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# blueMed

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## Executive Summary

This report describes the outcome of the BLUEMED CSA Start-Up Actions (SuAs) supported by the BLUEMED CSA under the project's Work Package 4. The respective SuAs activities have cumulated into a set of feasibility studies together with other outputs on the issues pertain to the respective subjects. Understandably they contribute to and are of importance to blue growth in the Mediterranean in general and to the BLUEMED Strategic Research and Innovation Agenda (SRIA) in particular.

In the deliverable D4.1 'Intermediate report on Start-up Actions' available at [www.blued-med-initiative.eu/wp-content/uploads/2020/04/BLUEMED-CSA\\_deliverable\\_4.1.pdf](http://www.blued-med-initiative.eu/wp-content/uploads/2020/04/BLUEMED-CSA_deliverable_4.1.pdf) one can find a description of all the preparatory work carried out by BLUEMED CSA Consortium prior to the launch of the Call for SuAs in May 2018, the rationale for implementing bottom-up the BlueMed vision, setting up of a transparent and fair evaluation process & culminating in the selection of the four top-ranked proposals endorsed by the BLUEMED Steering Committee, and the interim progress made of the respective SuAs up till December 2019.

The unexpected effects of the Covid-19 pandemic severely disrupted the final activities of the respective SuAs. The SuAs were expected to conclude their last meeting by May 2020 and submit their final feasibility study by August 2020. However, soon after the adverse impacts were identified contingency plans were drafted and implemented to safeguard the execution of the SuAs. In this regard, activities were recognised in a digital format and greater focus was put towards the production of dissemination material.

This report focuses on the respective SUAs feasibility studies and other outputs.

## Scope

This Deliverable falls under Work Package 4 (Start-up Actions), specifically Tasks 4.2 on 'Implementing and Monitoring the Start-up Actions'. MCST as Work Package Leader worked in close collaboration with the BLUEMED Coordinator as well as with all BLUEMED CSA partners, in particular NIB, RIF, IZOR, DGPM, CNRS, and IFREMER. Any changes made to the original plan as described in the Grant Agreement were agreed to by the BLUEMED Steering Committee and submitted to the European Commission in due form.

Start-up Actions effectively embodied the spirit of the BLUEMED project, by concretely showcasing the BLUEMED vision by bringing together stakeholders from all Mediterranean shores and beyond, thus taking the project beyond EU borders as well as by engaging public and private sector from policy makers to research institutions to companies to NGOs in the co-designing process. This collaboration with third countries is an important aspect of the BLUEMED Initiative science-diplomacy based approach, which acknowledges the fact that challenges to blue growth in the Mediterranean can only be appropriately tackled by means of international cooperation, data sharing and dissemination.

The BLUEMED CSA has assisted the SuAs in disseminating their events and results to the best possible extent in the circumstances. The dedicated webpage on the BLUEMED CSA project website: [www.blued-med-initiative.eu/the-startup-actions/](http://www.blued-med-initiative.eu/the-startup-actions/) is a permanent window to the SuAs activities and outputs.

One can concretely extrapolate that **the feasibility studies provoked by these collaborative actions have further develop into initiatives with long-term, widespread impact at European, Mediterranean and global level.**

## THE START-UP ACTIONS AND THE FEASIBILITY STUDIES

The activities of the SUAs, continued their progress post December 2019 with the full intentions of concluding their last meeting by May 2020 and submit their final feasibility study by August 2020.

However, soon after the adverse impacts were identified contingency plans were drafted and implemented to safeguard the execution of the SuAs. An Annex “Activities Extension to Mitigate Covid-19 Impacts” was included in the respective partnership agreements with the SUAs, which set out the conditions for the extension. In this regard, the activities post February 2020 were recognised accordingly. All details concerning these meetings, and complementing the information reported in the intermediate report (deliverable D4.1) can be found in the Coordinator’s comprehensive meeting reports in the corresponding Annexes.

In total **fourteen** separate **meetings** took place under this work package, which involved a **wide variety of stakeholder from different EU member state and non-EU countries**. These meetings attracted a comparatively balanced participation of both male and female genders overall. The overall participation of the female gender exceeding 35%. At three (3) meetings the female gender participation exceeded 50%. These meetings involved the participation of over 400 stakeholders from a diverse pool of sectors. In the corresponding Annexes several charts give a detailed graphical representation of the data collected from these meetings.

The respective SuAs produced also dedicated outputs, ranging from scientific publications (including abstracts, articles and papers), dedicated web pages, guidebooks, feasibility studies, foresight reports translated into English, Spanish, French and Italian languages, amongst other outputs. Four unique infographics were created, one for each respective Start-Up Action, inspired by the theme of the SuA and providing a graphic synthesis of each (Figure 1 Figure 2).

Furthermore, at the project final event “#One Mediterranean: practices, results and strategies for a common Sea BlueMed CSA Final Conference” ([www.blumed-initiative.eu/blumed-final-conference/](http://www.blumed-initiative.eu/blumed-final-conference/)) a dedicated session entitled “Seeds to flourish: a conversation with the Coordinators of the BlueMed Start-up Actions presenting their feasibility studies” for the presentation of the results of the BLUEMED Start-Up Actions was held on 24 February 2021 to showcase the activities in an interactive discussion with the audience as well as envisaging future concrete trajectories for the scaling-up of the activities. With 76 active users contributing to the questions and polls via Sli.do. In the corresponding Annexes the analytics report and poll results produced by Sli.do software can be found.



**DEVELOPMENTS OF MEDITERRANEAN CRUISE AND RECREATIONAL BOATING SECTORS**

## BlueBoatsMed

**BlueBoatsMed** is a StartUp Action promoted by the BlueMed CSA to boost the development of innovative ideas leading to sustainable Blue Growth in the Mediterranean. More info: <http://www.bluemed-initiative.eu/the-startup-actions/>.

BlueBoatsMed is engaged to:

- ### 1. TRENDS

Analyse and evaluate the prospects for further and sustainable expansion in the cruise and recreational boating sectors in the Mediterranean, based on the partners' knowledge and on-going research.
- ### 2. STAKES

Agree on up to four main environmental or societal challenges associated with such expansion (i.e. challenges linked to the rapid changes the cruise and recreational boating sectors are undergoing and expected to experience in the upcoming years).
- ### 3. PROMISING INNOVATIONS AND CONDITIONS FOR SCALING UP

For each selected challenge, present up to three promising innovations through case studies, discuss the potential and readiness for further uptake of these innovations, and identify the socio-instruments (or policy mixes) necessary to accompany these transitions in the short, medium and long terms.
- ### 4. GUIDELINES

Contribute to outlining and designing guidelines for a sustainable and inclusive cruise and recreational boating sector, including yachting, in the Mediterranean.

**MEETING: WEB BASED**

1. This first meeting focused on identifying major trends, key challenges and promising innovations in the cruise and recreational boating sectors.

**MEETING: GENOA, ITALY**

2. Three working groups were set up to discuss the environmental and societal challenges associated with the expansion of the cruise and recreational boating sector.

**MEETING: MARSEILLES, FRANCE**

3. Discussion revolved around the conditions and levers necessary to support the transition to the sustainability of the sector through continued developments of guidelines.

**START UP ACTION SUPPORTED BY THE BLUEMED CSA**

<http://www.bluemed-initiative.eu/>

**blueMed**

Supported by the BLUEMED CSA (GA 727453) funded by the European Commission DG Research and Innovation

## ECOMEDPORT

Feasibility study of an ecosystem-oriented plant for sediments management in Mediterranean ports and marinas

**Promoting the adoption of an innovative and sustainable technology for the management of sediments in harbour areas in the Mediterranean Sea**

blueMed <http://www.bluemed-initiative.eu/>

**UNIQUE PLANT FOR AUTOMATIC SEDIMENT REMOVAL**

Now working in Cervia and Cattolica, Italy

open to public, development achieved within a technological and normative framework

**INNOVATIVE BUSINESS DEVELOPMENT**

Opportunity in the Mediterranean

to develop new technology a related products & services towards an integrated management of coastal areas, with an ecosystem-friendly approach

**POTENTIAL SITES**

in Lebanon and Tunisia

preliminary identified as sites for replication, further evaluation and analysis of the legislative barriers and stakeholders are being discussed

**C1**

Goal of the BLUEMED Strategic Agenda

addressed in the context of reducing the coastal risk of disasters and their effects

**STRENGTHENING SYNERGIES**

between science, industry and policy makers

in the field of maritime transport, safety, protection and integrated management of coastal areas

Supported by the BLUEMED CSA (GA 727453) funded by the European Commission DG Research and Innovation

Figure 1 – Infographic of the BLUEMED Start-up Actions: BlueBoatsMed and ECOMEDPORT

# SEALINES Mediterranean Safety Network

One of the most important tasks of the Sealines project is to promote the international expansion and growth of the national scientific research network called CLYPEA - innovation network for future energy - in order to achieve important result in the framework of Blue Growth

Main output expected:

- identification of a real case study in the Adriatic Sea, to implement the Start-Up Action results;
- creation of a Mediterranean Interdisciplinary Network on offshore safety;
- planning for a MED-based high education-training programme on offshore oil & gas safety.

