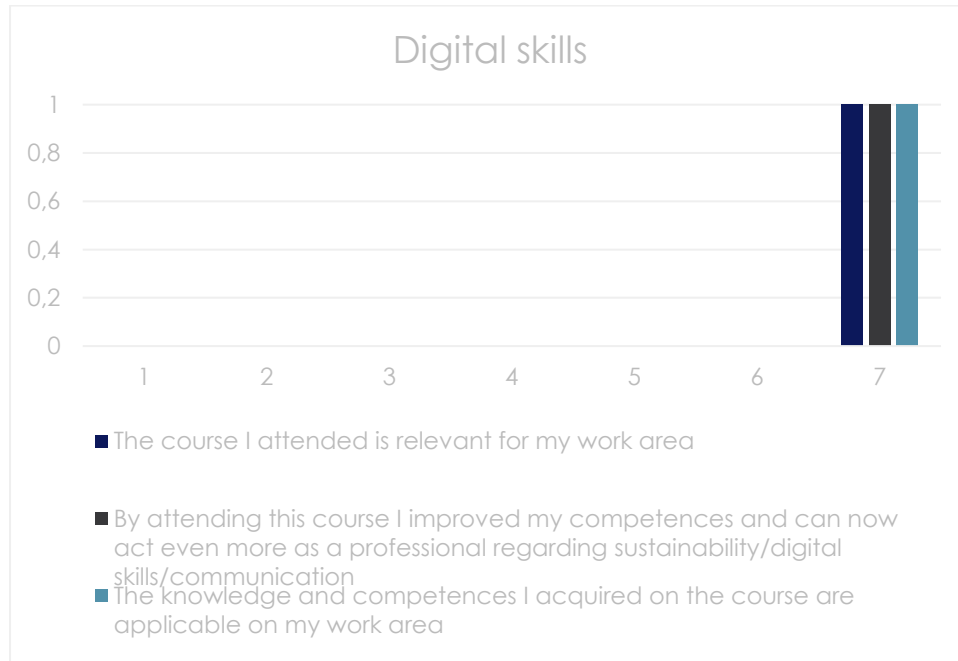


Figure 11. Digital skills survey trainees' perspective survey 2.

The two participants in the second survey rated the training unit 7 out of 7 on all the questions and strongly agreed.

There was an open question where the participants could provide additional information on the adequacy of the units and their relevance for their professional role:

- "All contents very useful, some applied immediately on my daily work tasks".
- "All competences very relevant for my work area and helped with work tasks".

The answers on the close- and open-ended question match and therefore strengthen the findings. However, there were only 2 participants which leads to the conclusion that the data and its results are questionable.

3.11 Basic digital skills for seafarers (N=1) - Trainer's perspective - Survey 1&2

Trainers were also asked to evaluate the courses in 2 surveys. Answers in survey 1 and 2 correlates 100% and are therefore presented in only one figure below.

