

WP 1	Milestone No. 13.2
-------------	---------------------------

MARBEFES Project

<p>Title: MARBEFES WP1: Stakeholder involvement Milestone 13.2: Results of the Third Stakeholder Consultations in Sardinia, Italy</p> <p>Delivery date: 21 April 2026</p>
<p>Project General Coordinator: Jan Marcin Węstawski Project Scientific Manager: Julie Bremner Project Manager: Joanna Potrykus</p>
<p>Task Leader(s) Herman Hummel</p>
<p>Author(s) Veronika Poškutė Dominga van der Vliet Hanie Matajinimvar Alissa Lotzkes Viviën Laros Herman Hummel</p>
<p>Submission date 21 April 2026</p>



The MARBEFES project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement no 101060937, and UKRI under Grant Agreements 10040216, 10048815, 10041354'



Document Version Control				
Version	Date	Comment	Modified by	Approved by
1.0	31.03.2026	First draft	Veronika Poškutė	
2.0	21.04.2026	Final version	Veronika Poškutė	Herman Hummel

Table of contents

Table of contents.....	3
1. Introduction.....	4
2. Materials and Methods	5
2.1 Preparation.....	5
2.2 Content and Format of Consultations	5
3. Results	7
3.1. Testing the Toolbox website.....	8
3.2. Testing the BowTie tool.....	10
3.3. Testing the sSES-DSS tool	12
3.4. Testing the Governance tool	14
3.5 Comparing the tools	16
4. Discussion and Conclusion.....	17
5. Acknowledgements	18
6. References	18
7. Appendices	19
Appendix 1. Stakeholder participation list	20
Appendix 2: Detailed Meeting Agenda.....	21
Appendix 3. Stakeholder information flyers	22
Appendix 4. Presentation PowerPoint slides	24
Appendix 4.1. General introduction	24
Appendix 4.2. Introduction to the MARBEFES Toolbox.....	27
Appendix 4.3. Introduction to the Bow Tie tool.....	29
Appendix 4.4. Introduction to the SES-DSS tool.....	31
Appendix 4.5. Introduction to the Governance tool	36
Appendix 5. Results of Mentimeter Sessions.....	39
Appendix 5.1. Testing the Toolbox website	39
Appendix 5.2. Testing the Bow Tie tool.....	42
Appendix 5.3. Testing the simple SES-DSS	44
Appendix 5.4. Testing the Governance tool	46



1. Introduction

This report, prepared under Milestone 13.2 of the MARBEFES project, presents the outcomes of the third round of stakeholder consultations conducted in Sardinia, Italy, as part of Work Package 1 (WP1). These consultations are a core element of WP1, which is dedicated to ensuring inclusive and effective stakeholder engagement across the project's Broad Belt Transact (BBT) case studies.

In the first round of stakeholder engagement, WP1 focused on identifying the “priority components” of the coastal and marine environments within each BBT, as perceived by a diverse range of local stakeholders. The insights gained during this initial consultation phase have provided valuable input to several other project WPs. This process has been reported for the visits to Svalbard and Porsanger in the “Arctic region”; the Bay of Gdańsk, the Curonian lagoon and the Finnish archipelago in the “Baltic region”; Dublin & Liverpool, Belgium (Doggerbank) and Santander in the “Atlantic region”; and Mallorca, Sardinia and Crete in the “Mediterranean region”.

The second phase marked a continuation of that participatory approach, with follow-up consultations being held in each of the BBTs. The key objectives of this round were to review and validate the outcomes of the first consultations, and to gather input from the stakeholders on the conceptual scenarios, tools, and transition pathways under development with other work packages, with the aim to co-design these further. The findings of these engagements in the Belgian Doggerbank, Bay of Biscay, Dublin, Sardinia, Crete, the Curonian Lagoon, the Bay of Gdańsk, the Finnish archipelago, Svalbard, and Porsangerfjord, have been documented respectively in Milestones 6, 7.1, 7.2, 8.1, 8.2, 9.1, 9.2, 9.3, 10.1, and 10.2.

The insights gained from the second round of consultations provide a robust foundation for the third and final phase of the project, in which the further refinement of the MARBEFES tools is the focal point, to be carried out in collaboration between stakeholders and project researchers across the WPs. In this co-design process the focus will shift from getting theoretical insights to practically testing the tools, whereby the tools can be refined and finalised by the other WPs in the project.

The appendices include a list of participating stakeholders, a detailed program outline, the flyer distributed in advance of the workshops, the PowerPoint slides presented (as far as they were different from those reported in Milestone 13.1 by Laros *et al.* 2026), and the complete results from the Mentimeter sessions held during the workshop.



2. Materials and Methods

2.1 Preparation

The approach to the Preparation and the Content and Format of Consultations closely followed the procedures outlined in Milestone 13.1 (Laros et al., 2026).

2.2 Content and Format of Consultations

As in the second round of consultations, the consultation workshop was conducted in Sardinia, an island belonging to Italy. Stakeholder invitations were managed by the local Contact Persons through the distribution of flyers (Appendix 3). This process resulted in the participation of six stakeholders (Appendix 1).

The composition of the stakeholders shows a varied image, with differences in prior engagement, professional affiliation, age, and gender, that may influence the range of perspectives in the consultation outcomes (Figs. 1 to 5).

The composition of the stakeholder group in the third round reflects varying degrees of prior participation (Figs. 1, 2). All of the stakeholders have participated at least once in one of the previous workshops. Half of the stakeholders (50%) have participated in the first round, a smaller number (33%) has taken part in the second round, and a minority (17%) has been involved in both rounds before. We have in these graphs, as well in the overall stakeholder list in Appendix 1, not included the local contact persons, who are researchers connected to the project and in the table (Appendix 1) of participants referred to as local representatives. One of those researchers, however, participated in the further testing of the tools and in the Mentimeter sessions, and is therefore included in the results section, since also being a potential user of the tools. Moreover, not all local stakeholders participated in all Mentimeter sessions, thus results are partly based on variable numbers (4 to 6; Appendix 5).

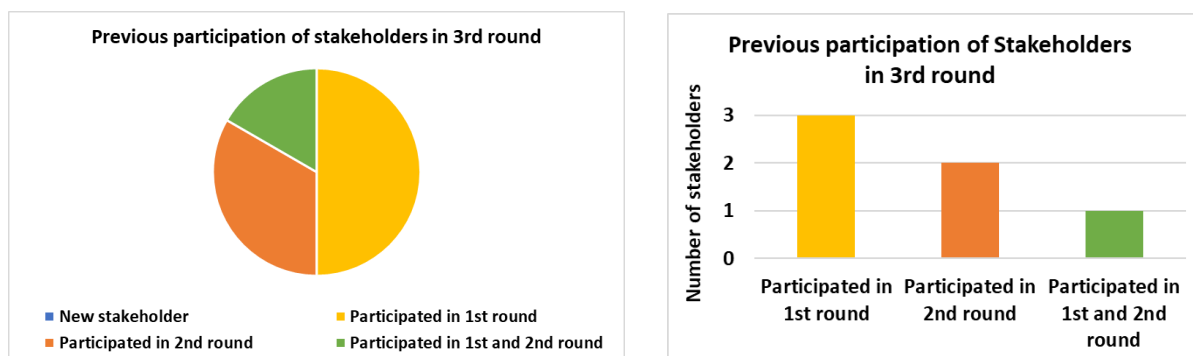
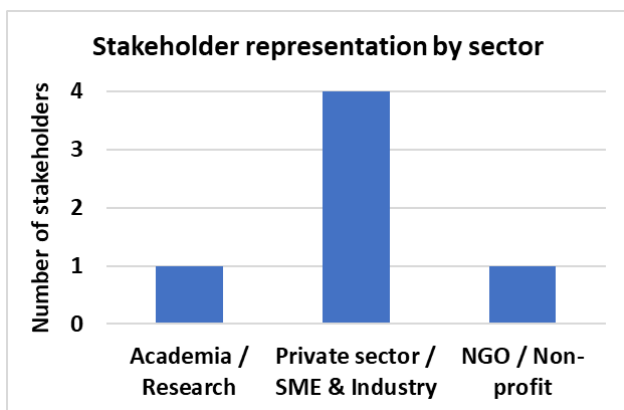


Figure 1 and 2. Stakeholder composition in the 3rd round by prior participation (left figure with relative values, right figure absolute values)

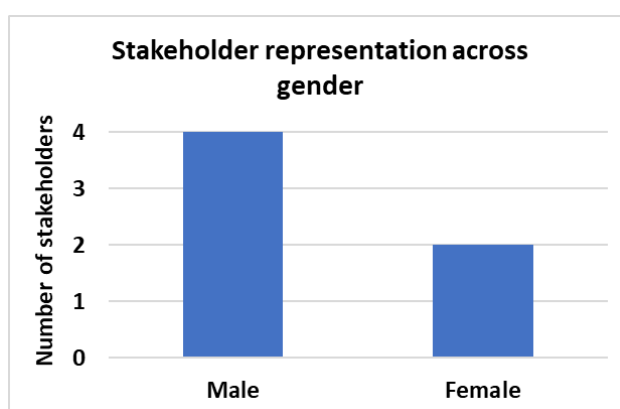
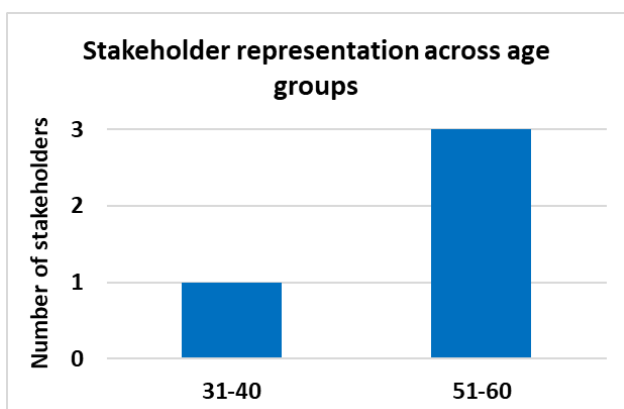
Since the focus of this workshop was on testing the tools' usefulness and usability for different stakeholder groups, and not any result nor the tools themselves had been shown before to any stakeholder, the high proportion of old participants does not affect the interpretation of the results.





The majority of stakeholders in Sardinia represented the Private sector and Industry (n = 4), followed by Academia / Research (n = 1), and NGOs (n = 1)(Fig. 3).

Figure 3. Professional sectors of the stakeholders present at the workshop



Figures 4 (left) and 5 (right). Age and gender distribution of participating stakeholders

Participating stakeholders were requested to provide their age for further analysis (Fig. 4). The majority of representatives belonged to the late-middle age group (51-60, n= 4), while one was a young-adult (31-40). Furthermore, participating stakeholders were distributed across gender (Fig. 5), with a greater number (n= 4) of male participants than female participants (2)(Fig. 5).

All participating stakeholders provided informed consent through signed consent forms, that are the same as in Milestone 13.1 by Laros et al. (2026). In addition, HuFoSS, acting as workshop chair, verbally informed participants that all workshop outputs would be anonymized. During the interactive sessions by means of Mentimeter – where stakeholder feedback and input were collected – participants’ professional categories, age and gender were recorded. The provision of personal data was entirely voluntary, and participants were free to skip these questions during the Mentimeter sessions. Individual responses, as well as the identities of participants and their affiliated organizations, remain non-identifiable. These procedures are fully compliant with the projects’ GDPR and IPR requirements¹.

