

Mission Ocean & Waters Cross-basin Lessons and Insights from CSAs

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Acronyms & Abbreviations

Table 1. Table of abbreviations and acronyms used in Prep4Blue and the document

Acronym / Abbreviation	Signification
BANOS	Baltic and North Sea
вмв	BlueMissionBANOS
вмм	BlueMissionMed
P4B	PREP4BLUE
(R)IA(s)	(Research) and Innovation Action(s) project(s)
СоР	Community of Practice
CSA(s)	Coordination & Support action project(s)
HEU(R)	Horizon Europe
EU	European Union
KER(s)	Key Exploitable Result(s)
КРІ	Key Performance Indicator
LH(s)	Lighthouse(s)
MIP Ocean	Mission Implementation Platform for the Mission Ocean and Waters
MIP	Mission Implementation Platform
OIR	Operational Implementation Roadmap (Mediterranean LH)
R&I	Research and Innovation
RIS3	Research and Innovation Strategy for Smart Specialization
WP	Work Package



1. Introduction

There are five CSAs (Coordination and Support Action *projects*) with only four covering a specific area (LightHouse CSAs) and the fifth is more transversal. Those CSAs are

- BlueMissionAA, for the Atlantic-Arctic area;
- BlueMissionBANOS, for the Baltic-North Sea area;
- EcoDaLLi, for the Danube and Black Sea area;
- BlueMissionMed, for the Mediterranean area;
- Prep4Blue, as the overarching CSA.

Lighthouse (LH), as defined in the Mission Implementation Plan, is a new concept implemented within the framework of the Mission. LightHouses (LHs) are basins for testing, demonstrating and deploying the Mission's activities in the EU's oceans, seas and river basins. They allow new ideas to be tested and businesses and local populations to be involved in the process. Up until now, the Mission has 4 LHs: Baltic & North Sea basin; Mediterranean Sea basin; Danube River and Black Sea basin; Atlantic & Arctic basin.

In the first phase of the Mission (2022-2025), each of the area specific LightHouse, is focusing on one specific Mission Objective and each LH has its own specific (LH) CSA project (Figure 1), as seen below:

- Protect and Restore aquatic and marine ecosystems: BlueMissionAA & EcoDaLLi
- Prevent and eliminate pollution: BlueMissionMed
- Make the blue economy carbon neutral and circular: BlueMissionBANOS



Figure 1. The Mission Lighthouses and their main objective of interest for the first phase of the Mission (2022-2025)



As all the basins covered in the Mission are varied and have cultural, social and economic differences, each LH CSAs adapted its implementation in their area. Each CSA's role and implementation in brief:

- Prep4Blue's work includes connecting stakeholders, mapping projects and initiatives using the WaveLinks database, along with activities on citizen engagement focusing on youth and ocean literacy. Prep4Blue also works on supporting an enabling environment on topics such as business, finance and regulations. There is also a lot of work done on communicating the Mission and storytelling Mission achievements for the broader public. Focus is also given on Knowledge transfer of solutions supporting the achievements of the Mission's objectives.
- The Danube and Black Sea CSA (EcoDaLLi) is focused on setting up governance structures to engage stakeholders also including the Black Sea basin. Living labs are designed to engage key stakeholders, including citizens, while also forming connections with various governance structures.
- When it comes to the Atlantic and Arctic CSA (BlueMissionAA) the main challenges relate to bridging differences between the Atlantic and the Artic basins. The scope of the activities is to test, transfer and scale technologies.
- The Baltic and North Sea CSA (BlueMissionBANOS) focuses on five geographically clearly
 delimitated innovation cycles, targeting solutions and involving stakeholders to co-design
 priorities, and boosting innovation. Mobilisation and engagement of those actors/actions is
 always enhanced through a final Mission Arena, with a Roadmap of Future Actions for this
 region as its outcome.
- The Mediterranean CSA (BlueMissionMed) focuses on identifying, scaling up, and replicating
 innovative transformative solutions and technologies, leveraging on existing networks and
 strategies as well as engaging with key stakeholders at multiple levels, including non-EU
 countries, also through a system of National and Regional HUBs created and implemented by
 the Project itself in 7 Mediterranean Countries.