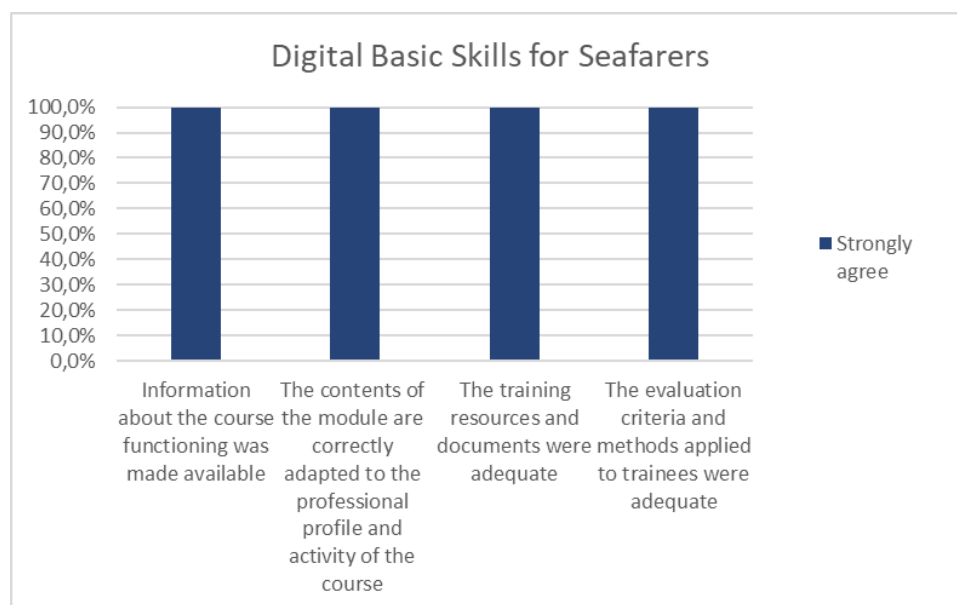


Figure 12. Digital skills survey trainer's perspective survey 1 and 2.

The trainer strongly agreed to alle the statements in the survey. This varies some from the trainees' first survey. Nonetheless, it is similar to the trainees' second survey.

Furthermore, trainers had the opportunity to give open answers to the following question "Highlight any aspect of the training (i.e. content, installation, equipment, resources, trainer) that you consider to be improved". This resulted in the answer below.

- "Low quality internet service available."

This is similar identical to the trainee's open answers in the first survey.

3.12 Basic digital skills for seafarers (N=1) - Coordinator's perspective – Survey 1&2

In addition to trainees' and trainers' perspectives. This research also includes the coordinators' perspectives of the training units.

The coordinators were asked the following question: "Highlight other aspects about the training process or improvement suggestions you would like to make as coordinator" and answered:

- *“Improve wi-fi quality of the facilities to improve training efficiency.”*

To sum up, the trainees, trainer and coordinator all agreed on unsatisfactory internet service.

3.13 English language – Communication on board (N=4) Survey 1

In the following survey the course participants answered four questions evaluating the quality of the training, its resources and contents.

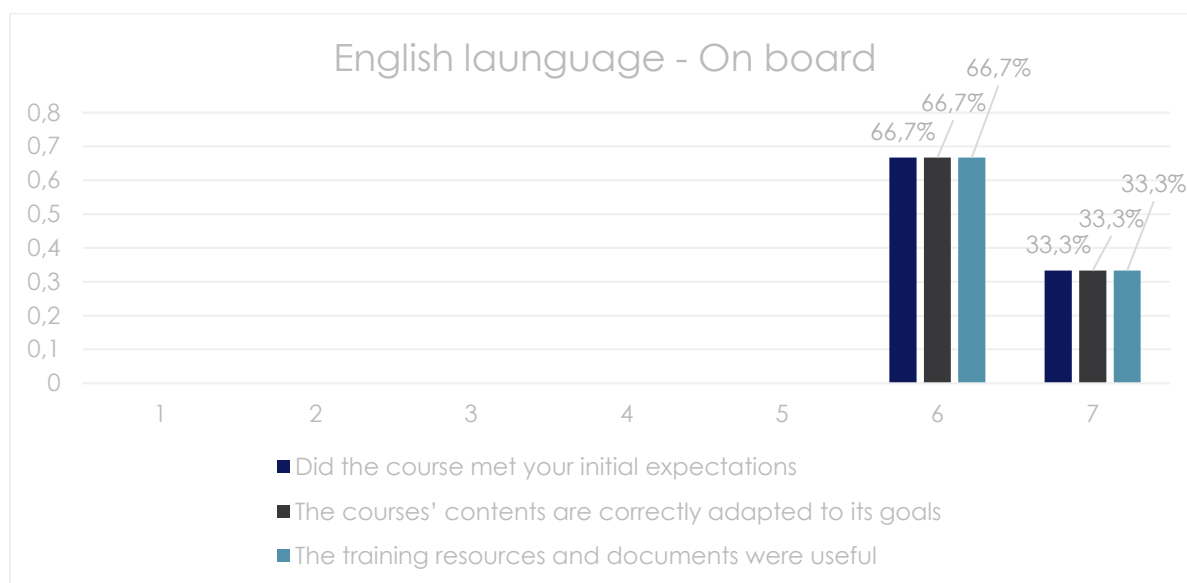


Figure 13. English language survey trainees' perspective survey 1.