### 1st Meeting

Held on 28th March 2019, Ravenna, Italy at the Offshore Mediterranean Conference 2019, an international energy event.

**E1, E2, D1 and Goal A**

are amongst the Challenges addressed by the project under the BLUEMED SRIA, particularly those related to crosscutting international cooperation, sustainable development and governance.

### 2nd Meeting

Held in Athens, Greece on the 24th June 2019.

**69 International Experts**

from administrations, private companies and research institutes attended this meeting.

**43 Participants**

From different EU and non-EU countries attended the 1st meeting.

**67.4%**

of the participants coming from research institutes and administrations, the rest were from private enterprises and academia.

**FOLLOW ON TWITTER**

**@SealinesA**  
**@BlueMedEU**

an RRI Initiative aiming to boost bluegrowth, create new jobs in the marine & maritime sectors in the Mediterranean supported by H2020 BLUEMED CSA.

[HTTP://WWW.BLUE-MED-INITIATIVE.EU/](http://www.blue-med-initiative.eu/)



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LabMAF showcases the small-scale and artisanal segment of the fishing industry which has a lower environmental impact whilst contributing to social wellbeing, particularly by sustaining coastal communities and nurturing cultural heritage.

The LabMAF project is exploring the ways to valorise the products of responsible small-scale and artisanal fishers who adhere to and implement sound ecological and socio-economic principles. The main expected output is a feasibility study of a scheme that distinguishes products harvested by such fishers.

So far LabMAF has mapped various local and regional labelling initiatives that are relevant to the scope of the project and evaluated the options to pursue.

**>45%**

Female participants at meetings thus far achieved. The initiative is also led and co-led by women.

**B1**

Goal of the BLUEMED SRIA directly addressed by "promoting" the optimal fishing strategies, technologies and practices that already exist.

**22+**

Experts in the field of small-scale and artisanal fisheries involved in the first outputs.

**SUSTAINABILITY IS RESPONSIBILITY:  
FISHERY SUPPLY CHAINS**  
*need to better address*

**ECOLOGICAL, SOCIAL  
AND ECONOMIC ASPECTS**

blueMed  
[HTTP://WWW.BLUE-MED-INITIATIVE.EU/](http://www.blue-med-initiative.eu/)



Supported by the BLUEMED CSA (GA 727453) funded by the European Commission DG Research and Innovation

Figure 2 Infographic of the BLUEMED Start-up Actions: SEALINES and LabMaf



## LabMAF - Developing a Labelling Scheme for Mediterranean Small-scale and Artisanal Fish Products

### LabMAF - The Who and When

This Start-up Action, coordinated by Jerneja Penca from the EMUNI University in Piran, Slovenia, and co-led by Alicia Said from the Malta College of Arts, Science and Technology in Malta.

The first meeting took place on 15-16 May 2019 in Ljubljana, Slovenia. The second meeting took place on 16-27 October 2019 at the University of Balamand, Jbeil/Byblos Lebanon. Having the event unfold in a non-EU MS helped ensure the considerations of a wider and more regional perspective. The third meeting took place on 6-7 October 2020, it was re-scheduled from May and later to June due to epidemic, this meeting was held online. This last meeting was attended by 21 participants from different EU and non-EU countries, with most participants coming from Academia and NGOs amongst others.

**Annex 3** encompasses the detailed technical and financial reports of the LabMaf SuA activities (vital and phscial) carried out.

### LabMAF - The Outputs

The main outcome is the 78 page long “**Feasibility report of the LabMAF project**” ([www.bluedmed-initiative.eu/wp-content/uploads/2021/02/Deliverable-LabMAF-FS.pdf](http://www.bluedmed-initiative.eu/wp-content/uploads/2021/02/Deliverable-LabMAF-FS.pdf)) authored by Jerneja Penca, Alicia Said, Marta Cavallé, Simone Libralato and Cristina Pita. Other individuals also contributed to the report in addition to contributions by participants of this SuA’s activities.

This comprehensive publication is about market opportunities for artisanal and small-scale fisheries products for sustainability of the Mediterranean Sea towards an innovative labelling scheme. In addition to the excellent executive summary and introduction the report gives in in-depth perspective of the Legal and Policy context and State of Play in the Markets (pre-covid19).

This is followed by an intrigue set of Innovative Initiatives from the Mediterranean, covering value chains, digitalisation of distribution channels, diversification, promotion, establishing new brands or labels, and change in leadership and ownership. This is further complimented with a section on promising initiatives from outside the Mediterranean covering two initiatives from South Africa and North America. This leads to a section that explores the options to leverage on the ongoing initiatives which are taking place at local or regional scales. This section discusses to an extent the interventions in bottom-up initiatives, actions to enhance transnational impacts and finally LabMAF contributions to future actions. Here a direct reference is made to outputs from this SuA notably “*Annex 1 - Guidelines for responsible Mediterranean*

small-scale fish products”, “Annex 2 - Leaflets for consumers & small-scale fishers” and a dedicated website (<https://labmaf.com/>).

The report culminates with a synopsis of the state of play indicating a more favourable policy context, concluding that the commonality amongst the studied initiatives examined is a bottom-up approach responding to specific local context. Further remarking that the key to the expansion of small-scale fisheries products differentiation is by paying attention to the local nature. Moreover, while defending a diversity of means to accomplish the objectives, this study finds a case for a harmonizing approach to these initiatives with the view of guiding stakeholders towards sustainability, involving environmental and social aspects as the ultimate goals.

Ultimate concluding that accelerating the bottom-up initiatives, while establishing a clear standard of practice can only be achieved with further development through knowledge exchange, capacity-building and their joint promotion, as well as improving the policy on small-scale fisheries access to the resource and synergistic policies that favour responsible small-scale fishers.

Other publications include:

Paper: Towards constructing a positive narrative for fisheries: Report from International Symposium on Fisheries Sustainability: Strengthening the Science-Policy Nexus, Jerneja Penca.

Symposium Call for abstracts: The future of small-scale fishery markets in the Mediterranean: social, environmental, economic and governance aspects.

Further to the above, the LabMAF’s ideas and outcomes represent one of the building stones of the Foodnected project (<https://www.slowfood.com/foodnected/>), launched on 10<sup>th</sup> March 2021.

## SEALINES: MEDITERRANEAN SAFETY NETWORK

### SEALINES - The Who and When

The SEALINES Start-up Action, coordinated by Ilaria Antoncecchi from the Ministry of Economic Development (Italy) and co-led by Marco Pacini from Rossetti Marino SpA in Italy.

The first meeting took place in Ravenna on 28 March 2019 during the Offshore Mediterranean Conference 2019, an international event focused on energy. The second meeting took place in Athens on 24 June 2019. The third meeting took place in Milan, Italy, on the 30<sup>th</sup> of September 2019 and 1<sup>st</sup> October 2019. All details concerning these three meetings can be found in the Coordinator's comprehensive reports.

This SuA managed to attract participants from different EU and non-EU countries to attend its meetings, with the majority of participants coming from research institutes and administrations, followed by private enterprises and academia. It was particularly successful in attracting the participation of private enterprises to its activities.

On the 17<sup>th</sup> of June 2020 a webinar was held by SEALINES SuA, with the support and involvement of the Bluemed CSA consortium, to showcase the feasibility study and its results. This dissemination event attracted 50 participants, an analytics report of this webinar is included in the corresponding annex.

**Annex 4** encompasses the detailed technical and financial reports of the SEALINES SuA activities (vitual and phscial) carried out.