The workshop had a duration of approximately half a day, commencing at 09:00 and concluding at around 13:30. The program (Appendix 2) began with a general welcome, followed by an introduction to the MARBEFES project and the specific objectives of the workshop. Participants were thanked for their engagement and informed about the potential benefits of their involvement in the consultation process.

¹ The GDPR and IPR protocol has been included as an Appendix in the Milestone 13.1 by Laros et al. 2026.



The MARBEFES project has received funding from the European Union’s Horizon Europe research and innovation programme under Grant Agreement no 101060937, and UKRI under Grant Agreements 10040216, 10048815, 10041354’



3. Results

This section presents selected initial insights derived from the interactive sessions during the third round of stakeholder consultations held in Sardinia, Italy.

After a general introduction (Appendix 4.1), the workshop focused on four tools: the Toolbox website (Appendix 4.2), the BowTie tool (Appendix 4.3), the Simple Social-Ecological System and Decision Support System (sSES-DSS) tool² (Appendix 4.4), and the Governance tool (Appendix 4.5). Each tool was briefly introduced, including an overview of its objectives, functionality, target users, and added value. The introductory presentation was largely similar to the one presented in Milestone 13.1 (Laros et al., 2026). The site-specific slides, and the slides differing by language (Italian instead of English), from those in Milestone 13.1 by Laros et al. (2026), are presented in Appendix 4.

The feedback obtained from the stakeholders after each interactive session was primarily conducted via Mentimeter (all raw results from the Mentimeter sessions are provided in Appendix 5).

Each Mentimeter session began with the same introductory questions: "*Which professional sector do you represent?*"; "*What is your age?*"; and "*What is your gender?*". As the responses to these questions have already been included in section 2.2, they are not repeated in this section. The figures included in this report relate exclusively to the multiple-choice and rating-scale questions related to the tools. While the open-ended questions included in Appendix 6 are not repeated here specifically, the answers are discussed narratively, as they are often particularly informative for interpreting the quantitative results presented in the figures.

It is important to note that the stakeholder workshops conducted as part of this milestone involved a relatively small, and variable, number of participants. Consequently, the findings presented in this report should not be interpreted as representative conclusions or generalizable insights applicable to the broader stakeholder population. Rather, they provide a reflection of the ideas, perspectives, and viewpoints of the specific group of stakeholders who were present at the workshops. While these insights offer valuable quantitative input into discussions on marine governance and management priorities, they should be viewed as indicative rather than definitive. Further engagement with a broader range of stakeholders would be required to validate and expand upon these perspectives for the local scale, whereas at larger scale, in combination with the results of the other BBTs, and of similar consultations at locations of the sister-project Marine SABRES, even stronger funded conclusions may be drawn.

² An overview of the sSES-DSS tool, that is being developed by a sister project MarineSABRES, and its content was also included in the program. The links between the sister projects MARBEFES and Marine SABRES are quite tight, since several tools in both projects have been calibrated and finetuned on basis of the stakeholder input from the earlier consultations of both projects.



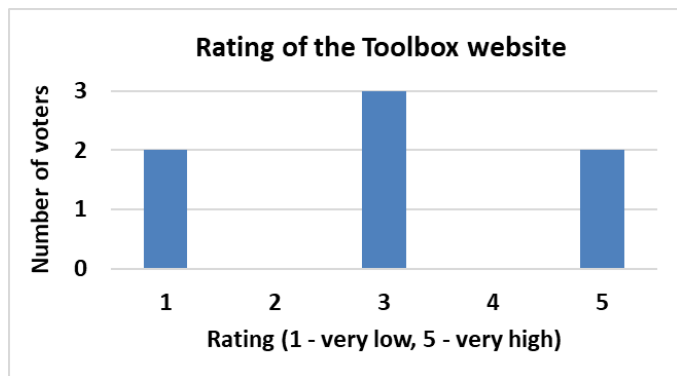
The MARBEFES project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement no 101060937, and UKRI under Grant Agreements 10040216, 10048815, 10041354'



3.1. Testing the Toolbox website

The first interactive session focused on the MARBEFES Toolbox website for stakeholders. The objective of this session was to introduce the website and its benefits, and allow participants to develop an understanding of the toolbox through individual exploration. Following a brief on-screen demonstration and individual hands-on testing, feedback was collected by a group discussion and a Mentimeter survey (Appendix 5.1).

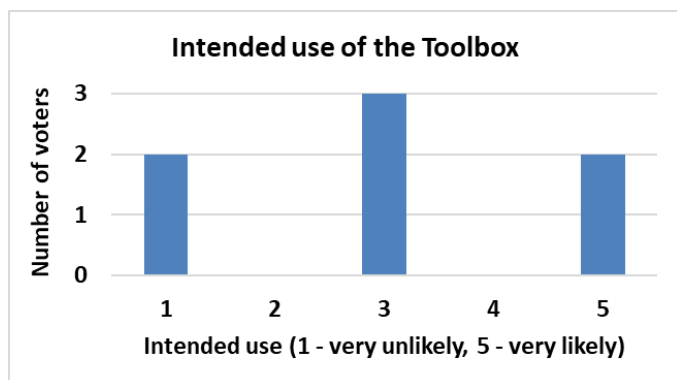
Q: How do you rate this tool?



The website elicited mixed perceptions, with most participants providing a neutral (3) rating. Very low (1) and very high (5) values were selected by the same number of respondents, indicating a balanced distribution of opinions (Fig.6).

Figure 6. Rating of the Toolbox website by stakeholders

Q: What is the likelihood of you using this tool?



Intended use of the Toolbox website varied significantly (Fig. 7). Very unlikely (1) and very likely (5) intended usage were chosen equally. However, most of the participants were uncertain (3) whether they will use the tool.

Figure 7. Intended use of the Toolbox website among participants

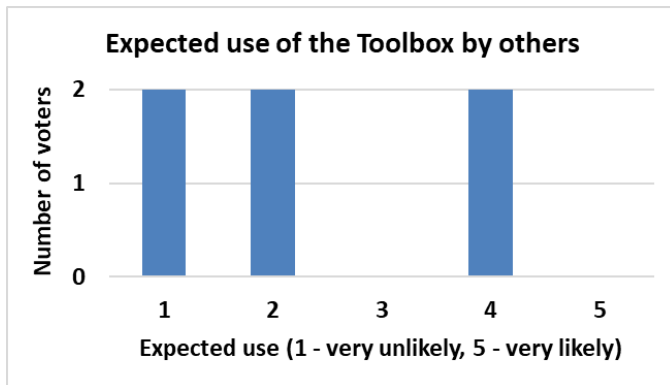
Even though the ratings of the Toolbox were disparate, feedback was gathered to understand primary motivations for utilizing the website. Stakeholders emphasized the need for both general public education on nature conservation and targeted consultations with fishermen regarding the state of the sea. The lower ratings were due to lack of familiarity with the website, the need for more detailed presentation and information on the tools, and an Italian translation. Thus, with further testing and refinement, the platform's ratings are expected to improve significantly.



The MARBEFES project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement no 101060937, and UKRI under Grant Agreements 10040216, 10048815, 10041354'



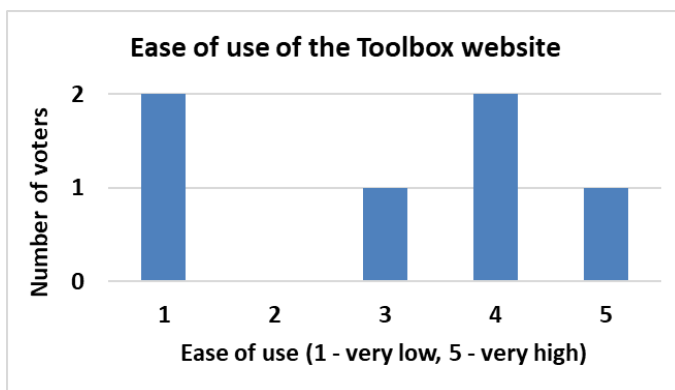
Q: What is the likelihood of others using this tool?



The responses indicate rather negative expectations regarding the website’s use by others (Fig. 8). Ratings were clustered at the lower (1–2) and higher (4) ends of the scale, with no responses indicating neutral (3) or very likely (5) usage of the tool by others.

Figure 8. Expected use of the Toolbox website by others

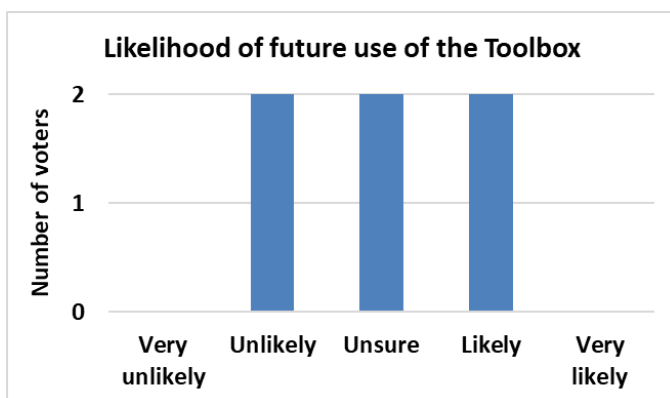
Q: What is the ease of use of the Toolbox website?



Ease of use was rated rather positively (Fig. 9). Most participants evaluated the ease of use as high (4), while neutral (3) and very high (5) answers were each selected by one respondent. However, two participants thought that the Toolbox was very difficult to use (1), indicating difference of opinion.

Figure 9. The ease in which the stakeholders found the Toolbox website to use

Q: How likely are you to use the Toolbox website in future projects?



Stakeholders showed a range of perspectives regarding their likelihood of using the Toolbox website in future projects (Fig. 10). Responses were equally split among “unlikely”, “unsure” and “likely”. No lowest or highest values were chosen, indicating no clear consensus.

Figure 10. The likelihood of stakeholders using the Toolbox website in future projects

When describing their experience, many participants noted that the Toolbox is still under development. Consequently, further testing is required to fully evaluate the user experience. Despite varied opinions, several stakeholders provided positive feedback. They expressed interest in using the website to share knowledge with students, monitor the state of the sea, track changes related to global warming, and collect data on marine biodiversity.



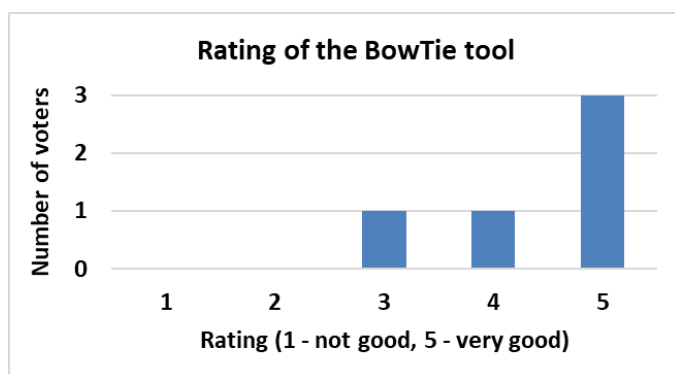
The MARBEFES project has received funding from the European Union’s Horizon Europe research and innovation programme under Grant Agreement no 101060937, and UKRI under Grant Agreements 10040216, 10048815, 10041354’



3.2. Testing the BowTie tool

The second practical session focused on the BowTie tool. Stakeholders were first introduced to the development of the tool, its benefits for managing complex marine systems, and its operational principles. Following a brief on-screen demonstration and individual hands-on testing by participants, feedback was collected through a Mentimeter survey (Appendix 5.2).