On the first question, to which level the course met the initial expectations, 33.3 % rated the highest level and strongly agreed, while 66.7 percent rated the second highest. The second question, to which level the courses' contents were adapted to its goals, 33.3 % rated the highest level and strongly agreed, while 66.7 percent rated the second highest. On the third question, whether the training resources and documents were useful, 33.3 % rated the highest level, while 66.7 percent rated the second highest.

In the following survey and figure presents the results on the five questions where the trainees rate the quality of their trainer.

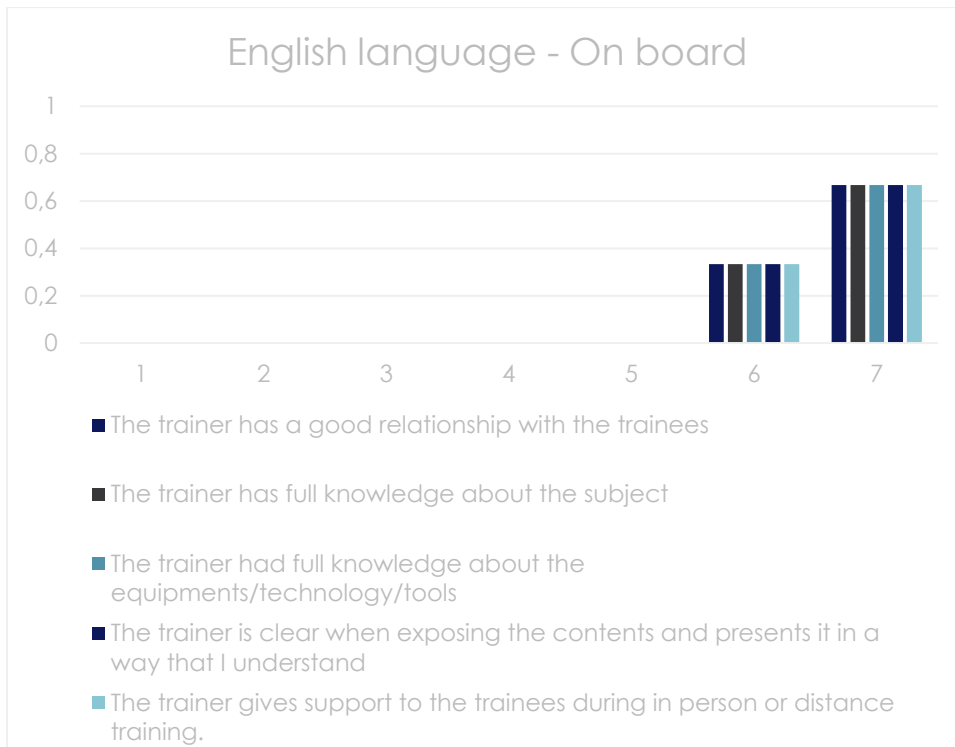


Figure 14. English language survey trainees' perspective on their trainer survey 1.

The majority of the trainees rated their trainer 7 out of 7 and strongly agreed whilst the remaining participants rated the trainer 6 out of 7 and agreed.

There was also an opportunity for the trainees to provide ideas for improvement on content, installation, equipment and resources in an open answer format, but no one gave input at this point in time.

3.14 English language – Communication on board (N=1) Survey 2

In the following survey the course participants answered three questions evaluating the quality of the training, its resources and contents.