### SEALINES - The Outputs

The main outcome is the 78 page long **“Feasibility study for a scientific research hub on an integrated green energy system, Re-use of offshore infrastructure for energy transition”** ([www.bluemed-initiative.eu/wp-content/uploads/2020/06/SEALINES-FEASIBILITY-STUDY\\_ultima-rev.pdf](http://www.bluemed-initiative.eu/wp-content/uploads/2020/06/SEALINES-FEASIBILITY-STUDY_ultima-rev.pdf)) a work carried out by the partners of Sealines Start-up Action: Italian Ministry of Economic Development – DGS UNMIG; Rosetti Marino S.p.A., Basis Engineering; National Research Institute of Astronomy and Geophysics (NRIAG); Hellenic Hydrocarbon Resource Management (HHRM); Croatian Hydrocarbons Agency (AZU); Ministry of Transport, Communications and Works Department of Public Works - Republic of Cyprus; Ministry of Labour, Welfare and Social Insurance – Department of Labour Inspection – Republic of Cyprus; Ministry of Agriculture, Rural Development and Environment – Department of Environment – Republic of Cyprus; National Institute of Oceanography and Applied Geophysics (OGS); University of L’Aquila – Department of Industrial and Information Engineering and Economics; Institute National des Sciences et Technologies de la Mer (INSTM), Laboratoire Milieu Marin (LMM); Polytechnic of Turin, Department of Applied Science And Technology (DISAT); National Research Council – Institute of Marine Sciences – Institute of Marine Engineering (CNR-ISMAR;

CNR-INM) and supported by UK Department for Business, Energy and Industrial Strategy (BEIS); INA Group; Eni S.p.A.; Edison S.p.A.; Rana Diving S.p.A.; RINA S.p.A.; Studio Pandolfi S.r.l.; Saipem S.p.A. thus having several authors.

This comprehensive study represents the outcome of the multi-disciplinary approach of Sealines Start-up Action, created by the strong interaction at international level between research centers, stakeholders and policy makers to achieve results for blue growth according to Research Strategic Agenda goals. It considers an abandoned platform, otherwise decommissioned, as the best case to test a hub for scientific research on an integrated “green energy” system.

The study starts by providing a description of the BlueMed framework of the Start-up Action initiative. It goes on to provide more elements about the project idea and lists AZALEA A (one of the platforms that in Italian regulatory framework is available for repurposing projects) technical features: position, structural status, linked facilities. Moreover, the energy potential from renewable resources (wind, solar, wave) is evaluated.

The study proposes the installation of solar panels, wind turbine and wave energy production systems and considers electric power produced by renewable sources (photovoltaic and/or turbine systems and/or wave systems) that would feed an electrolyzer and may be converted to produce hydrogen (H<sub>2</sub>) thanks to the use of Proton Exchange Membranes – PEM. Accounting for the green energy production and conversion to H<sub>2</sub> further considerations are taken to evaluate a possible transport system. For this reason, the feasibility study also investigates repurposing process involving linked sealines. Two different options are considered: energy inland transport and H<sub>2</sub> storage and transport.

It goes on to consider three ideal business cases evaluated against budgetary investment costs:

- option 1: hybrid electric power generation integrated into the power system of the nearby platforms in operation (it is not the option linked to case study of AZALEA A);
- option 2: direct H<sub>2</sub> injection into the existing gas sealine of the nearby platforms in operation and sold at the same price of the natural gas (same case of AZALEA A);
- option 3: inland transportation through abandoned sealine and sold as H<sub>2</sub> technical gas (it is not the option linked to case study of AZALEA A).

The study continues by focusing on the second option, being the applicable case to AZALEA A. It considers the power generation of by solar and wind, and H<sub>2</sub> injection into the existing natural gas sealines, where a total investment costs is estimated to be about 0.8 million euro. Interestingly, it denotes that although the amount of renewable sources estimated in the study area may not be sufficient for an economic investment in the current economic frame, the use of existing offshore infrastructure for power generation, included the reuse of sealines for energy storage and transport of H<sub>2</sub>, may too be a good alternative from an economic point of view considering decommissioning costs.

The proposed technical study demonstrates how the integration of the existing offshore infrastructures with the new hybrid power generation systems is feasible and can be envisaged as a positive example of “Blue Economy”. However, it goes on to set out the importance of testing the technological and scientific improvements. Here it identified a further scale-up of the SEALINES Start-up Action, which may provide a good solution proposing a scientific research hub and an integrated green energy system on a disused platform.

The study concludes with the identifying of the opportunity for the Sealines Network - which requires implementation and enriching within new cooperation programs like Horizon Europe or BlueInvest Platform and with engagement of other expert countries.

Other publications include:

- Paper: Research Hub for an Integrated Green Energy System reusing SEALINES for H2 storage and transport.
- SEALINES Guide Book.
- Dissemination event (webinar) - SEALINES, results from the BlueMed Start-up Action was held on 17<sup>th</sup> June 2020.

Further outputs awaited:

- Identification of a real case study in the Adriatic Sea to implement start-up action results.
- Creation of a Mediterranean Interdisciplinary Network on offshore safety.
- Planning for a Med-based high education training programme on offshore safety and sustainable growth.



## BLUEBOATSMED – FORESIGHT ON CRUISE & RECREATIONAL BOATING, THEIR POTENTIAL FOR TRANSITION TOWARDS A BLUE ECONOMY IN THE MEDITERRANEAN AND ASSOCIATED ENVIRONMENTAL CHALLENGES

### BlueBoatsMed - The Who and When

The BlueBoatsMed, coordinated by Lina Tode from Plan Bleu, with Alberto Cappato from Porto Antico di Genova, Italy, as co-lead.

The first meeting was web based and took place on 14 May 2019. The second meeting took place in Genova, Italy, on 19 June 2019. The third meeting was held at the World Trade Center Marseille, France, on the 25<sup>th</sup> of November 2019. For third meeting participants were selected amongst national and regional stakeholders engaged in recently closed or on-going projects/initiatives in the cruise and recreational boating sectors. On the 22 October 2020 an additional virtual meeting was organised to wrap-up the results and coherently set them out in the foresight report.

The Start-Up Action BlueBoatsMed brought together 25 experts with complementary expertise on the cruise and recreational boating sectors, involved in separate on-going initiatives, to (1) analyse the prospects for the cruise and recreational boating sectors in the Mediterranean; (2) agree on main environmental challenges linked to these sectors; for each challenge, (2a) present up to 3 promising innovations; and (2b) discuss the potential for further uptake of these innovations to accompany transitions.

**Annex 5** encompasses the detailed technical and financial reports of the BlueBoatsMed SuA activities (virtual and physical) carried out.

### BlueBoatsMed - The Outputs

The main outcome is “**BlueBoatsMed short Foresight Report**” ([www.blueded-initiative.eu/wp-content/uploads/2021/02/D-4.1-BlueBoatsMed-foresight-report-.pdf](http://www.blueded-initiative.eu/wp-content/uploads/2021/02/D-4.1-BlueBoatsMed-foresight-report-.pdf)) authored by Raffaele Mancini and Lina Tode of Plan Bleu, containing an extensive results matrix which outline a number of promising innovations to address the challenges identified. This was further complimented by a second report “BlueBoatsMed report on Scoping of further activities”.

The foresight report documents trends and future developments of the cruising, yachting and recreational boating sectors in the Mediterranean, relevant for several BLUEMED SRIA and IP components:

- ✓ MEDITERRANEAN SEA DYNAMICS
  - Goal: Understanding and forecasting the Mediterranean Sea dynamics.
    - Action: Perform scenarios of environmental change to provide insights into the impacts of alternative future socioeconomic development pathways, policy options and blue growth exploitation on biodiversity and nature’s benefits.

- ✓ PROMOTING SUSTAINABLE TOURISM IN THE MEDITERRANEAN
  - Goal: Linking tourism and environment.
    - Action 1: Define and assess environmental value, risk mitigation and conflicts of use by involving scientist, companies, regulators and coastal communities.
    - Action 2: Develop strategies and practices to improve the wellbeing of coastal communities and their economy and ensure the preservation of their culture/identity.
  - Goal: Developing smart technologies and dedicated services.
    - Action 1: Develop smart technologies and dedicated services for sustainable tourism; tackle environmental protection and human wellbeing.

The foresight study did not aim to define a vision, nor a strategy or action plan for a sustainable development of the targeted sectors, instead it identifies key elements that may be contained in or transformed into an action plan.