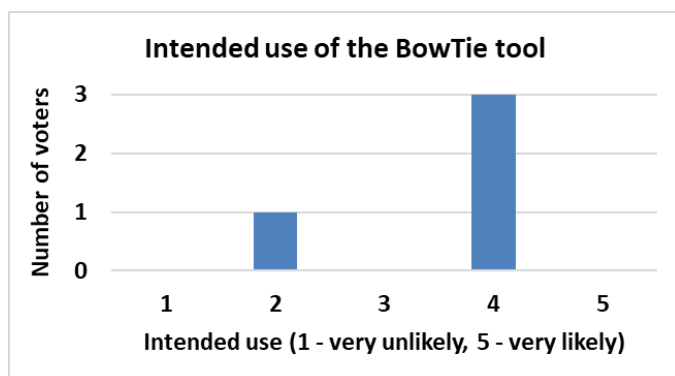
Q: How do you rate this tool?



Stakeholders rated the BowTie tool positively, with the majority assigning it a very good (5) score (Fig. 11). The minority selected good (4) and neutral (3) values. No stakeholders provided negative ratings (1–2). Overall, the responses indicate a generally positive perception of the tool.

Figure 11. Rating of the Bow-Tie tool by stakeholders

Q: What is the likelihood of you using this tool?

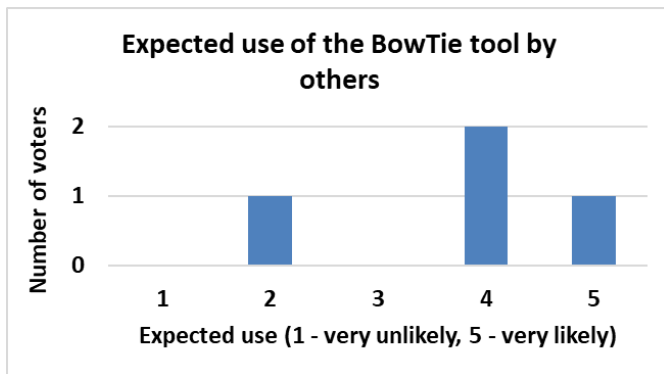


Most participants indicated that they were likely (4) to use the tool, while only one stakeholder reported a lower likelihood (2)(Fig. 12). There were no lowest (1), neutral (3) and highest (5) scores on the intended usage of the tool. Generally, the likelihood of using this tool was rather positive.

Figure 12. Intended use of the Bow-Tie tool among participants

The BowTie's positive rating is reflected in the stakeholders' intended use of the tool. Participants shared that they would use the tool to analyse activities of their profession, share experiences to make them more actionable, and approach complex issues from a new perspective. However, some feedback suggested that the tool may not be suitable for every intended activity. Despite these limitations, the overall reception indicates a rather strong foundation for integrating the tool into the stakeholders' standard workflows.

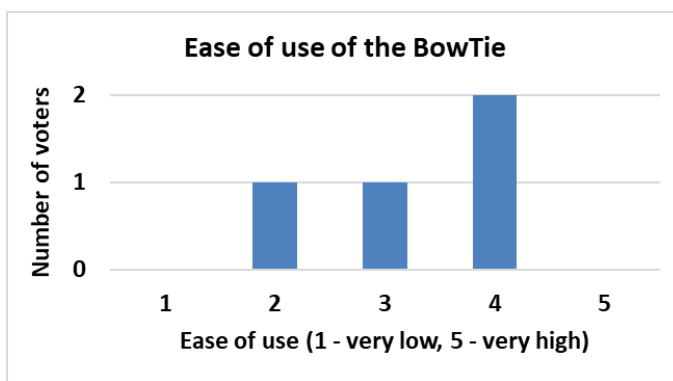
Q: What is the likelihood of others using this tool?



Participants expressed generally positive expectations, with one exception, regarding the use of the BowTie tool by others (Fig. 13). While most participants considered it likely (4) that others would use the tool, one stakeholder expected the use by others to be very likely (5), and one predicted it to be unlikely (2). Overall, the results were optimistic with some caution.

Figure 13. Expected use of the BowTie tool by others

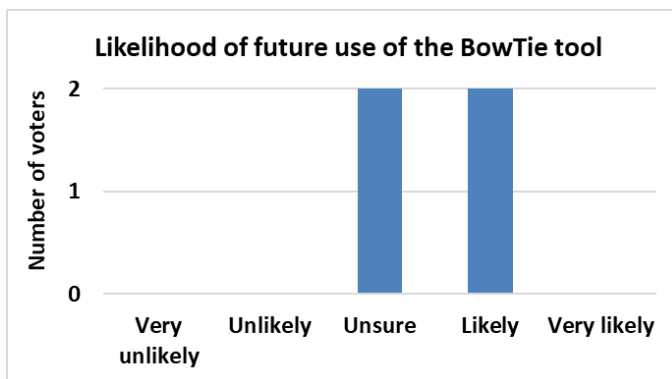
Q: What is the ease of use of the BowTie tool?



Participants generally reported ease of use as moderate (Fig. 14). The responses were concentrated in the low to high (2-4) range, with the highest frequency at high (4). It indicates that the BowTie tool was perceived as relatively easy to use.

Figure 14. The ease in which the stakeholders found the BowTie tool to use

Q: How likely are you to use the BowTie tool in future projects?



Participants were equally divided between being “unsure” and “likely” to use the BowTie tool in future projects (Fig. 15). This indicates a generally moderate expectation of future use.

Figure 15. The likelihood of stakeholders using the BowTie tool in future projects

When describing their experience with the tool, stakeholders characterized it as "interesting" and "useful", yet noted it is still "to be studied", indicating a need for further testing. In practice, the tool would be applied to monitoring fish resource depletion and reporting abandoned fishing gear on the seabed. To facilitate broader adoption, participants suggested providing an Italian translation and increasing stakeholder engagement. Furthermore, the ease-of-use rating could be improved by using less technical language and ensuring the legend colors correspond directly with symbols without interference. Ultimately, resolving these technical issues is essential for the tool's success.



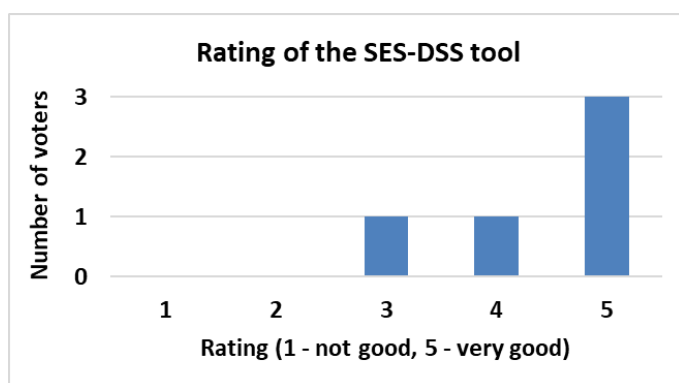
The MARBEFES project has received funding from the European Union’s Horizon Europe research and innovation programme under Grant Agreement no 101060937, and UKRI under Grant Agreements 10040216, 10048815, 10041354’



3.3. Testing the sSES-DSS tool

The third practical session of the workshop was dedicated to shortly explain to the stakeholders what a Simple SES and DSS are, how we came to the sSES-DSS tool, the benefits of this tool in managing complex marine systems, to explain how the tool operates, and mainly to let the stakeholders interact with the tool in practice as a test. After a short demonstration and testing phase, feedback on this subject was gathered through a group discussion and a Mentimeter survey (Appendix 5.3).

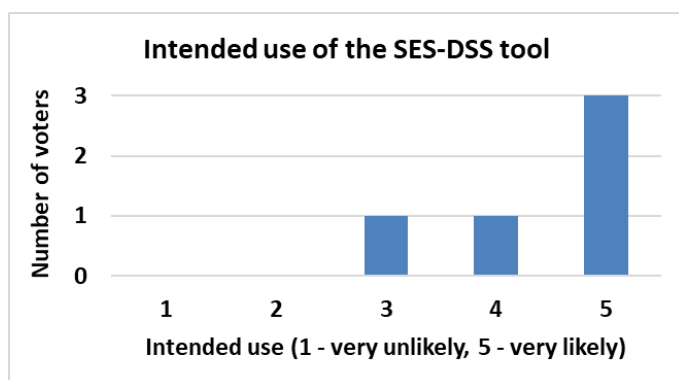
Q: How do you rate this tool?



The overall rating of the sSES-DSS tool was positive, with most participants rating it very good (5)(Fig. 16). No stakeholders provided negative ratings (1–2). A subset of respondents provided a good (4) and a neutral (3) rating, indicating generally positive, but heterogenous perceptions of the tool.

Figure 16. Rating of the sSES-DSS tool by stakeholders

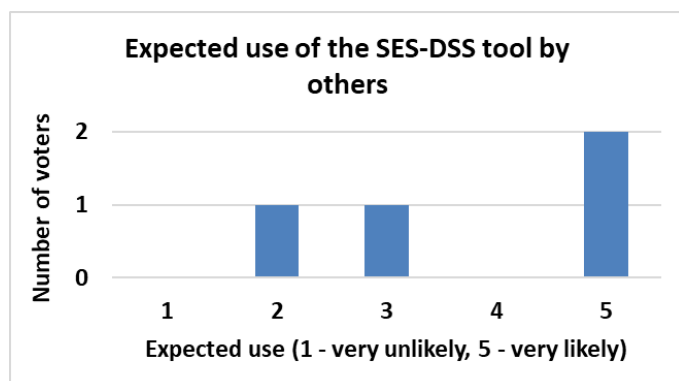
Q: What is the likelihood of you using this tool?



The results suggest a rather positive perception of the likelihood of using the sSES-DSS tool in their daily work (Fig. 17). Most of the respondents are very likely (5) to use it in the future, with one being likely (4) and one neutral (3) answer. Negative (1-2) ratings were not given.

Figure 17. Intended use of the sSES-DSS tool among participants

Q: What is the likelihood of others using this tool?

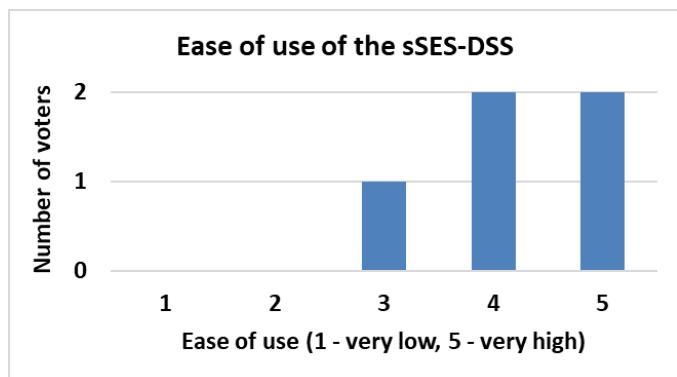


Participants expressed differing views regarding the expected use of the SES-DSS tool by others (Fig. 18). While most participants considered it very likely (5) that others would use the tool, one respondent took a neutral position (3), and one though it was unlikely (2). The results indicate a mixed pattern, with a slight tendency toward positive responses.

Figure 18. Expected use of the sSES-DSS tool by others

The SES-DSS tool was rated quite positively, albeit with some caution. Stakeholders found it constructive and interesting, noting that its primary value lies in planning and programming. However, the tool was also described as complex, highlighting a need for more specific categories and a more personalized approach to analysis. Furthermore, providing an Italian translation would likely lead to even higher satisfaction and broader adoption among users.