This report aims to present the implementation methods of each Mission Ocean and Waters LightHouse CSAs (<u>BlueMissionBANOS</u>, <u>BlueMissionAA</u>, <u>BlueMissionMed</u>, <u>EcoDaLLi</u>) within their respective areas, as well as the implementation of the overarching CSA (<u>Prep4Blue</u>). We will also discuss the role of these CSAs in connecting Mission-funded projects, enhancing synergies, and highlight some of their key activities.

Throughout this report, we will explore the position and interactions of each CSA within the Mission project ecosystem, as well as their collaboration with the Mission Implementation Platform (MIP Ocean) and the Mission Secretariat.

Another section will focus on the results achieved by each CSA, particularly those that will be transferred as legacy to the broader Mission ecosystem.

We will also address the barriers and challenges faced by the CSAs, along with their recommendations. Finally, we will discuss how the LH CSAs envision their role in the second phase of the Mission (2026-2030), offering key recommendations and suggested actions for improvement.



2. CSAs implementations

2.1. PREP4BLUE

2.1.1. Overall Objective

PREP4BLUE's overarching objective is to develop the R&I implementation modalities required to achieve the Mission objectives and to facilitate a successful first phase (2022-2025) of the Mission "Restore our Ocean and Waters". Our outcomes will allow the Mission LHs to develop and pilot innovation of all forms: technological, social, business models and governance; with an emphasis on the methodologies that will allow co-design and co-implementation of solutions with citizens and stakeholders.

2.1.2. Implementation

PREP4BLUE serves as the overarching Coordination and Support Action (CSA) for the EU Mission "Restore our Ocean & Waters", spanning three years and commencing in June 2022. The project is split into six distinct work packages (see Figure 2). Its primary objective is to bolster the Research and Innovation (R&I) endeavours of the Mission and facilitate its smooth execution, particularly in its initial phase (2022-2025). Through a series of pilot initiatives conducted at the Mission's demonstrator sites, also known as 'Lighthouse' (LH) sites, PREP4BLUE is developing tools, guidelines, processes and methodologies to aid stakeholders across all Mission-funded projects. This collaborative approach has fostered optimization and synthesis across Mission activities and solutions, ensuring coherence and connectivity across various sectors and between European citizens and stakeholders (For further details, visit prep4blue.eu/project-overview).

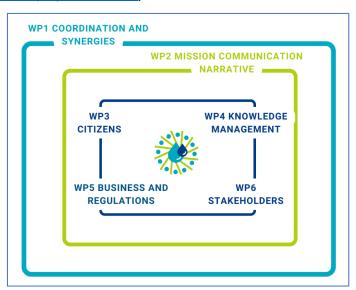


Figure 2. Prep4Blue's work packages

WP1's primary focus for the project has been to align and complement all European Commission (EC), international, national, and regional initiatives to realize the objectives of the Mission. Over the initial project phase, significant efforts and groundwork have been dedicated to establishing connections between ongoing Mission projects (CSAs, Implementing Actions (IAs), and Research and Innovation Actions (RIAs)), as well as invigorating the Mission ecosystem. Extensive interactions and alignment endeavours have been pursued with LH CSAs, the Mission Secretariat, and the MIP Ocean. Additionally, breakthroughs have been achieved on an international scale through collaborations with



various partners involved in initiatives related to the UN Decade on Ocean Science for Sustainable Development, both at strategic and operational levels.

Within WP2, the objective is to formulate guidelines for an effective, innovative, and appealing communication and dissemination strategy for the Mission, fostering engagement among stakeholders and citizens. For this, Prep4Blue worked on the development of the Mission Narrative guide, Prep4Blue's communication toolkit, the establishment of the Mission Digital Academy, the creation of a comprehensive Mission Website for the general public, and the management of social media channels (see section 3.1, Table 2 for detailed overview).

WP3 is dedicated to ensuring active citizen involvement in the co-design and co-execution of the Mission's Research and Innovation (R&I) core activities. During the initial phase, extensive work was undertaken in co-design efforts to produce the <u>citizen engagement toolkit</u>, conduct a <u>series of nine webinars</u>, establish a community of practice for citizen engagement, create a <u>guide on good practices and recommendations for citizen science</u>, and compile a <u>database of citizen initiatives</u> across Europe. In the 2nd phase of the project, focus was on <u>pilot actions to support and engage citizen organizations and networks</u> with the Mission, on the update of the citizen engagement toolkit (will be updated in May 2025), and on <u>bespoke legacy training resources to support citizen engagement</u>.