The study commences with a synopsis of trends identification within the Mediterranean cruising and recreational boating sectors and goes on to take account of the disruption to the trends linked to the Covid-19 pandemic. It goes on to interpret the trends where it aspires to draw conclusion from them to be able to perceive the prevailing situation. The study determines for:

- Cruising - The general trend is growth of the sector and of linked environmental degradation, noting however that social, environmental and economic (distributional) issues (externalities) become more and more visible to an increasing number of stakeholders.
- Yachting - The general trend is growth of the sector and of linked environmental degradation with the capacity of marinas in the North [Mediterranean] being a limit.
- Recreational boating - The general trend is stagnation (except for some niche segments) reaching a point that may be conducive to structural change.

The study progresses by taking account of the observations, and with additional contributions from the SUA partners, identifies the challenges. The approach taken is to address the question “*What might happen over the next years?*”. Here the participants of the BlueBoatsMed establish the main challenges linked to the future development of the cruising and recreational boating/yachting sectors are linked to avoiding negative externalities, that is to say avoiding costs imposed by these sectors on third parties, including ecosystems, who did not agree to incur that cost or degradation. Subsequently, it outlines four outcomes and states that without taking decisive action the outcomes can accentuate and cumulate thereby translating into challenges to be addressed through strategic foresight and planning.

Next, another question is addressed, “*What we may need to do?*”, here the strategic options were considered and makes reference to the results matrix developed. This followed by yet another question “*What will we do? How?*”, in this section the study remarks that the results matrix can be a tool kit for decision makers to move from the current projected situation towards one which is more desirable for the future. However, it outlines that promising innovation alone is unlikely to deliver sustainability of the sector. Furthermore, it defines as crucial to make use of the

identified innovation as part of an overall long-term and multi-stakeholder's strategy and outlines five steps towards it. Concluding that all that has been mentioned in the study should be enshrined into an overall ecosystem approach framework built on conservation (carrying capacity) and planning (MSP/ICZM) tools.

The Annex 2 of this study contains the comprehensive BlueBoatsMed Results Matrix, being apex output.

The SuA also provided a complimentary report "BlueBoatsMed report on Scoping of further activities". This report scopes further regional activities that may assist the transition towards sustainable and inclusive cruise and recreational boating in the Mediterranean. It proposes to launch a participative process, in the wake of the BlueBoatsMed SuA experience and fully capitalizing on the results, to formulate an initiative "Guidelines for the sustainability of cruise and recreational boating in the Mediterranean region" otherwise known as the "*Guidelines*" project.

The report outlines the concept and direction of the "*Guidelines*" project. It also considers the framework it will operate in and its future steps - here the report sets out that the results of this SuA have fully been taken up by the project team and participants, which is supported by the UNEP/MAP - Barcelona Convention - Mediterranean Trust Fund (MTF), as well as by the French Environment and Energy Management Agency (ADEME).

Other publications include:

Four (4) illustrated translated versions of BlueBoatsMed short Foresight Report on Cruising, Yachting and Recreational Boating in the Mediterranean, in the English, Spanish, French and Italian languages.

## ECOMEDPORT - FEASIBILITY STUDY OF AN ECOSYSTEM-ORIENTED PLANT FOR SEDIMENTS MANAGEMENT IN MEDITERRANEAN PORTS AND MARINAS

### ECOMEDPORT - The Who and When

This Start-up Action was coordinated by Prof. Cesare Saccani from the Department of Industrial Engineering from the University of Bologna, Italy.

The first meeting which spanned two and half days took place on 26-28 September 2019, in Bologna and Riccione, Italy. The second meeting took place on the 28 May 2020, it was meant to take place in Tripoli, Lebanon in March but due to Covid-19 limitation it took place remotely. The third meeting took place on 6 July 2020 again in remote due to Covid-19 restrictions. This meeting was meant to be organised in Tunisia, Tunisia including a conference hosting local stakeholder and a visit to the La Gaulette harbour and Sidi Bou Said Marina. A fourth meeting was held in remote on 28 October 2020.

The ECOMEDPORT Start-Up Action was successful at bring together experts from EU MS and Non-EU countries, particularly from Tunisia and Lebanon with complementary and multi-disciplinary expertise. In the meetings participants numbers overall exceeded 125 attendees, having a varied background including a good number of participants from the private sector and representatives of municipalities.

**Annex 6** encompasses the detailed technical and financial reports of the ECOMEDPORT SuA activities (vitutal and phscial) carried out.

### ECOMEDPORT - The Outputs

The main outcomes are two distinct Feasibility Studies, one **addressing the “Port of Tripoli”** ([www.blued-med-initiative.eu/wp-content/uploads/2021/02/ECOMEDPORT\\_deliverable\\_Tunisian\\_DEF.pdf](http://www.blued-med-initiative.eu/wp-content/uploads/2021/02/ECOMEDPORT_deliverable_Tunisian_DEF.pdf)) and the other addressing **the “Port of Houmt Souk”** ([www.blued-med-initiative.eu/wp-content/uploads/2021/02/ECOMEDPORT\\_deliverable\\_Lebanon\\_DEF.pdf](http://www.blued-med-initiative.eu/wp-content/uploads/2021/02/ECOMEDPORT_deliverable_Lebanon_DEF.pdf)).

The “Feasibility study – Port of Tripoli” authored by Dr. Sana Abidib (Lebanese University -Green Community), Dr. Joanna Eid (University of Kaslik), Prof. Walid Kamali (City University), Dr. Nahed Msayleb (Lebanese University - Green Community), Prof. Marco Pellegrini (UniBo), and Giovanni Preda (Trevi).

The “Feasibility study – Port of Houmt Souk” authored by Dr. Béchir Béjaoui (INSTM), Prof. Marco Pellegrini (UniBo), Dr. Giovanni Preda (Trevi), Prof. Cesare Saccani (UniBo), and Dr. Nouredine Zaaboub (INSTM).

These comprehensive studies serve as techno-economic tools for the follow up of the ECOMEDPORT SUA. Both reports are structured with the same approach, starting with brief executive summary, and followed by a description of the ejectors plant technology. Then each report goes on to respectively provide a description of the port concerned and how to apply the technology, via an assessment of sedimentation, technical and economic analysis.

The assessment of sedimentation respectively identifies the sources of sedimentation and concludes the characteristics of the sediments at the ports, being:

- Tripoli harbour - The clay content in sediments is in the order of or greater than 30%, at the old basin thick layer of clayey sand to sandy clay with gravel and pebbles, sometimes cemented (conglomeratic). New basin sediments are consisted of dark, greenish, grey, stiff to very stiff calcareous silty clay to clayey silt (marl), and traces of organic materials and peat.
- Sediment in Houmt Souk port area is characterized by 70-90% of sand and 10-30% of silt and clay.

In the technical analysis sections both studies discuss two localized issue areas and propose the technology and particular needs for each site, including a preliminary schematic of the plants. Environmental impact is also taken into account.

In the economic analysis concludes a rundown of the capital costs involved for the localized site proposals including design, installation, and commissioning. Moreover, it considers annual operational costs and maintenance expenditure.



## Conclusion

The BLUEMED CSA is pleased with the **successful implementation** of the four respective Start-up Actions and the various outputs delivered by Coordinators, Co-Leads and partnership members together with all the contributors including experts, supporting stakeholders, and the respective networks. This in particular is termed a success, not just in light of the exceptional circumstances brought about by the Covid-19 pandemic, due the Start-up Actions effectively implementing the spirit of the BLUEMED project, by concretely showcasing the BLUEMED vision by bringing together stakeholders from all Mediterranean shores and beyond, thus taking the project beyond EU borders as well as by engaging public and private sector from policy makers to research institutions to companies to NGOs in the co-designing process. Remarkably, Start-up Action Coordinators proved a dynamic approach in finding/reacting to scenarios of opportunities for further up-scale, including at EU level. Thus, they demonstrate the willingness to further develop the activities carried out in the BLUEMED framework.

The multi-national, multi-disciplinary and multi-stakeholder Start-up Actions succeeded in bringing together a total of **405 stakeholders** from different EU member state and Non-EU countries, engaging **110 members of academia**, **38 NGO** representatives, **92 private sector** representatives and **165** representatives from the **other sectors** cumulatively over **14** separate **meetings**. They also produced high-level multi-targeted outputs, ranging from technical report, dissemination products and scientific papers.