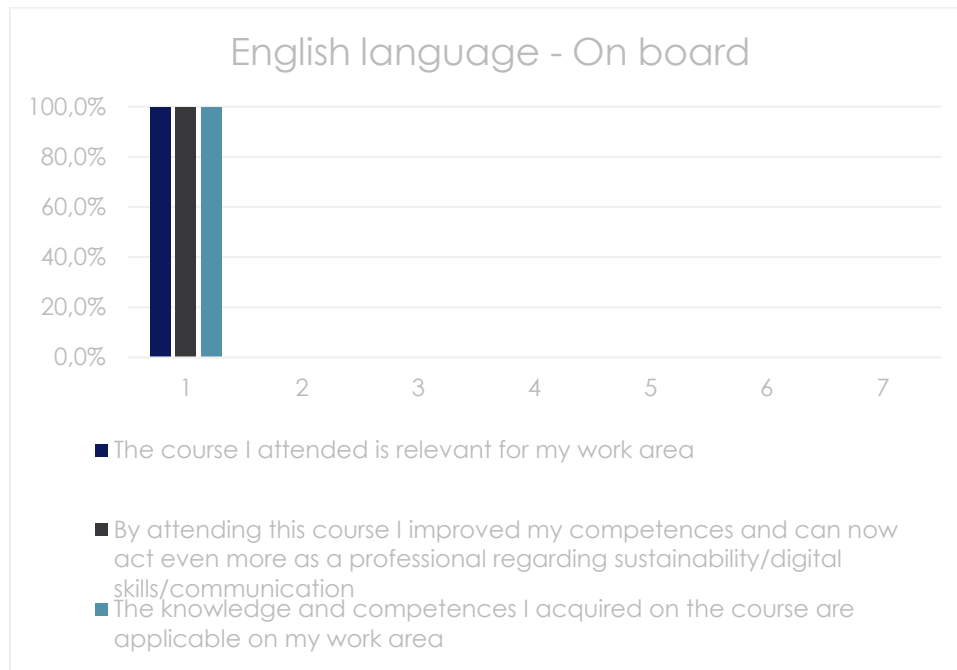


Figure 15. English language survey trainees' perspectives survey 2.

The findings show that the course's participant was not satisfied with either of the three questions.

There was an open question where the participant could provide additional information on the adequacy of the units and their relevance for their professional role

- "The contents helped to assess the right communication and environment on board".
- "They allowed me to prepare to use the English language on board".

In conclusion, the findings in the second survey seem unreliable given the meaning of the text written in the open-ended questions because it contradicts the answers in the Likert scale questionnaire. Additionally, answers from only one participant are not reliable results.

3.15 English language – Communication on board (N=1) - Trainer's perspective - Survey 1&2

Trainers were also asked to evaluate the courses in 2 surveys. Answers in survey 1 and 2 correlates 100% and are therefore presented in only one figure below.

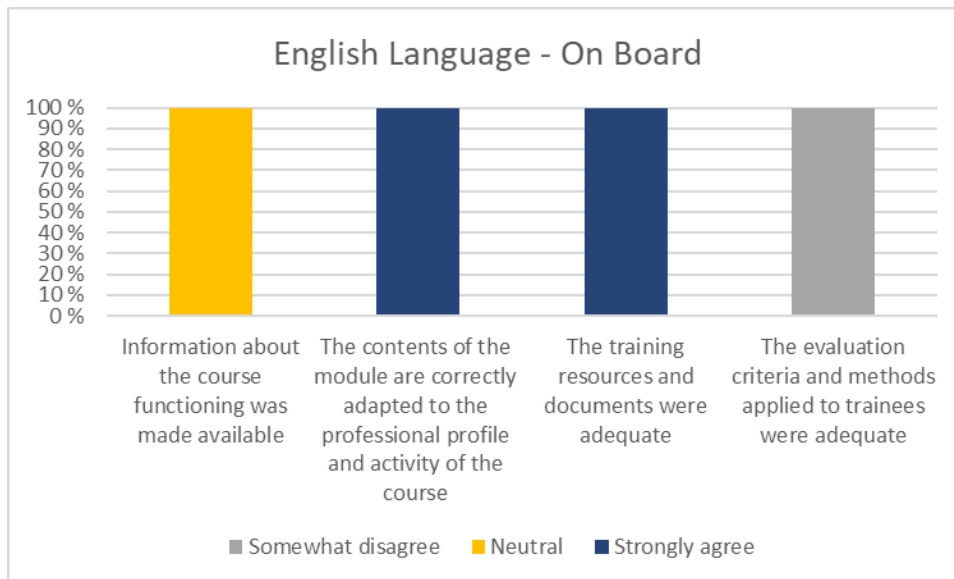


Figure 16. English language survey trainer's perspective survey 1 and 2.

The English language – communication on board trainer strongly agreed to two statements. But at the same time, the trainer was neutral to one statement and somewhat disagreed with one statement.

Furthermore, trainers had the opportunity to give open answers to the following question "Highlight any aspect of the training (i.e. content, installation, equipment, resources, trainer) that you consider to be improved". This resulted in the answer below.