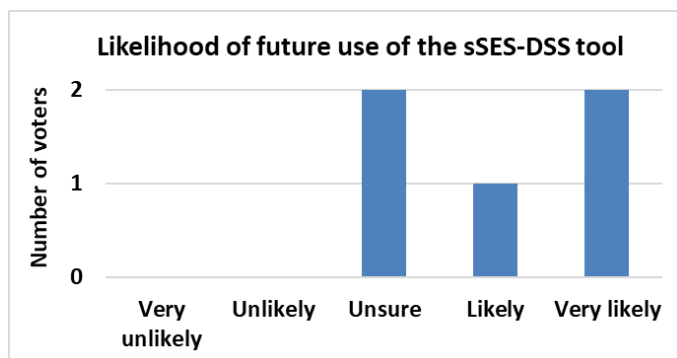
Q: What is the ease of use of the sSES-DSS tool?



Most participants found the tool easy to use (Fig. 19). The majority selected high (4) or very high (5) scores, with only one providing a neutral (3) answer. Negative answers were not provided.

Figure 19. The ease in which the stakeholders found the sSES-DSS tool to use

Q: How likely are you to use the sSES-DSS tool in future projects?



The findings suggest a generally positive view of the tool’s future use (Fig. 20). There was an equal number of participants choosing “Unsure” and “Very likely”, with one selecting “Likely”. This indicates a generally optimistic expectation of future use, albeit with some caution.

Figure 20. The likelihood of stakeholders using the sSES-DSS tool in future projects

Overall, responses regarding the tool's future application lean positively, though they remain somewhat varied. Respondents indicated they would use the SES-DSS tool in their daily work for multiple purposes, most notably for planning and analysing activities within socio-ecological systems—the primary goal of the application. Other participants suggested the tool would be beneficial for identifying solutions to marine-related problems and organizing complex processes. While some stakeholders noted they require more time to evaluate the tool thoroughly, the general consensus describes the SES-DSS as both useful and helpful.



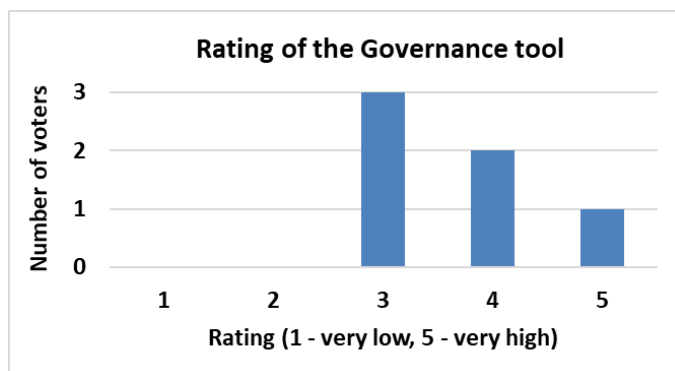
The MARBEFES project has received funding from the European Union’s Horizon Europe research and innovation programme under Grant Agreement no 101060937, and UKRI under Grant Agreements 10040216, 10048815, 10041354’



3.4. Testing the Governance tool

The final practical session focused on the Governance tool. Stakeholders were first introduced to the development of the tool, its benefits for managing complex marine systems, and its operational principles. Following a brief on-screen demonstration and individual hands-on testing by participants, feedback was collected through a group discussion and a Mentimeter survey (Appendix 5.4).

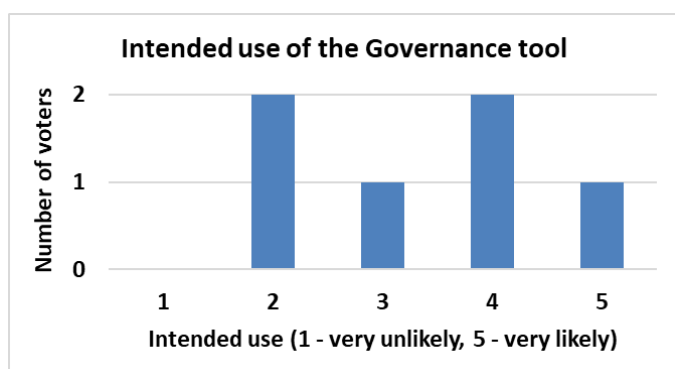
Q: How do you rate this tool?



Ratings tended toward the positive side, although most respondents rated the Governance tool neutrally (3)(Fig. 21). A small number selected a high (4) score and one participant rated the tool very high (5).

Figure 21. Stakeholders' ratings of the likeability of the Governance tool

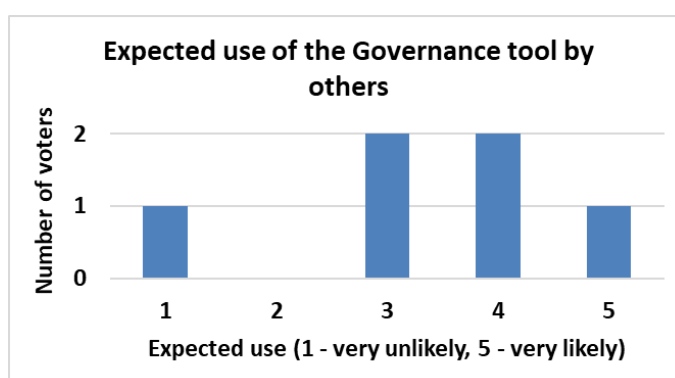
Q: What is the likelihood of you using this tool?



Responses about intended use of the tool were spread across low and high values, with no lowest scores selected (Fig. 22). Participants were evenly split between likely (4) and unlikely (2), and the minority selected neutral (3) and very likely (5). Overall, the data present a very mixed picture.

Figure 22. The ease in which the stakeholders found the Governance tool to use

Q: What is the likelihood of others using this tool?

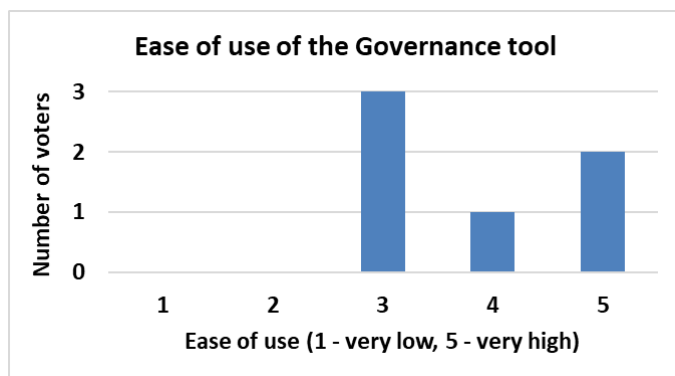


Stakeholders reported a range of expectations regarding the use of the Governance tool by others (Fig. 23). Most participants reported neutral (3) or likely (4) scores. Very unlikely (1) and very likely (5) options were each selected by one respondent, thereby providing a split perspective.

Figure 23. Expected use of the Governance tool by others

The rating of the Governance tool and its potential usage presented a mixed picture. Stakeholders expressed interest in using the tool because it provides valuable information, while others were simply curious to explore its features. However, lower ratings were attributed to the complexity of the platform, with several users calling for a more user-friendly interface. Furthermore, the majority of respondents requested an Italian translation and suggested making the tool more editable. Ultimately, stakeholders emphasized the need for frequent updates to ensure the most current legislative information is available.

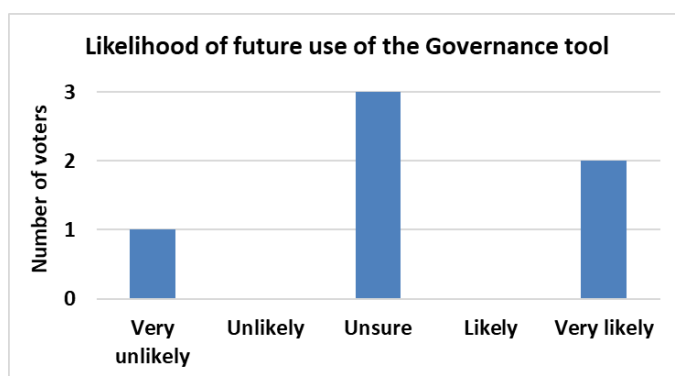
Q: What is the ease of use of the Governance tool?



Stakeholders expressed a generally optimistic outlook on the tool’s ease of use (Fig. 24). Most participants selected a neutral rating (3), while a subset marked that the tool was very easy (5) to use, and one provided a high (4) score.

Figure 24. The ease in which the stakeholders found the Governance tool to use

Q: How likely are you to use the Governance tool in future projects?



Stakeholders provided a varied perspective on the likelihood of future use of the Governance tool (Fig. 25). The majority of participants were “Unsure” about using it in the future, while the second-largest group indicated they were “Very likely” to use it, and one participant was “Very unlikely.” This distribution suggests a mixed pattern of responses regarding potential usage.

Figure 25. The likelihood of stakeholders using the Governance tool in future projects

Stakeholders shared several viewpoints on how the tool could be integrated into their daily work. Some participants noted its value for gathering knowledge and ensuring compliance with relevant laws, while others intended to use it as a core component of their case studies. Additionally, feedback highlighted the tool's potential for improving communication and information sharing. Although some respondents felt the introductory process or demonstration was perhaps a bit too fast, overall the experience was described as “helpful”, “positive”, and “interesting”.



The MARBEFES project has received funding from the European Union’s Horizon Europe research and innovation programme under Grant Agreement no 101060937, and UKRI under Grant Agreements 10040216, 10048815, 10041354’



3.5 Comparing the tools

This section provides a comparative overview on the appreciation of the tools, drawing on the previously discussed stakeholder responses to assess their perceived rating, intended use by stakeholders, expected use by others, ease of use and likelihood of use in future work.

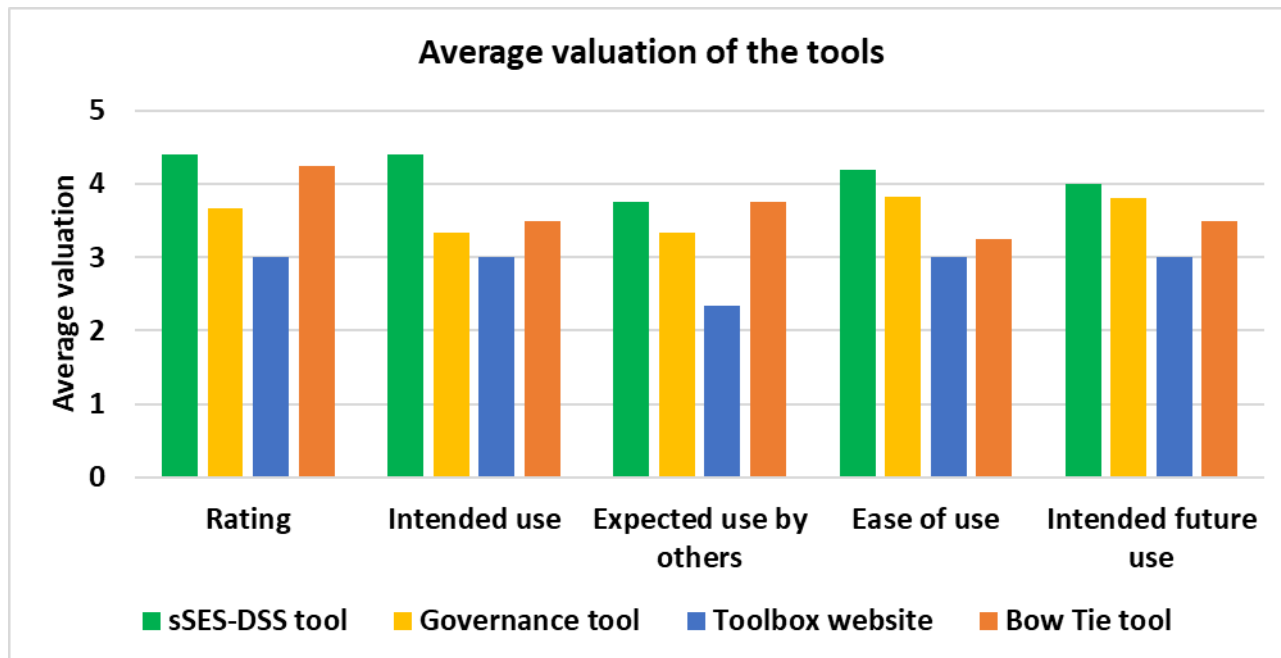


Figure 26. Comparison of the average valuation of each tool

Overall, all four tools – the sSES-DSS, the Governance tool, the Toolbox website, and the BowTie tool – received moderately to highly positive valuations. The primary exception was the Toolbox website, which consistently recorded the lowest scores, indicating some scepticism regarding its broader adoption and perceived relevance to a wider peer group. For the remaining three tools, mean values remained steadily above a valuation of three to four on a five-point scale across all categories, reflecting a generally optimistic reception and perceived utility.