In terms of the quality of the outputs and the future of the four respective Start-up Actions, the BLUEMED CSA firmly believes that the **feasibility studies provoked by these collaborative actions have develop into initiatives with long-term, widespread impact at European, Mediterranean and global level.**



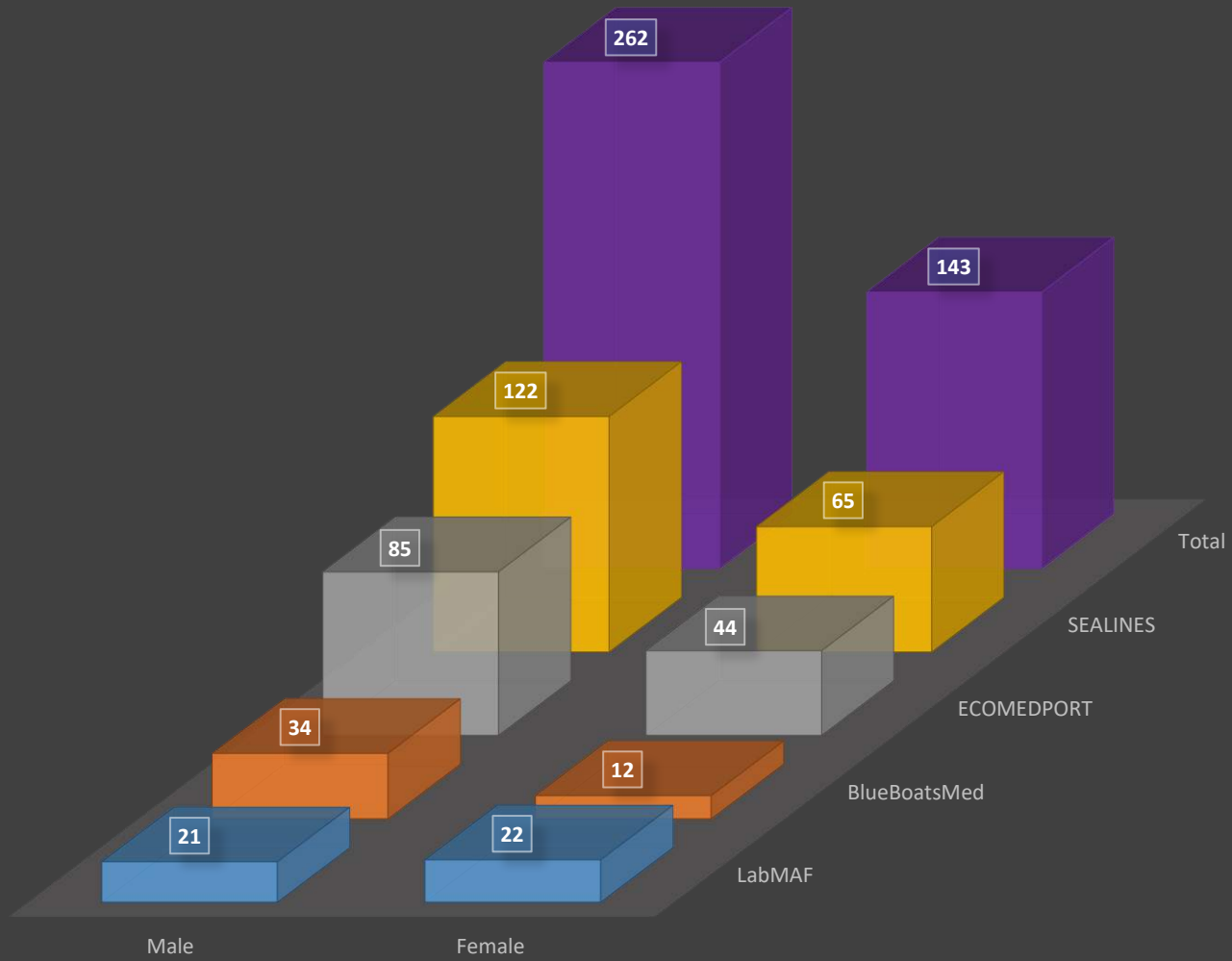
This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 727453