WP4 is focused on facilitating effective knowledge management and transfer to support the core Research and Innovation (R&I) activities. Given the ambitious scope of the Mission, it's crucial to manage, transfer, and adopt high-potential knowledge efficiently among target and end-users. WP4 is dedicated to developing methodologies, testing digital tools, and promoting the adoption of solutions throughout all Mission activities. At this stage, main outcomes, progress and results includes the development of a Mission ontology and semantic network, establishing the framework for a digital knowledge management system, and identifying innovative solutions with potential for scaling up to fulfil the Mission objectives. This has included expert workshop to identify High Potential KER (Key Exploitable Results) and then work on the impact pathways of those KERs. These KERs have been included in the Mission Ecosystem Database hosted on WaveLinks through the online showcasing module.

WP5 is dedicated to fostering an enabling environment from both regulatory and economic standpoints to facilitate the necessary private and public investments for future projects. The outcomes, mainly based on desktop analysis and interviews, include a comprehensive funding gap analysis, benchmarking of existing business models, formulation of key recommendations for Interregional financing options, and mapping of policies and regulations to incentivize and overcome obstacles in achieving Mission objectives and concrete examples of business interaction models with public entities and other organisations.

WP6 is focused on developing effective strategies and models for meaningful stakeholder engagement to collaboratively develop and implement the scaling-up of innovative solutions toward achieving Mission objectives. Substantial work has been accomplished in co-designing a stakeholder engagement guideline, including a toolkit and an online tool referencing 47 stakeholder engagement methods hosted on WaveLinks, as well as compiling a database of stakeholders. Additionally, pilot stakeholder assemblies have taken place in the four LHs areas, the Prep4Blue helpdesk has expanded throughout the project to assist Mission contributors in engaging stakeholders. Work has also been done on capacity building through workshops and webinars.



2.2. BlueMissionAA

BlueMissionAA serves as the Coordination and Support Action (CSA) for the Atlantic and Arctic Lighthouse of the EU Mission "Restore our Ocean & Waters by 2030", spanning 36 months starting in November 2022. It focusses on restoration of marine and coastal ecosystems and increased climate resilience. BlueMissionAA is having a structuring effect to consolidate and mobilise a wide community of relevant stakeholders and EU citizens towards the achievement of Mission objectives at basin level. It will deliver an effective governance framework aligned with policies, initiatives and actions at national, regional and EU level [WP1], build a well-coordinated monitoring framework to assess the progress of the implementation on an ongoing basis [WP2], provide a wide range catalogue of supporting services [WP3], foster an attractive innovation ecosystem for ecological restoration [WP4], and give the opportunity and empower EU citizens to engage in the preservation and restoration of oceans and waters through participative means [WP5]. BlueMissionAA is developing two region-specific proposals towards an effective Mission lighthouse governance, one for the Atlantic and one for the Arctic.

2.2.1. Mission Governance and Implementation in the Atlantic & Arctic

The building and mobilisation of governance frameworks and networks through multidisciplinary and multi-sectoral cooperation began by engaging with stakeholders involved in restoration projects to understand the drivers and barriers to effective governance frameworks.

Multiple activities across BlueMissionAA have promoted stakeholders' engagement with the Mission, including:

- the facilitation of increasing the number of pledges to the Mission Charter (e.g., the pledges from Atlantic Arc Commission regions, contributing to the currently 81 pledges for the Atlantic and Arctic basin and 395 for the biodiversity restoration objective),
- the BlueMissionAA newsletter distribution to over 12000 contacts,
- the building of effective relationships through the Atlantic & Arctic Lighthouse Weekly Hour webinar series reaching over 4400 views on YouTube,
- work with representatives of six different restoration case studies,
- and the involvement of BlueMissionAA in numerous pivotal international high-level agreement initiatives and events, such as the Atlantic and Arctic Lighthouse launch event: Mission "Restore our Ocean and Waters by 2030": an Atlantic-Arctic lighthouse, the Mission Ocean & Waters Annual Forums, the Atlantic Stakeholder Platform Conferences, the UN Ocean Decade Conference, and the All-Atlantic Ocean Research and Innovation Alliance (AAORIA) Fora.