Among the evaluated resources, the sSES-DSS tool achieved the highest overall scores. It performed particularly well in the 'Rating' and 'Intended use' categories; this suggests that despite being a preliminary version, stakeholders recognize its utility and believe it effectively fills a gap in current knowledge and analytical capabilities.

The lower ratings of the Toolbox website likely stem from the website's current draft status, which may not yet provide a sufficiently comprehensive user experience.

Across all criteria, 'Expected use by others' consistently ranked as the lowest metric. While respondents indicated they would personally apply these tools to their own work, they appear less confident that the tools will be integrated into the wider, cross-disciplinary workflows of the region. Consequently, future efforts should focus not only on technical refinement but also on fostering a collaborative environment to encourage broader stakeholder acceptance.

4. Discussion and Conclusion

Overall the results from this workshop with stakeholders in Sardinia showed a relatively high appreciation of the usability of all tools discussed and practically tested.

Next to the relatively high likelihood of using the tools, the stakeholders made some general observations on the status of the tools and on how to improve the future use.

The remarks and comments for improvement made by the stakeholders primarily tended towards 1) the tools being rather complex by using often technical or scientific terms, 2) the need of a description or translation in the local language, and 3) the possibility of a more personal or locally directed approach for the steps to be made in the tools instead of an AI guided approach.

This shows that the sequential steps to be followed in the tools, and the content of the tools, have still to be further simplified, with a user-friendly interface, towards the local conditions in a specific area, and towards the needs of the end-users.

Nevertheless, this shows also that the workshop in Sardinia, Italy—conducted as part of the “3rd round of Stakeholder Consultations”— has proven to be helpful for the further co-design of these tools and in advancing the overarching goals of the MARBEFES project. The general consensus from the event is that the workshop was instrumental in furthering the key objectives of MARBEFES through active and meaningful stakeholder engagement in a co-design and bottom-up fashion .

By integrating the stakeholder feedback from this Broad Belt Transect (BBT), the workshop in Sardinia successfully supports the progression of the project’s tools from Technology Readiness Level (TRL) 5 to TRL 6, where prototypes are demonstrated as being functional in a relevant environment. This validation extended through this workshop, with various stakeholders, beyond the scientific community, confirming the applicability and usefulness of the tools for a broad range of end-users and reinforcing their relevance across diverse perspectives.



5. Acknowledgements

This report, developed under Milestone 13.2 of the MARBEFES project, would not have been possible without the invaluable contributions of many individuals and organizations. We would like to express our sincere gratitude to the stakeholders who participated in the third round of consultations held in Sardinia, Italy. Their thoughtful insights and active engagement have played a crucial role in the success of this initiative.

In particular, we would like to thank the following individuals for their active participation: Elisa Serra, Giuseppe Melidoro, Stefania Collu, Riccardo la Porta, Massimo Marras - Director Mal di Ventre Island MPA, and Stefano Paolo Atzei.

We also extend our thanks to the local contact persons, Paolo Magni, Lorenzo Latini, Giorgio Massaro, Francesca Zama, and Stefania Coppa, who facilitated the stakeholder outreach and invitations, ensuring the successful participation of a diverse group of stakeholders. Their efforts in coordinating the consultations were essential to the overall process.

We are also grateful to the members of the MARBEFES project team for their tireless efforts in collecting, analysing, and presenting the data, as well as those who provided feedback during the interactive sessions. Their collaboration has been instrumental in advancing our understanding of the socio-ecological systems and the governance challenges faced by coastal communities.

Finally, we acknowledge the funding support for the MARBEFES project by the European Commission, which has made this important work possible. MARBEFES is funded by the European Union's Horizon Europe programme under grant agreement No. 101060937.

Without the dedication and hard work of all involved, this report would not have been achievable.

6. References

Laros, V., Matajinimvar, H., Van der Vliet, D., Lotzkes, A., Poškutè, V., Hummel, H. (2026). MARBEFES WP1: Stakeholder involvement Milestone 13.1: Results of the Third Stakeholder Consultations in Crete, Greece. HuFoSS, Roosendaal, the Netherlands, 56 pp.



7. Appendices

The following pages contain appendices:

Appendix 1 provides a list of all stakeholders who participated in the workshops held in Sardinia

Appendix 2 includes a detailed meeting agenda of the workshop

Appendix 3 includes the template of information flyer used to inform stakeholders

Appendix 4 (sections 4.1 – 4.5) presents the PowerPoint slides

Appendix 5 (Sections 5.1 – 5.4) contains, in chronological order, the results of the Mentimeter session



The MARBEFES project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement no 101060937, and UKRI under Grant Agreements 10040216, 10048815, 10041354'



Appendix 1. Stakeholder participation list

Name	Organisation name	Category	Gender	Date	Consent project partners	Consent third parties	Representatives HuFoSS	Local representatives
Elisa Serra**^	UniCA & IMC	Academia & Research	F	03.02.2026	Yes	Yes	Dominga van der Vliet, Hanie Matajinimvar, Alissa Lotzkes	Paolo Magni, Lorenzo Latini, Giorgio Massaro, Francesca Zama, Stefania Coppa
Giuseppe Melidoro*	Pescaturismo Faber	Industry & Private sector	M	03.02.2026	Yes	Yes	Dominga van der Vliet, Hanie Matajinimvar, Alissa Lotzkes	Paolo Magni, Lorenzo Latini, Giorgio Massaro, Francesca Zama, Stefania Coppa
Stefania Collu*	Pescaturismo Faber	Industry & Private sector	F	03.02.2026	Yes	Yes	Dominga van der Vliet, Hanie Matajinimvar, Alissa Lotzkes	Paolo Magni, Lorenzo Latini, Giorgio Massaro, Francesca Zama, Stefania Coppa
Riccardo la Porta***	A.s.d. Sea Scout	Industry & Private sector	M	03.02.2026	Yes	Yes	Dominga van der Vliet, Hanie Matajinimvar, Alissa Lotzkes	Paolo Magni, Lorenzo Latini, Giorgio Massaro, Francesca Zama, Stefania Coppa
Massimo Marras^^	Area Marina Protetta "Penisola del Sinis - Isola di Mal di Ventre	Public audience	M	03.02.2026	Yes	Yes	Dominga van der Vliet, Hanie Matajinimvar, Alissa Lotzkes	Paolo Magni, Lorenzo Latini, Giorgio Massaro, Francesca Zama, Stefania Coppa
Stefano Paolo Atzei**	Pescaturismo San Giovanni	Industry & Private sector	F	03.02.2026	Yes	Yes	Dominga van der Vliet, Hanie Matajinimvar, Alissa Lotzkes	Paolo Magni, Lorenzo Latini, Giorgio Massaro, Francesca Zama, Stefania Coppa

* = Stakeholder has also participated in the first round of consultations

** = Stakeholder has also participated in the second round of consultations

*** = Stakeholder has also participated in the first and second round of consultations

^ = Stakeholder acts as an overarching stakeholder



The MARBEFES project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement no 101060937, and UKRI under Grant Agreements 10040216, 10048815, 10041354'



Appendix 2: Detailed Meeting Agenda

Date: 3 February 2026

Location: Sardinia, Italy

Morning 09:00 – 13:30

09:00 Welcome and introduction to the project

09:15 MARBEFES toolbox

- Presentation
- Hands-on testing
- Collecting feedback

9:45 Bow Tie tool

- Presentation
- Hands-on testing
- Collecting feedback

10:30 COFFEE BREAK

10:45 sSES-DSS tool

- Presentation
- Hands-on testing
- Collecting feedback

12:30 Governance tool

- Presentation
- Hands-on testing
- Collecting feedback

13:00 LUNCH



The MARBEFES project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement no 101060937, and UKRI under Grant Agreements 10040216, 10048815, 10041354'





STAKEHOLDER CONSULTATIONS – 3RD ROUND

Join us to test marine tools

You helped shape them... now test them!

DD MM YYYY | START AT (XX)

📍 LOCATION: (XX)

Why join?

- Get a first look at the interactive tools developed from your feedback
- See how they can support your work in management, policy, or conservation
- Shape the final version of tools
- Connect with other stakeholders and project partners

Together, we are turning ideas into action!

Scan me for more info





Get involved!

In the first two rounds, you helped identify priorities and shape the tools that help to understand your environment and manage it.

Now, in this third round, your feedback will help us fine-tune and validate them – making sure they are practical, user-friendly, and ready for real-world application.

Together, we ensure these tools truly work for you, your community, and the marine environment.

Meeting agenda

09:00	Welcome, and introduction to the project
09:15	Presentation of the MARBEFES tools
09:30	Hands-on testing
10:30	COFFEE BREAK
11:00	Further testing and short discussion
12:30	Collecting your feedback
13:00	LUNCH

If you have any questions, please contact (local contact person xx)



Appendix 4. Presentation PowerPoint slides

Appendix 4.1. General introduction



MARBEFES

MARinBiodiversity and Ecosystem Functioning leading to Ecosystem Services

3° Incontro con i portatori d'interesse

Valutazione dei portatori d'interesse sui risultati ottenuti

Dicembre 2025 / Marzo 2026

Sardegna, Italia

3 Febbraio 2026

Herman Hummel, Hanie Matajinimvar, Dominga van der Vliet,
Vivièn Laros, Alissa Lotzkes, Veronika Poškutè
HuFoSS, Roosendaal, the Netherlands




The MARBEFES Project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement no101060937, and UKRI under Grant Agreements 10040216, 10048815 and 10041354



Terza serie di consultazioni con i portatori d'interesse



- ↓ **MARBEFES recap**
- ↓ **MARBEFES Toolbox**
 - BowTie
 - Il semplice Sistema Socio-Ecologico (SES)
 - Sistema di Supporto alle Decisioni (DSS)
 - **Sfide percepite e soluzioni per la governance della biodiversità**
- ↓ **Pranzo**



The MARBEFES project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement no 101060937, and UKRI under Grant Agreements 10040216, 10048815, 10041354'



Benvenuti al workshop MARBEFES dedicato ai portatori d'interesse

MARBEFES mira a:

- Comprendere il collegamento tra biodiversità, funzioni ecosistemiche, e servizi
- mostrare come gli ecosistemi costieri forniscono benefici essenziali per la società
- valutare questi benefici attraverso diversi metodi di valutazione
- proporre strategie per accrescere il valore ecologico ed economico