## **Annex 1 - Charts graphically representing data collected from the SUAs meetings**

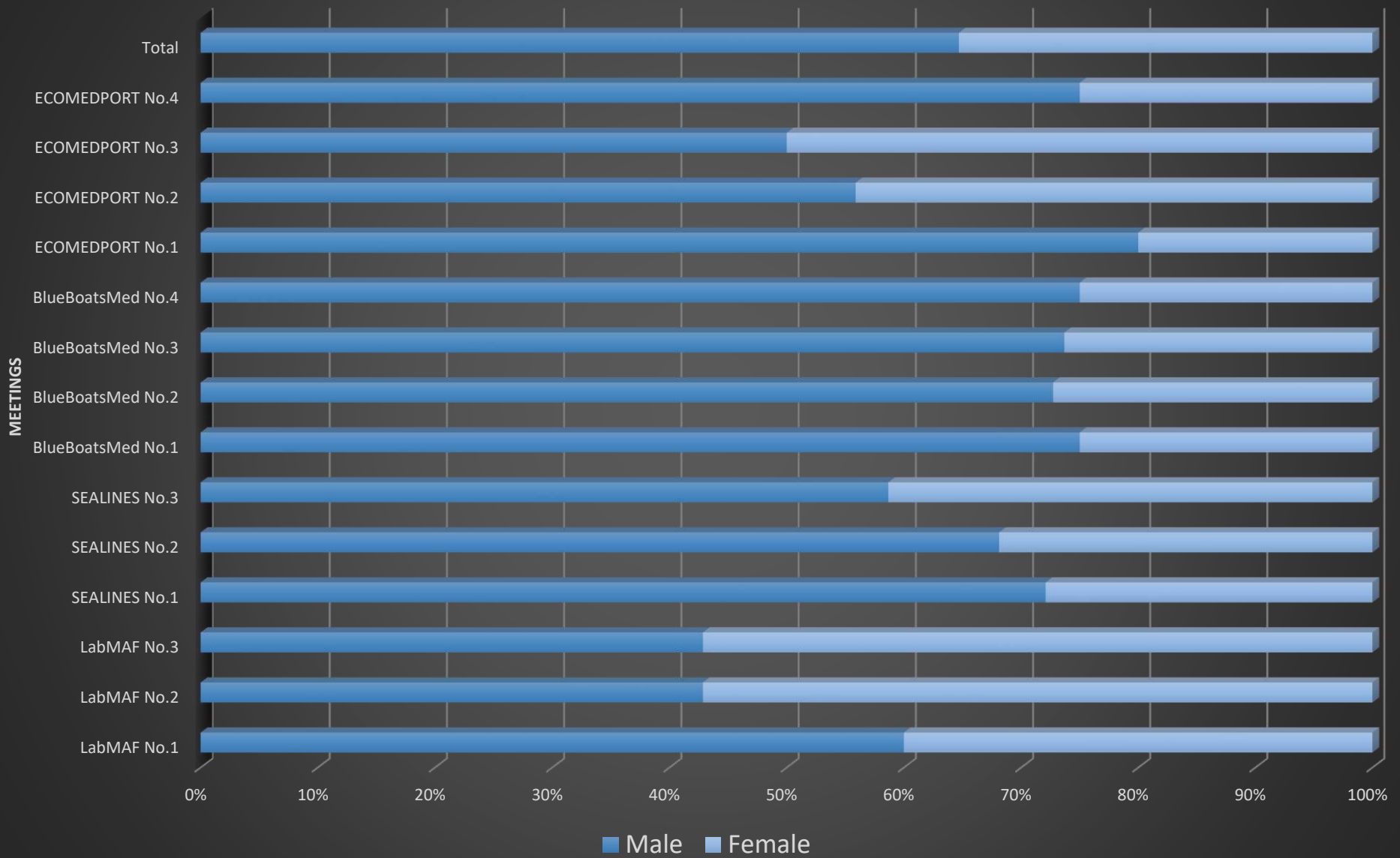


# GENDER PARTICIPATION IN NUMBERS

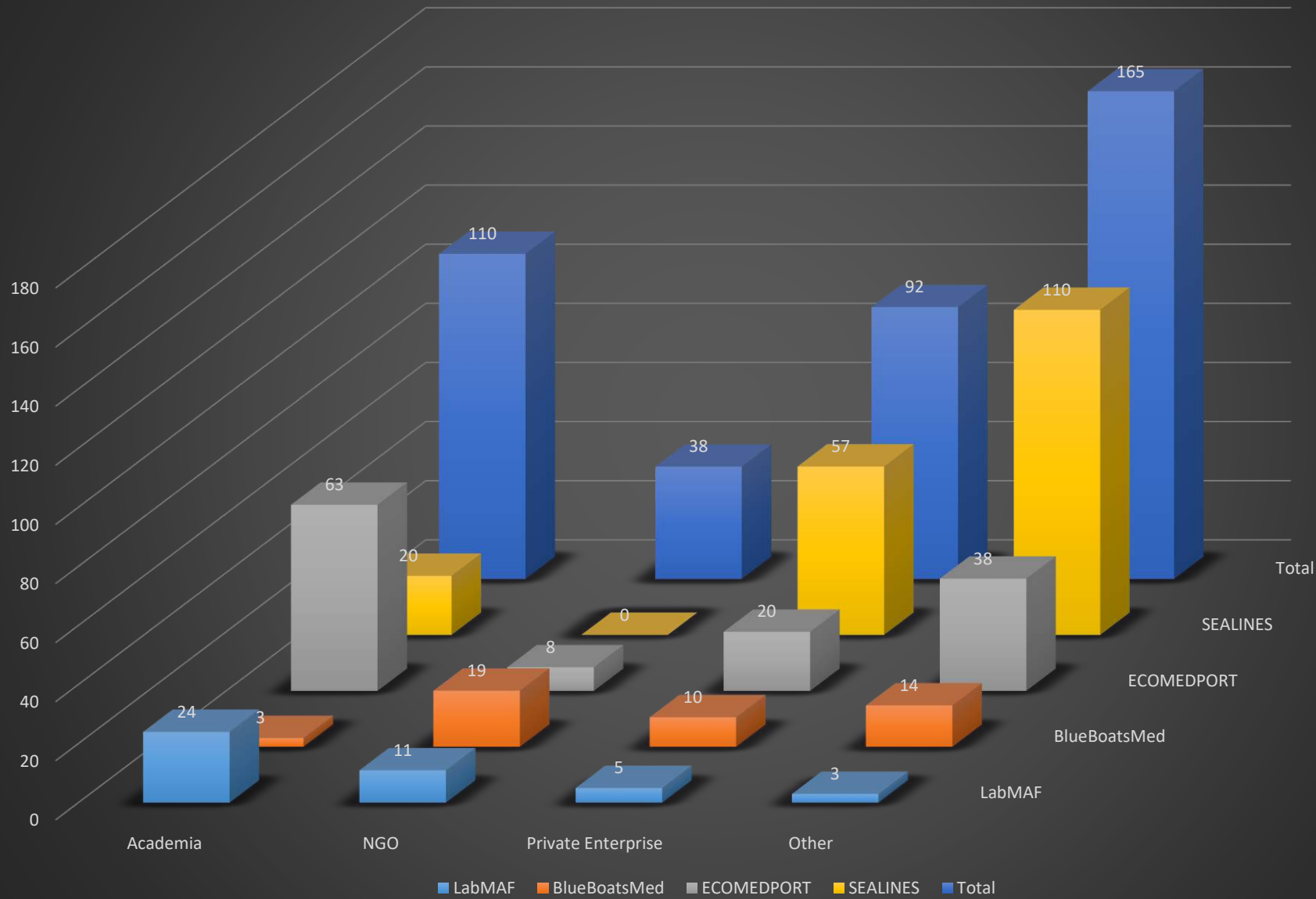
■ LabMAF ■ BlueBoatsMed ■ ECOMEDPORT ■ SEALINES ■ Total



# Gender Participation in SUAs Meetings

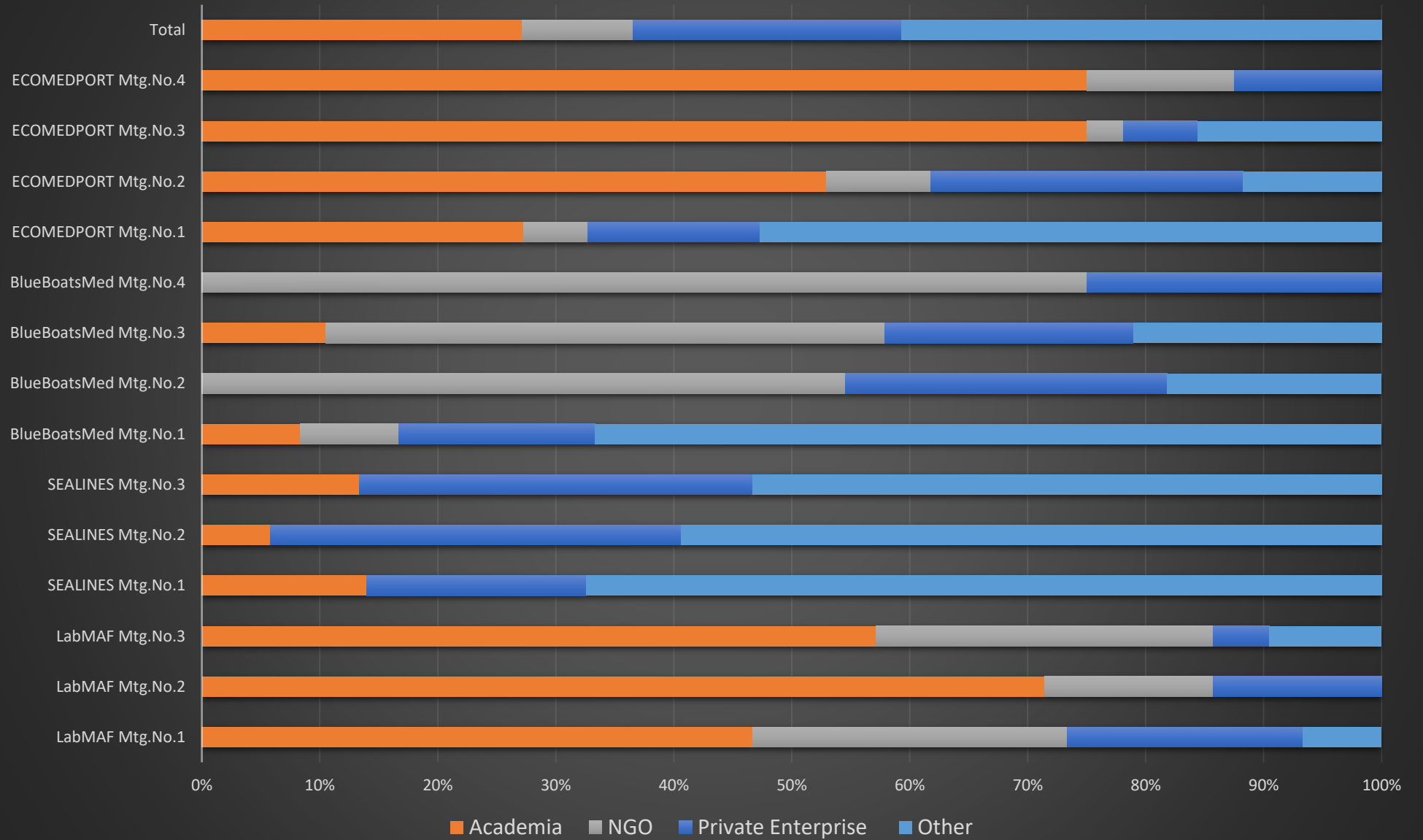


# Sector Participation in Numbers





# Sector Participation in SUAs Meetings






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## **Annex 2 - Slido analytics report and poll results from final project conference “BlueMed #one Mediterranean Event”**


Note: Questions relevant for the SuAs session are highlighted in yellow.