- *"It's necessary to create a previous English level evaluation method that fairly measures the English levels of the course candidates and also to select the maritime professional who effectively work on board of the merchant ships so that this course has added value to the work life of the trainees."*

The answer above is a possible explanation to the statement the trainer somewhat disagreed with as shown in the figure above.

3.16 English language – Communication on board (N=1) - Coordinator's perspective – Survey 1&2

In addition to trainees' and trainers' perspectives. This research also includes the coordinators' perspectives of the training units.

The coordinators were asked the following question: "Highlight other aspects about the training process or improvement suggestions you would like to make as coordinator" and answered:

- *"High rate of dropouts (5 trainees) because of the inadequate method of selection of candidates".*
- *"Also, the enrollment period should be higher to allow seafarers to fit training into their work schedule".*

The coordinator's answers shed light on possible improvements that were not mentioned by the trainees nor the trainer.

4 Annexes

Annex I – Report on the working groups sessions ([here](#))

Annex II – Evaluation form to assess implementation

Annex II – Evaluation form to assess implementation

Trainees – Survey 1

Trainees evaluate training	Did the course met your initial expectations
	The courses' contents are correctly adapted to its goals
	The training resources and documents were useful

Trainees evaluate trainer	The trainer has a good relationship with the trainees
	The trainer has full knowledge about the subject
	The trainer had full knowledge about the equipments/technology/tools
	The trainer is clear when exposing the contents and presents it in a way that I understand
	The trainer gives support to the trainees during in person or distance training.

Highlight any aspect with the training that can be improved (i.e. content, installation, equipment, resources):

Trainees – Survey 2

The course I attended is relevant for my work area
By attending this course I improved my competences and can now act even more as a professional regarding sustainability/digital skills/communication
The knowledge and competences I acquired on the course are applicable on my work area
How do you perceive the adequacy of the units and their relevance for your professional role?
What are your perceptions of the competencies acquired and their alignment with the needs and trends of your workplace, and the work-market in general?

Trainer – Survey 1

Information about the course functioning was made available
The contents of the module are correctly adapted to the professional profile and activity of the course
The training resources and documents were adequate
The evaluation criteria and methods applied to trainees were adequate
Highlight any aspect of the training (i.e. content, installation, equipment, resources, trainer) that you consider to be improved

Trainer – Survey 2

Information about the course functioning was made available
The contents of the module are correctly adapted to the professional profile and activity of the course
The training resources and documents were adequate
The evaluation criteria and methods applied to trainees were adequate
Highlight any aspect of the training (i.e. content, installation, equipment, resources, trainer) that you consider to be improved

Coordinator Survey 1&2

Highlight other aspects about the training process or improvement suggestions you would like to make as coordinator

Scale points in forms

Options	Points
Strongly disagree	1
Disagree	2
Somewhat disagree	3
Neutral	4
Somewhat agree	5
Agree	6
Strongly agree	7

5 Conclusion

To sum up, four short-duration training units; Whale watching by maritime tour operators, Ocean conservation, Basic digital skills for seafarers and English language – communication on board were implemented during the summer in 2023. Two surveys were conducted to evaluate the different training units. Trainees, trainers and coordinators participated in the surveys.

To conclude, there is high satisfaction with Whale watching by maritime tour operator and Basic digital skills for seafarers whilst Ocean conservation and English – communication on board have slightly less satisfaction. However, all the different training units have potential for improvement in accordance with the results in the different surveys.



ON THE WAVE

This project is co-funded by Iceland, Liechtenstein and Norway through the EEA Grants. Through the European Economic Area (EEA) Agreement, Iceland, Liechtenstein and Norway are partners in the internal market with the Member States of the European Union. In order to promote a continuous and balanced strengthening of economic and trade relations, the parties to the EEA Agreement have established a multi-annual Financial Mechanism, known as the EEA Grants. The EEA Grants aim to reduce social and economic disparities in Europe and to strengthen bilateral relations between these three countries and the recipient countries. For the 2014-2021 period, a total contribution of € 2.8 billion was agreed for 15 beneficiary countries. Portugal will benefit from a budget of 102.7 million euros. Portugal will benefit from an amount of 102.7 million euros. Learn more at eeagrants.gov.pt

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