Insieme a voi:

- abbiamo selezionato le principali priorità per il Vostro ambiente marino costiero
 - per le sfide, ecologiche, sociali ed economiche
- realizziamo strumenti pratici a supporto della ricerche e della politica
 - e sviluppiamo un Sistema di supporto gestionale e decisionale di semplice utilizzo



Vantaggi della partecipazione a MARBEFES

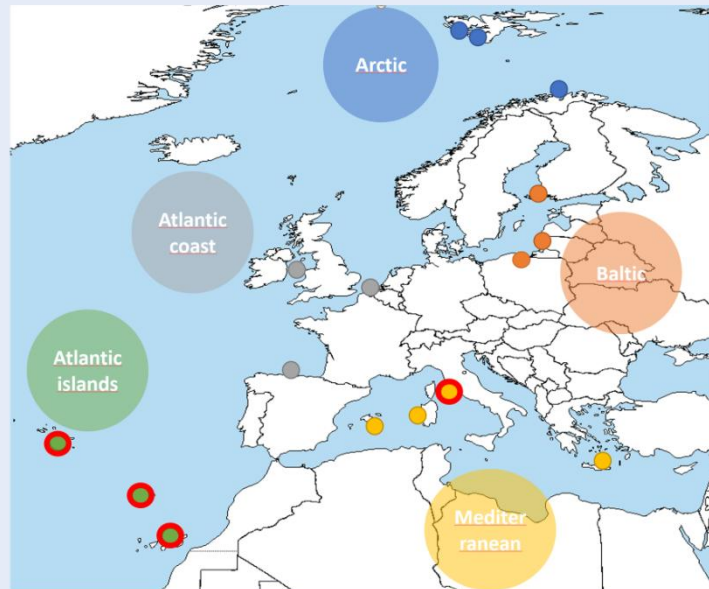
- Promuovere un approccio olistico per le sfide ambientali
- Integra le tue conoscenze locali nel processo di consultazione
- Esprimi le tue priorità e preoccupazioni , affinché vengano incluse
- Creiamo insieme uno strumento pratico, efficace e facilmente utilizzabile, pensato per te



Per raccogliere i dati di base abbiamo condotto numerosi sondaggi e interviste con i portatori d'interesse in tutta Europa.


Insieme nei progetti gemelli MARBEFES e Marine SABRES 

Questo ha contribuito a creare gli strumenti che sono raccolti in una cassetta degli attrezzi a disposizione dei portatori d'interesse



Appendix 4.2. Introduction to the MARBEFES Toolbox

MARBEFES



Sito per accedere alla cassetta degli attrezzi a disposizione dei portatori d'interesse

Developed by AkvaplanNiva (Frida Crossen c.s.) and LWE (Joaquin Lopez c.s.)

MARBEFES TOOLBOX
Tools for valuing marine biodiversity and ecosystem services

VIEW TOOLS

Hello

My name is Marby, how can I help you?


Type here your question or message...

Start Conversation

- Find tools based on topic of interest
- Discover tools based on your sector
- See where tools have been tested
- Find decision-support tools
- Discover methods and approaches
- Explore based on type of output

Akvaplan.niva

LifeWatch ERIC



Accesso al sito (by AkvaplanNiva)

- Click [here](#)
- Or scan QR code



<https://xd.adobe.com/view/a30029fd-3569-4d5c-9979-28b50218acb6-f653/>




Sito per la cassetta degli attrezzi - Revisione

- Mentimeter link:
- Or scan ->



Appendix 4.3. Introduction to the Bow Tie tool






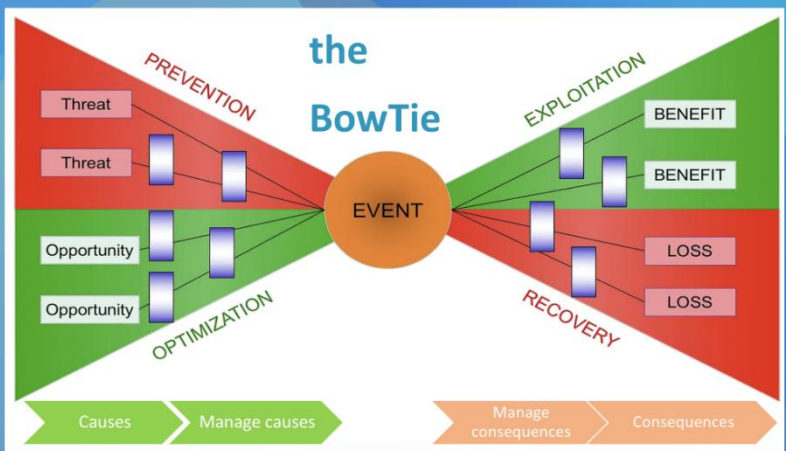
Uno degli strumenti sviluppati in MARBEFES è:



Bow-Tie

Relazione causa-conseguenza


Developed by IECS (Mike Elliot c.s.), BC3 (Marta Pascual c.s.), and KU (Arturas Razinkovas-Baziukas c.s.)



MARBEFES Project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement no 101060937 and UKRI under Grant Agreements 10040216, 10048815 and 10041354



Analisi Bow-tie Sardegna

Esempio: Pesca locale

Drivers Central Theme (non-natural change in biodiversity) Impacts



Presented with aribid

Cause
Gestione delle cause

Gestione delle conseguenze
Conseguenze











Bow-Tie Shiny App – Ora prova tu!

- Go to: http://laguna.ku.lt:3838/bowtie_app/

- Or scan ->



Bow-Tie Shiny App - Review

- Mentimeter link:
- Or scan ->



Appendix 4.4. Introduction to the SES-DSS tool

In collaborazione con Marine SABRES, le informazioni disponibili sono state utilizzate per costruire un Sistema Socio-Ecologico (SES) e un Sistema di Supporto alle Decisioni, al fine di comprendere meglio le interazioni nel nostro ambiente costiero e marino.

Cosa è un Sistema Socio-Ecologico:
Un'area in cui elementi umani e naturali coesistono e si influenzano reciprocamente



The SES approach is developed by the team of Michael Elliott & Gemma Smith (IECS Ltd)
The DSS ShinyApp is developed by the team of Arturas Razinkovas -Baziukas (KU)



Il semplice approccio del Sistema Socio-Ecologico (SES)

Aiuta a gestire sistemi marini complessi comprendendo come si comportano nel loro insieme

E' semplice come A, B, C...



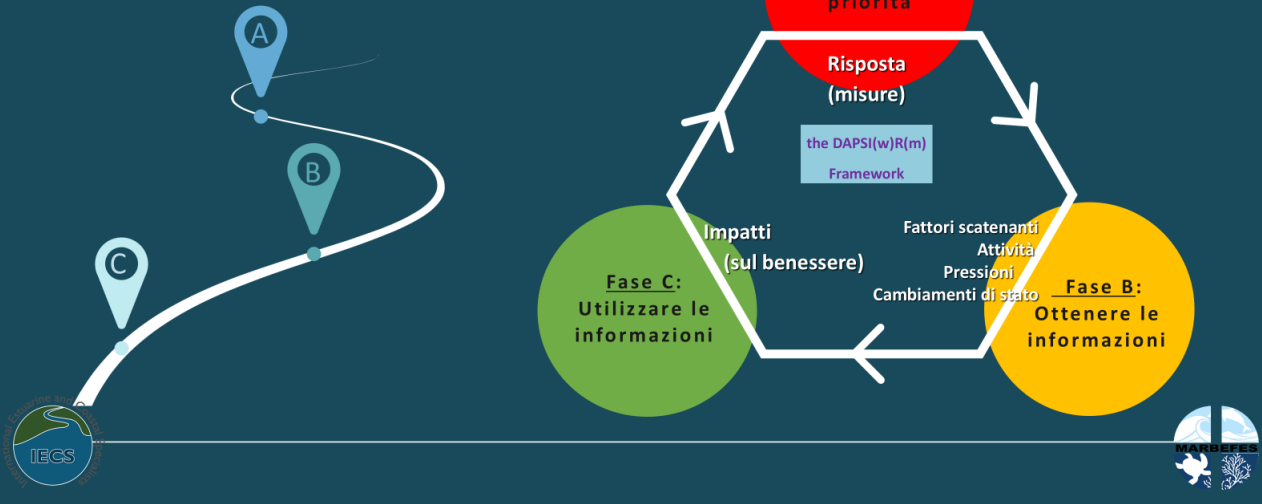
Parte A – Comprendere le priorità e cosa si vuole migliorare

Parte B – Raccogliere informazione sul sistema

Parte C – Utilizzare le informazioni per progettare misure di gestione



Il semplice approccio del Sistema Socio-Ecologico (SES)



Dai Sistemi Socio-Ecologici (SES) ai Sistemi di Supporto alle Decisioni (DSS)



In Marine SABRES, le informazioni sui Sistemi Socio-Ecologici sono state integrate in un Sistema di Supporto alle Decisioni – la ShinyApp DSS.

- L'obiettivo generale di un Sistema di Supporto alle Decisioni è **sostenere e facilitare il processo decisionale informato**
- Un DSS può supportare i decisori nel **bilanciare o comprendere le sfide**, come ad esempio:
 - rischi, incertezze... e **trovare alternative**
 - interessi differenti tra il pubblico... e **individuare soluzioni**

Developed by KU
(Arturas Razinkovas-Baziukas c.s.)



Klaipeda University
Marine Research Institute



7 STEPS TO EFFECTIVE DECISION MAKING

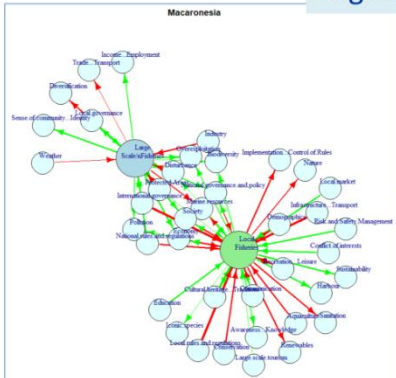
Decision making is the process of making choices by identifying a decision, gathering information, and assessing alternative resolutions.



<https://www.umassd.edu/fycm/decision-making/process>

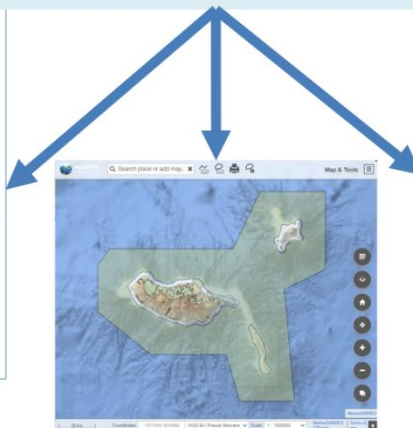


Il DSS di Marine Sabres sarà composto da diversi componenti progettati per guidarti nella valutazione delle esigenze specifiche degli utenti



Strumento di analisi dei SES locali, basato sui tuoi input

Pronto per essere testato



Informazioni geografiche (GIS) Strumento per dati spaziali



Governance dei SES

Pronto per essere testato



Sistema di support alle decisioni

- Go to: <http://193.219.76.93:3838/marinesabres>

http://laguna.ku.lt:3838/marinesabres/?user_level=beginner



Sistema di support alle decisioni - Revisione

- Mentimeter link:



Appendix 4.5. Introduction to the Governance tool



MARBEFES

Lo strumento di Governance

Developed by LWE (Joaquin Lopez c.s.) and IECS (Mike Elliot c.s.)