## Event summary report BlueMed #One Mediterranean event

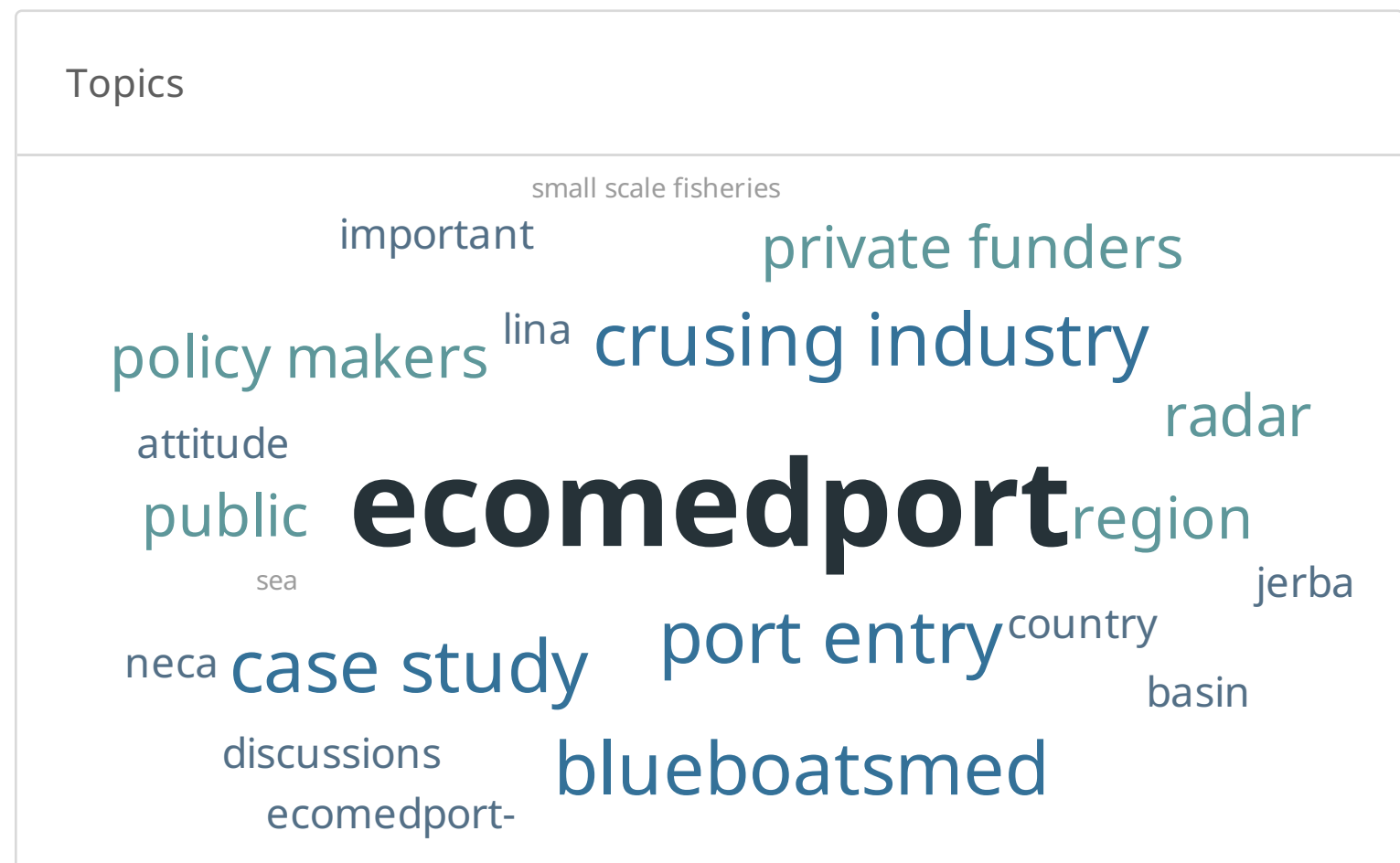
 Active users <b>76</b>	
Engagement score	<b>220</b>
Engagement per user	<b>2.9</b>

 Questions <b>17</b>	
Likes / dislikes	<b>14 / 0</b>
Anonymous rate	<b>71%</b>











 Poll votes <b>189</b>	
Polls created	<b>8</b>
Votes per poll	<b>24</b>

### Popular questions

 Anonymous	0 🗨️ 3 👍
Regarding the presentation on Sealines, the case study you presented is the only option available to test renewable energies into the sea?	
 Anonymous	0 🗨️ 2 👍
...or for a further scale-up other options could be taken into account?	
 F	0 🗨️ 2 👍
regarding BlueBoatsMED, do you intend to include also guidelines concerning the underwater noise reduction?	
 Anonymous	0 🗨️ 2 👍
To ecomedport- why is the port entry and towing basin so important to not have sedimentation ?	
 Anonymous	0 🗨️ 2 👍
To all the panelists: What about the NECA/SECA Mediterranean institution request raised last year?	



### Influential users

 F		1 🗨️ 2 👍
 W		1 🗨️ 2 👍
 F		1 🗨️ 0 👍
 G		1 🗨️ 0 👍
 J		1 🗨️ 0 👍

# BlueMed #One Mediterranean event

22 - 24 Feb 2021

Poll results

## Table of contents

- In your opinion and experience – and also after having listened to our Ambassadors' stories – what is the added value of involving young people in the role of Ambassadors in initiatives like Bluemed? Select the 3 most relevant.
- The BlueMed Implementation Plan presents a set of strategic actions to address relevant priorities for the Mediterranean Sea. Which actions would you like to see developed first? Take your time and select maximum 3!
- In your opinion, how soon do you think that the cruise sector will recover from the pandemic impacts and transition towards a resilient and sustainable industry operating at the same levels of pre-Covid?
- What word would you use to best describe the benefits of reuse of offshore infrastructures?
- What is your preferred source or production system when you purchase seafood?
- How would you know about the source or production system when you purchase seafood?
- In your opinion how important is the marine flora and fauna in the harbour inlet area?
- How would you define the benefits of this innovative technology for



# Table of contents

- sediment management in ports and channels in one word?

**In your opinion, how soon do you think that the cruise sector will recover from the pandemic impacts and transition towards a resilient and sustainable industry operating at the same levels of pre-Covid?**

0 1 8

1-4 years (by 2025)  
28 %

5-9 years (by 2030)  
56 %

10+ years (by 2035)  
11 %

15+ years (after 2036)  
6 %

What word would you use to best describe the benefits of reuse of offshore infrastructures?

0 1 6



## What is your preferred source or production system when you purchase seafood?

0 2 6

No, I don't care where my seafood comes from

0 %

I prefer catch coming from large-scale (industrial) production

0 %

I prefer catch from small-scale fishers

81 %

I prefer farmed products (from aquaculture)