MARBEFES Project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement no 101060937 and UKRI under Grant Agreements 10040216, 10048815 and 10041354





Strumento di governance



Search


Layers
Highlight distance




Locations

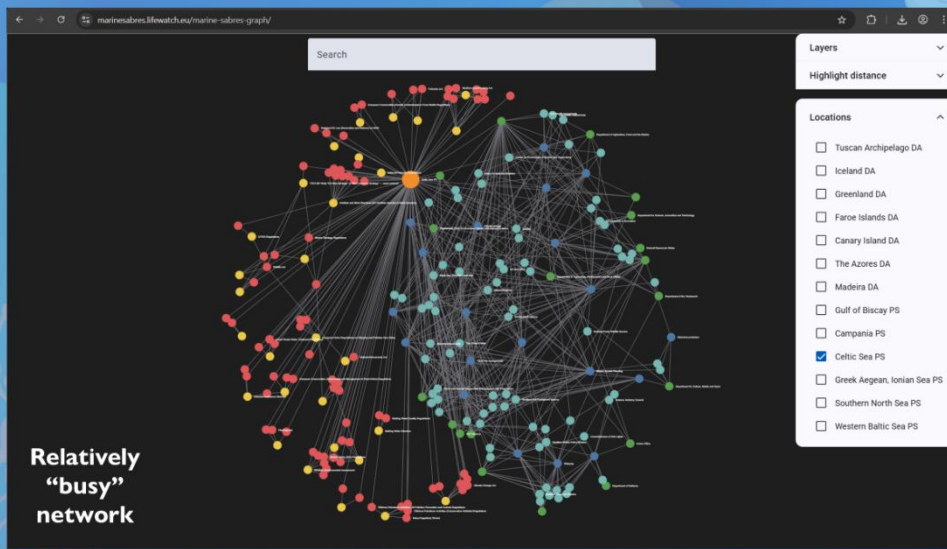
- Tuscan Archipelago DA
- Iceland DA
- Greenland DA
- Faroe Islands DA
- Canary Island DA
- The Azores DA
- Madeira DA
- Gulf of Biscay PS
- Campania PS
- Celtic Sea PS
- Greek Aegean, Ionian Sea PS
- Southern North Sea PS
- Western Baltic Sea PS



Strumento di governance



Strumento di governance – Ora puoi provare tu!

- Go to: marbafes.lifewatch.eu
- Or scan ->



Strumento di governance - Revisione

- Mentimeter link: <http://marinesabres.lifewatch.eu>
-



MARBEFES



Grazie per la tua attenzione e partecipazione!

Herman Hummel, Hanie Matajinimvar, Dominga van der Vliet,
Vivièn Laros, Alissa Lotzkes, Veronika Poškutè
HuFoSS, Roosendaal, the Netherlands



MARBEFES Project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement no 101060937 and UKRI under Grant Agreements 10040216, 10048815 and 10041354



Appendix 5. Results of Mentimeter Sessions

Appendix 5.1. Testing the Toolbox website

Question Type	Location of SH	SH	Q1. What professional sector are you representing?
Multiple choice	Sardinia	1	Academia / Research
Multiple choice	Sardinia	2	Academia / Research
Multiple choice	Sardinia	3	Private sector / SME
Multiple choice	Sardinia	4	Fisheries
Multiple choice	Sardinia	5	Private sector / SME
Multiple choice	Sardinia	6	Fisheries
Multiple choice	Sardinia	7	Academia / Research
Question Type	Location of SH	SH	Q2. What is your age?
Open	Sardinia	1	30
Open	Sardinia	2	49
Open	Sardinia	3	52
Open	Sardinia	4	53
Open	Sardinia	5	32
Open	Sardinia	6	53
Open	Sardinia	7	49
Question Type	Location of SH	SH	Q3. What is your gender?
Multiple choice	Sardinia	1	Female
Multiple choice	Sardinia	2	Male
Multiple choice	Sardinia	3	Male
Multiple choice	Sardinia	4	Female
Multiple choice	Sardinia	5	Female
Multiple choice	Sardinia	6	Male
Multiple choice	Sardinia	7	Male
Question Type	Location of SH	SH	Q4. I rate this website: (1-5)
Scale	Sardinia	1	1
Scale	Sardinia	2	3
Scale	Sardinia	3	3
Scale	Sardinia	4	5
Scale	Sardinia	5	1
Scale	Sardinia	6	5
Scale	Sardinia	7	3
Question Type	Location of SH	SH	Q5. I will use this website: (1-5)
Scale	Sardinia	1	1
Scale	Sardinia	2	3
Scale	Sardinia	3	4
Scale	Sardinia	4	5
Scale	Sardinia	5	1
Scale	Sardinia	6	4
Scale	Sardinia	7	5
Question Type	Location of SH	SH	Q6. Others will use this website: (1-5)
Scale	Sardinia	1	1
Scale	Sardinia	2	2
Scale	Sardinia	3	2
Scale	Sardinia	4	4

Scale	Sardinia	5	1
Scale	Sardinia	6	4
Scale	Sardinia	7	
Question Type	Location of SH	SH	Q7. Why will you use this website?
Open	Sardinia	1	
Open	Sardinia	2	Nn saprei, nn avete ancora spiegato il sito
Open	Sardinia	3	Non so!
Open	Sardinia	4	Sarà utile per il nostro lavoro di pescatori per le informazioni relative allo stato di salute del mare e a anche per la nostra attività di Pescaturismo poiché sarà utile consultare le interazioni
Open	Sardinia	5	I am not sure I will use it. I need to have a deeper look on it
Open	Sardinia	6	Per sensibilizzazione delle persone nel rispetto della natura e la sua conoscenza
Open	Sardinia	7	
Question Type	Location of SH	SH	Q8. What could be a possible reason why you will not use this website?
Open	Sardinia	1	
Open	Sardinia	2	Scarso interesse per gli applicativi sviluppati
Open	Sardinia	3	Non é in italiano!
Open	Sardinia	4	Al momento non saprei rispondere poiché ancora non conosco bene il sito
Open	Sardinia	5	
Open	Sardinia	6	Non lo so
Open	Sardinia	7	Sarebbe necessaria una presentazione più approfondita
Question Type	Location of SH	SH	Q9. What should we improve in the next version of the website?
Open	Sardinia	1	
Open	Sardinia	2	
Open	Sardinia	3	Proporlo anche in italiano.
Open	Sardinia	4	Il sito è graficamente molto bello e intuitivo. Migliorerei la comunicazione con la possibilità di consultazione anche in lingua italiana.
Open	Sardinia	5	
Open	Sardinia	6	Migliorare la comunicazione in più lingue
Open	Sardinia	7	La raggiungibilità
Question Type	Location of SH	SH	Q10. Did any words or phrases on the website confuse you?
Open	Sardinia	1	
Open	Sardinia	2	The introduction on the tools
Open	Sardinia	3	No
Open	Sardinia	4	Vorrei conoscere meglio il sito prima di rispondere a questa domanda
Open	Sardinia	5	No, but maybe could be useful to have the website in other languages
Open	Sardinia	6	Da verificare
Open	Sardinia	7	Migliorare l'introduzione
Question Type	Location of SH	SH	Q11. For what questions in your daily work would you use this website to answer?
Open	Sardinia	1	Non credo li userò. Molti non sono ancora pronti e non si capisce a cosa servono.
Open	Sardinia	2	Comunicazione verso gli studenti
Open	Sardinia	3	Non saprei
Open	Sardinia	4	Avere maggiori informazioni sulla biodiversità marina. Conoscere i cambiamenti delle abitudini delle specie ittiche e del loro ambiente

Open	Sardinia	5	
Open	Sardinia	6	Conoscenze dello stato del mare i cambiamenti per causa del riscaldamento globale e come comportarsi per avere un impatto minore
Open	Sardinia	7	
Question Type	Location of SH	SH	Q12. The website is easy to use:
Scale	Sardinia	1	1
Scale	Sardinia	2	3
Scale	Sardinia	3	4
Scale	Sardinia	4	5
Scale	Sardinia	5	
Scale	Sardinia	6	4
Scale	Sardinia	7	1
Question Type	Location of SH	SH	Q13. How likely are you to use the website in future projects?
Scale	Sardinia	1	Unlikely
Scale	Sardinia	2	
Scale	Sardinia	3	Unlikely
Scale	Sardinia	4	Likely
Scale	Sardinia	5	Unsure
Scale	Sardinia	6	Unsure
Scale	Sardinia	7	Likely
Question Type	Location of SH	SH	Q14. Describe your experience with the website in two words:
Open	Sardinia	1	Sito in costruzione
Open	Sardinia	2	Confused
Open	Sardinia	3	easy Come Easy Go
Open	Sardinia	4	Utile, graficamente carino
Open	Sardinia	5	In progress
Open	Sardinia	6	Positiva
Open	Sardinia	7	Da approfondire
Question Type	Location of SH	SH	Q15. Any comments...?
Open	Sardinia	1	
Open	Sardinia	2	Maybe we have visit and explore the apps before this questions
Open	Sardinia	3	
Open	Sardinia	4	In attesa di verificare meglio
Open	Sardinia	5	I would like to see the website fully developed in order to evaluate it
Open	Sardinia	6	Segue
Open	Sardinia	7	

Appendix 5.2. Testing the Bow Tie tool

Question Type	Location of SH	SH	Q1. What professional sector are you representing?
Multiple choice	Sardinia	1	Academia / Research
Multiple choice	Sardinia	2	Fisheries
Multiple choice	Sardinia	3	Authorities (governance / policy)
Multiple choice	Sardinia	4	MPA (management / ranger)
Question Type	Location of SH	SH	Q2. What is your age?
Open	Sardinia	1	31
Open	Sardinia	2	53
Open	Sardinia	3	53
Open	Sardinia	4	53
Question Type	Location of SH	SH	Q3. What is your gender?
Multiple choice	Sardinia	1	Female
Multiple choice	Sardinia	2	Female
Multiple choice	Sardinia	3	Male
Multiple choice	Sardinia	4	Male
Question Type	Location of SH	SH	Q4. I rate this tool: (1-5)
Scale	Sardinia	1	2
Scale	Sardinia	2	5
Scale	Sardinia	3	5
Scale	Sardinia	4	5
Question Type	Location of SH	SH	Q5. I will use this tool: (1-5)
Scale	Sardinia	1	2
Scale	Sardinia	2	4
Scale	Sardinia	3	4
Scale	Sardinia	4	4
Question Type	Location of SH	SH	Q6. Others will use this tool: (1-5)
Scale	Sardinia	1	2
Scale	Sardinia	2	5
Scale	Sardinia	3	4
Scale	Sardinia	4	4
Question Type	Location of SH	SH	Q7. Why will you use this tool?
Open	Sardinia	1	
Open	Sardinia	2	Per meglio analizzare le attività del nostro mestiere. Soprattutto quelle future
Open	Sardinia	3	Per condividere esperienze e renderle utili
Open	Sardinia	4	Per analizzare problematiche complesse con un nuovo approccio
Question Type	Location of SH	SH	Q8. What could be a possible reason why you will not use this tool?
Open	Sardinia	1	
Open	Sardinia	2	Nessuna ragione
Open	Sardinia	3	La domanda è mal posta
Open	Sardinia	4	Forse non adatto ad alcune attività
Question Type	Location of SH	SH	Q9. What should we improve in the next version of the tool?
Open	Sardinia	1	
Open	Sardinia	2	Sarebbe molto utile poter scegliere la lingua italiana
Open	Sardinia	3	Un maggiore coinvolgimento nella creazione
Open	Sardinia	4	Leggibilità migliore

Question Type	Location of SH	SH	Q10. Did any words or phrases on the tool confuse you?
Open	Sardinia	1	
Open	Sardinia	2	Linguaggio un po' troppo tecnico
Open	Sardinia	3	No
Open	Sardinia	4	Corrispondenza tra legenda e simboli nel diagramma (a volte i colori non corrispondono)
Question Type	Location of SH	SH	Q11. What questions in your daily work would you use this tool to answer?
Open	Sardinia	1	
Open	Sardinia	2	Depauperamento della risorsa ittica. Controllo maggiori delle autorità preposte
Open	Sardinia	3	Segnalazione di attrezzatura da pesca impigliate nel fondale marino
Open	Sardinia	4	None
Question Type	Location of SH	SH	Q12. The Bowtie is easy to use:
Scale	Sardinia	1	2
Scale	Sardinia	2	4
Scale	Sardinia	3	4
Scale	Sardinia	4	3
Question Type	Location of SH	SH	Q13. How likely are you to use the Bowtie in future projects?
Scale	Sardinia	1	Unsure
Scale	Sardinia	2	Likely
Scale	Sardinia	3	Unsure
Scale	Sardinia	4	Likely
Question Type	Location of SH	SH	Q14. Describe your experience with the tool in two words:
Open	Sardinia	1	Da studiare
Open	Sardinia	2	Utile,
Open	Sardinia	3	Interessante
Open	Sardinia	4	Interessante
Question Type	Location of SH	SH	Q15. Any comments...?
Open	Sardinia	1	Non si puo' scaricare il manuale di istruzioni
Open	Sardinia	2	
Open	Sardinia	3	No
Open	Sardinia	4	

Appendix 5.3. Testing the simple SES-DSS

Question Type	Location of SH	SH	Q1. What professional sector are you representing?
Multiple choice	Sardinia	1	Academia / Research
Multiple choice	Sardinia	2	Fisheries
Multiple choice	Sardinia	3	Private sector / SME & Industry
Multiple choice	Sardinia	4	Fisheries
Multiple choice	Sardinia	5	MPA (management / ranger)
Question Type	Location of SH	SH	Q2. What is your age?
Open	Sardinia	1	28
Open	Sardinia	2	53
Open	Sardinia	3	32
Open	Sardinia	4	53
Open	Sardinia	5	53
Question Type	Location of SH	SH	Q3. What is your gender?
Multiple choice	Sardinia	1	Female
Multiple choice	Sardinia	2	Female
Multiple choice	Sardinia	3	Female
Multiple choice	Sardinia	4	Male
Multiple choice	Sardinia	5	Male
Question Type	Location of SH	SH	Q4. I rate this tool: (1-5)
Scale	Sardinia	1	3
Scale	Sardinia	2	5
Scale	Sardinia	3	4
Scale	Sardinia	4	5
Scale	Sardinia	5	5
Question Type	Location of SH	SH	Q5. I will use this tool: (1-5)
Scale	Sardinia	1	3
Scale	Sardinia	2	5
Scale	Sardinia	3	5
Scale	Sardinia	4	4
Scale	Sardinia	5	5
Question Type	Location of SH	SH	Q6. Others will use this tool: (1-5)
Scale	Sardinia	1	2
Scale	Sardinia	2	5
Scale	Sardinia	3	
Scale	Sardinia	4	5
Scale	Sardinia	5	3
Question Type	Location of SH	SH	Q7. Why will you use this tool?
Open	Sardinia	1	
Open	Sardinia	2	Utile per la programmazione.
Open	Sardinia	3	It seems interesting for my work
Open	Sardinia	4	Lo trovo costruttivo
Open	Sardinia	5	Molto interessante
Question Type	Location of SH	SH	Q8. What could be a possible reason why you will not use this tool?
Open	Sardinia	1	
Open	Sardinia	2	Nessun motivo
Open	Sardinia	3	None
Open	Sardinia	4	Non ne ho motivo

Open	Sardinia	5	Forse è un po' complesso e poco utile per certe categorie
Question Type	Location of SH	SH	Q9. What should we improve in the next version of the tool?
Open	Sardinia	1	
Open	Sardinia	2	Si potrebbe specificare andare più bello specifico dei singoli argomenti
Open	Sardinia	3	Better Italian translation
Open	Sardinia	4	Domande più chiare
Open	Sardinia	5	Inserendo un tasto Back nel processo
Question Type	Location of SH	SH	Q10. Did any words or phrases on the tool confuse you?
Open	Sardinia	1	
Open	Sardinia	2	Alcuni termini sono troppo tecnici
Open	Sardinia	3	
Open	Sardinia	4	Pesca commerciale
Open	Sardinia	5	
Question Type	Location of SH	SH	Q11. For what questions in your daily work would you use this tool to answer?
Open	Sardinia	1	Prima devo studiare il tool per rispondere a questa domanda
Open	Sardinia	2	Non per specifiche domande, ma per la programmazione e l'analisi dell'attività
Open	Sardinia	3	Socio ecological systems analysis
Open	Sardinia	4	Per trovare soluzioni ai problemi riguardo lo stato del mare
Open	Sardinia	5	Per organizzare le idee sui processi
Question Type	Location of SH	SH	Q12. The SES-DSS is easy to use:
Scale	Sardinia	1	3
Scale	Sardinia	2	4
Scale	Sardinia	3	5
Scale	Sardinia	4	4
Scale	Sardinia	5	5
Question Type	Location of SH	SH	Q13. How likely are you to use the SES-DSS in future projects?
Scale	Sardinia	1	Unsure
Scale	Sardinia	2	Very likely
Scale	Sardinia	3	Very likely
Scale	Sardinia	4	Unsure
Scale	Sardinia	5	Likely
Question Type	Location of SH	SH	Q14. Describe your experience with the tool in two words:
Open	Sardinia	1	
Open	Sardinia	2	Interessante, utile,
Open	Sardinia	3	Very interesting
Open	Sardinia	3	Helpful
Open	Sardinia	4	Piacevole
Open	Sardinia	5	Utile
Question Type	Location of SH	SH	Q15. Any comments...?
Open	Sardinia	1	
Open	Sardinia	2	Unico aspetto migliorabile, la lingua e quindi la comunicazione
Open	Sardinia	3	I will read carefully the user manual. Very interesting tool. Thank you
Open	Sardinia	4	
Open	Sardinia	5	

Appendix 5.4. Testing the Governance tool

Question Type	Location of SH	SH	Q1. What professional sector are you representing?
Multiple choice	Sardinia	1	Academia / Research
Multiple choice	Sardinia	2	Fisheries
Multiple choice	Sardinia	3	Fisheries
Multiple choice	Sardinia	4	Private sector / SME
Multiple choice	Sardinia	5	Fisheries
Multiple choice	Sardinia	6	MPA (management / ranger)
Question Type	Location of SH	SH	Q2. What is your age?
Open	Sardinia	1	33
Open	Sardinia	2	60
Open	Sardinia	3	53
Open	Sardinia	4	32
Open	Sardinia	5	53
Open	Sardinia	6	53
Question Type	Location of SH	SH	Q3. What is your gender?
Multiple choice	Sardinia	1	Female
Multiple choice	Sardinia	2	Male
Multiple choice	Sardinia	3	Female
Multiple choice	Sardinia	4	Female
Multiple choice	Sardinia	5	Male
Multiple choice	Sardinia	6	Male
Question Type	Location of SH	SH	Q4. I rate this tool: (1-5)
Scale	Sardinia	1	3
Scale	Sardinia	2	3
Scale	Sardinia	3	5
Scale	Sardinia	4	4
Scale	Sardinia	5	4
Scale	Sardinia	6	3
Question Type	Location of SH	SH	Q5. I will use this tool: (1-5)
Scale	Sardinia	1	3
Scale	Sardinia	2	2
Scale	Sardinia	3	5
Scale	Sardinia	4	4
Scale	Sardinia	5	4
Scale	Sardinia	6	2
Question Type	Location of SH	SH	Q6. Others will use this tool: (1-5)
Scale	Sardinia	1	3
Scale	Sardinia	2	1
Scale	Sardinia	3	4
Scale	Sardinia	4	5
Scale	Sardinia	5	4
Scale	Sardinia	6	3
Question Type	Location of SH	SH	Q7. Why will you use this tool?
Open	Sardinia	1	
Open	Sardinia	2	
Open	Sardinia	3	Informazioni molto utili
Open	Sardinia	4	Seems interesting and useful

Open	Sardinia	5	Divulgare e apprendere
Open	Sardinia	6	Per provarla
Question Type	Location of SH	SH	Q8. What could be a possible reason why you will not use this tool?
Open	Sardinia	1	
Open	Sardinia	2	Troppo complesso
Open	Sardinia	3	Nessuna
Open	Sardinia	4	Not sure
Open	Sardinia	5	Nessuna
Open	Sardinia	6	Too complex
Question Type	Location of SH	SH	Q9. What should we improve in the next version of the tool?
Open	Sardinia	1	Traduzione in italiano, aggiungere la possibilità di editare (nel link condiviso si puo' solo visualizzare)
Open	Sardinia	2	La lingua
Open	Sardinia	3	Più dettaglio geografico in merito alle normativa Usare la lingua corrente nelle varie aree Aggiornamenti frequenti
Open	Sardinia	4	Maybe più customizzabile, editabile
Open	Sardinia	5	Traduzione in più lingue e tenerlo aggiornato
Open	Sardinia	6	Lingua
Question Type	Location of SH	SH	Q10. Did any words or phrases on the tool confuse you?
Open	Sardinia	1	
Open	Sardinia	2	No
Open	Sardinia	3	No
Open	Sardinia	4	No all clear
Open	Sardinia	5	No
Open	Sardinia	6	No
Question Type	Location of SH	SH	Q11. For what questions in your daily work would you use this tool to answer?
Open	Sardinia	1	Non so, dovrei prima studiare il tool
Open	Sardinia	2	
Open	Sardinia	3	Per operare con cognizione di causa e nel rispetto delle leggi
Open	Sardinia	4	Governance tool in my case study
Open	Sardinia	5	Per condividere
Open	Sardinia	6	Per comunicare
Question Type	Location of SH	SH	Q12. The Governance tool is easy to use:
Scale	Sardinia	1	3
Scale	Sardinia	2	3
Scale	Sardinia	3	5
Scale	Sardinia	4	5
Scale	Sardinia	5	4
Scale	Sardinia	6	3
Question Type	Location of SH	SH	Q13. How likely are you to use the Governance tool in future projects?
Scale	Sardinia	1	Unsure
Scale	Sardinia	2	Very unlikely
Scale	Sardinia	3	Very likely
Scale	Sardinia	4	Very likely

Scale	Sardinia	5	Unsure
Scale	Sardinia	6	Unsure
Question Type	Location of SH	SH	Q14. Describe your experience with the tool in two words:
Open	Sardinia	1	
Open	Sardinia	2	
Open	Sardinia	3	Piacevole, positivo
Open	Sardinia	3	Helpful
Open	Sardinia	3	Interesting
Open	Sardinia	4	Positiva
Open	Sardinia	5	Too fast
Open	Sardinia	6	
Question Type	Location of SH	SH	Q15. Any comments...?
Open	Sardinia	1	
Open	Sardinia	2	
Open	Sardinia	3	Nessuno
Open	Sardinia	4	Thank you
Open	Sardinia	5	No
Open	Sardinia	6	No