19 %

## How would you know about the source or production system when you purchase seafood?

0 2 6

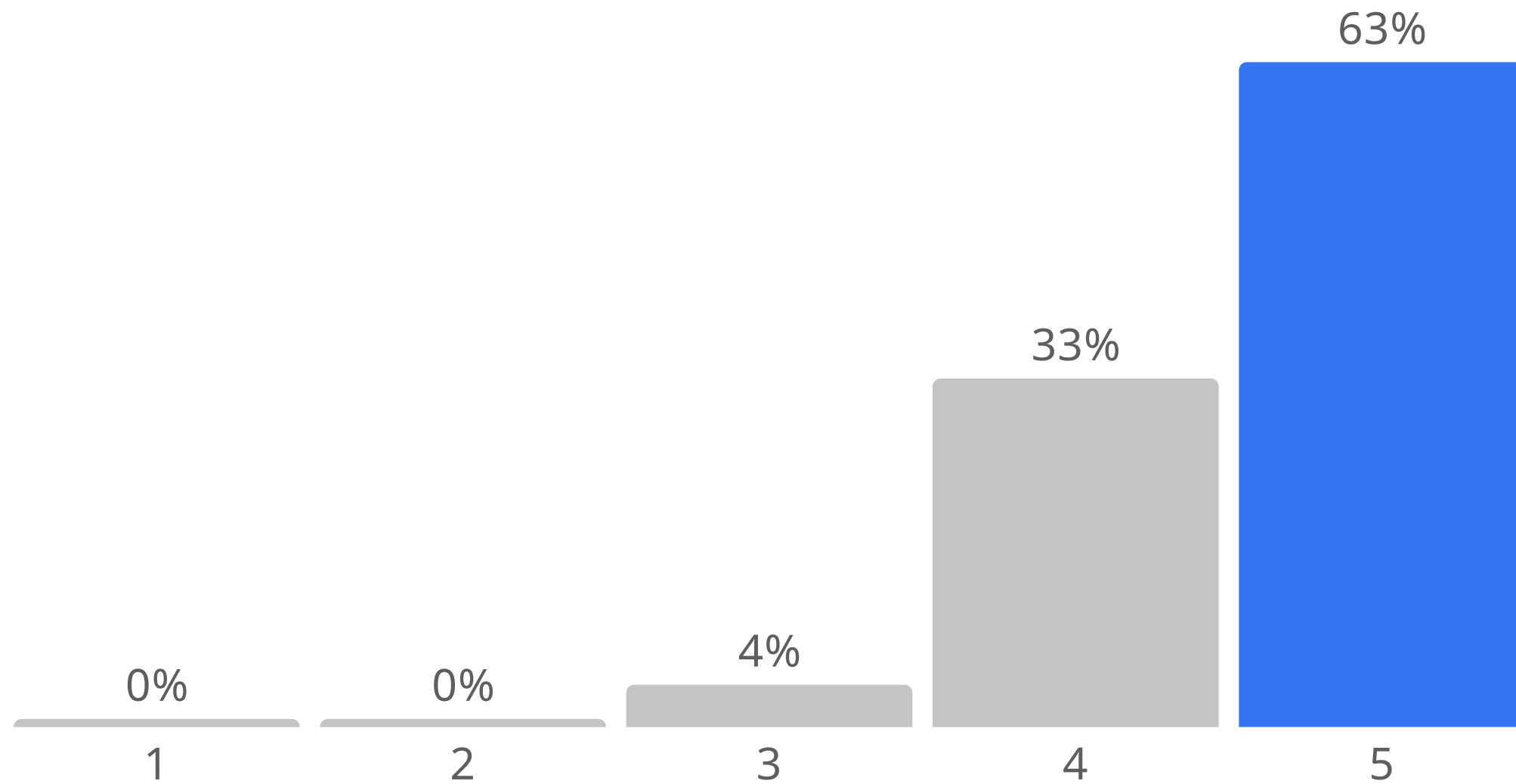
- Label with the obligatory consumer information
- Etiquette
- Label
- Asked to seller
- Labels and asking the vendors
- Label
- Asking
- Label
- Label
- quality
- Label
- Shop infos
- Labeling
- Lable
- Asking the vendor
- Labelling
- Labelling
- I buy from local fishermen.
- Buying from the fisherman
- Asking and trusting the shop
- Buy it from the producer/fisher directly and ask
- labels and origins
- I ask the vendor
- label
- Label
- labels



**In your opinion how important is the marine flora and fauna in the harbour inlet area?**

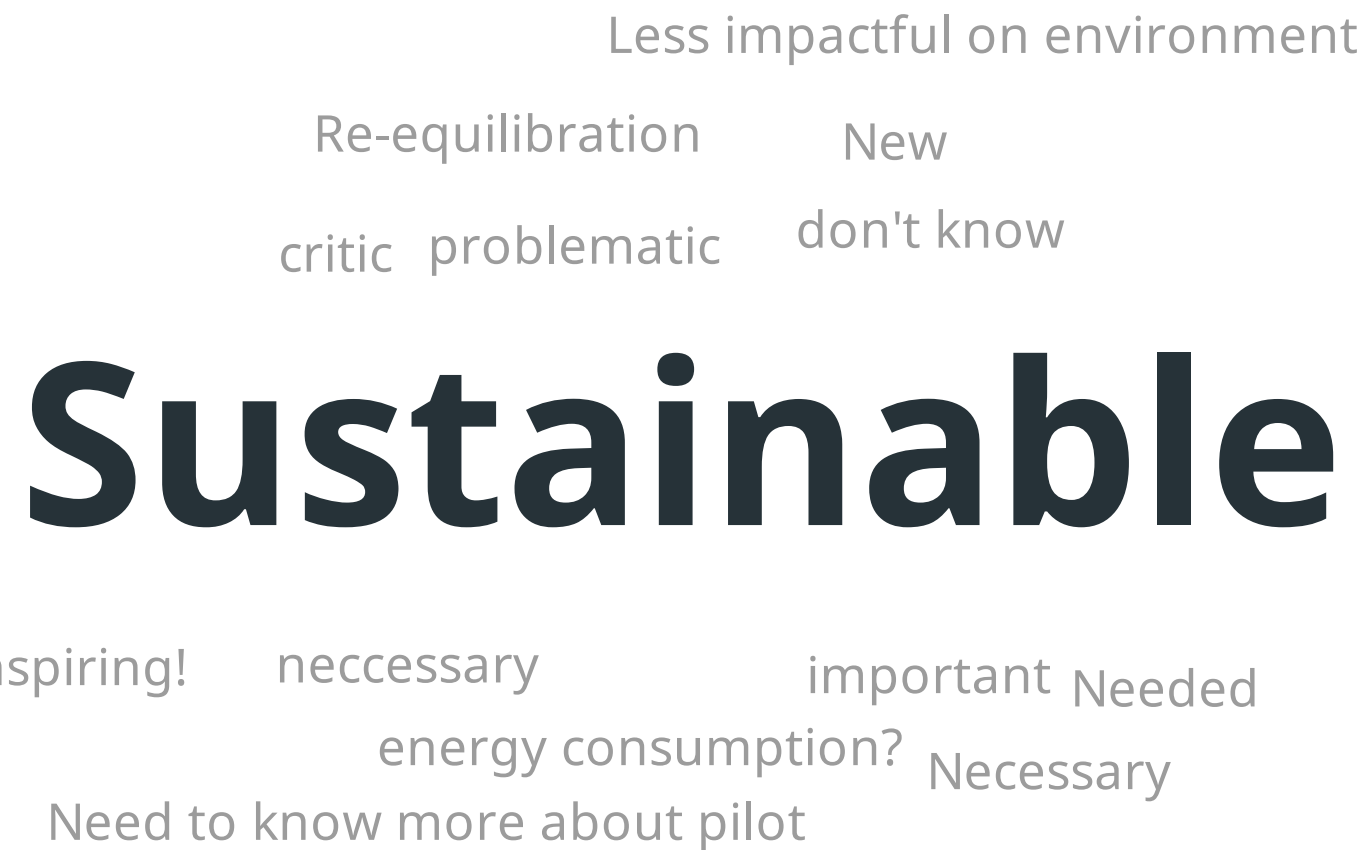
0 2 7

Score: 4.6



**How would you define the benefits of this innovative technology for sediment management in ports and channels in one word?**

0 1 7





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blue  med



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## **Annex 3 - Compilation of reports and outputs of LabMAF - Developing a Labelling Scheme for Mediterranean Small-scale and Artisanal Fish Products**

Note: Annex 3 to 6 are available respectively at <http://www.blued-med-initiative.eu/the-startup-actions/> and [http://www.blued-med-initiative.eu/wp-content/uploads/2020/04/BLUEMED-CSA deliverable 4.1.pdf](http://www.blued-med-initiative.eu/wp-content/uploads/2020/04/BLUEMED-CSA_deliverable_4.1.pdf) .





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## **Annex 4 - Compilation of reports and outputs of SEALINES: Mediterranean Safety Network**

Note: Annex 3 to 6 are available respectively at <http://www.blumed-initiative.eu/the-startup-actions/> and [http://www.blumed-initiative.eu/wp-content/uploads/2020/04/BLUEMED-CSA\\_deliverable\\_4.1.pdf](http://www.blumed-initiative.eu/wp-content/uploads/2020/04/BLUEMED-CSA_deliverable_4.1.pdf) .





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## **Annex 5 - Compilation of reports and outputs of BlueBoatsMed - Foresight on cruise & recreational boating, their potential for transition towards a blue economy in the Mediterranean and associated environmental challenges**

Note: Annex 3 to 6 are available respectively at <http://www.blumed-initiative.eu/the-startup-actions/> and [http://www.blumed-initiative.eu/wp-content/uploads/2020/04/BLUMED-CSA deliverable 4.1.pdf](http://www.blumed-initiative.eu/wp-content/uploads/2020/04/BLUMED-CSA_deliverable_4.1.pdf).







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## **Annex 6 - Compilation of reports and outputs of ECOMEDPORT - Feasibility study of an ecosystem-oriented plant for sediments managements in Mediterranean ports and marinas**

Note: Annex 3 to 6 are available respectively at <http://www.blumed-initiative.eu/the-startup-actions/> and [http://www.blumed-initiative.eu/wp-content/uploads/2020/04/BLUEMED-CSA deliverable 4.1.pdf](http://www.blumed-initiative.eu/wp-content/uploads/2020/04/BLUEMED-CSA_deliverable_4.1.pdf).