A stakeholder mobilization plan was developed to ensure that governance approaches are appropriate and aligned with both environmental and stakeholder needs. A dialogue structure with six selected case studies has been implemented to deliver guidelines and recommendations in respect of best practices and optimum governance approaches for delivering environmental protection and restoration. Establishment of an Expert Governance Panel has set the foundation for multidisciplinary and multi-sectoral cooperation by bringing experts associated with MPAs, MSP and restoration together to discuss the key thematic areas that need to be advanced. These areas will be further advanced through directed stakeholder engagement as part of the workflow towards the development of region-specific proposals for an effective governance in the Atlantic and Arctic.



2.2.2. Monitoring and Reporting through WaveLinks

A comprehensive monitoring and reporting framework is being developed to measure the Mission implementation progress in the Atlantic and Arctic Sea basins on an ongoing basis, including the development of a set of indicators in coordination with MIP Ocean, the PREP4BLUE project and all other lighthouse projects in the four sea and river basins. In addition, BlueMissionAA, together with PREP4BLUE and BlueMissionBANOS, have successfully launched the WaveLinks.eu platform (see Figure 3). The platform serves as a central resource for stakeholders and the public to access extensive datasets on restoration projects and solutions/services, institutional engagements, citizen science initiatives, and engagement methods aligned with the Mission Ocean objectives. As of September 2023, WaveLinks.eu is fully operational with monthly enhancements to improve functionality and content richness. Currently, the platform hosts detailed information on 5,887 projects connected to the Mission's goals, involving over 14,000 institutions. This includes 967 citizen science initiatives, and 50 proven engagement methods used in related projects. Specifically, within the Atlantic and Arctic regions, the database includes over 1,500 projects, with 117 of these focusing explicitly on restoration activities under the Atlantic and Arctic lighthouse directive. The integration of established international datasets — such as those from CORDIS, the Mission Ocean and Waters projects portfolio, the UN Decade of the Ocean, and the Blue Bio COFUND — ensures comprehensive coverage and relevance. Plans are in place to further enrich this database with contributions from regional and national stakeholders through BlueMissionAA partners, and data from other projects and initiatives, improving interoperability and collaboration across the Mission Ocean and Waters' ecosystem. Additionally, the platform allows individual users to contribute new data via straightforward online surveys, enhancing community involvement and data richness. To expand user engagement and platform utilization, targeted communication campaigns are under development. These efforts are designed to facilitate easy adoption of the platform, ensuring it becomes a valuable tool for tracking the progress of ecological restoration efforts across Europe and monitor the progress towards restoring our ocean and waters by 2030.



Figure 3. Snapshot of the WaveLinks.eu platform



2.2.3. Innovation Support Systems

A catalogue of services (see Figure 4) has been developed under BlueMissionAA's WP3, providing the structure and architecture of a comprehensive resource of technical expertise, services, and innovative solutions related to ecosystem restoration and biodiversity protection. This catalogue was submitted as a deliverable – D3.1 Catalogue of Services - Interactive catalogue of services, technical expertise, know-how and technical support in the area. Active identification and compilation of relevant services and models from across the Atlantic and Arctic regions is ongoing. Various formats of collection of data and solutions from stakeholders have been explored, including offering options to submit information in different file formats (e.g., doc forms, and interactive pads) and direct engagement at events like the Ocean Days in Brussels and the UN Ocean Decade Conference.

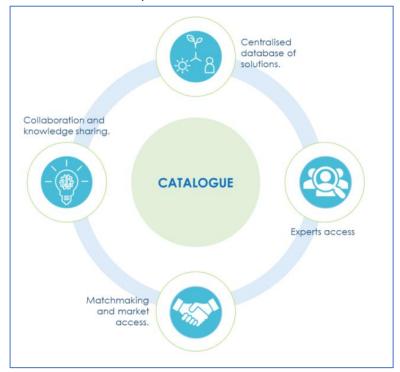


Figure 4. Objectives of the BlueMissionAA Catalogue of Services

2.2.4. Transfer Support Systems

Mature technologies and solutions on their path to market and productive use are supported through the provision of Guidelines and Recommendations, as well as connections to investors, funders, donors, and both public and private customers, fostering a dynamic entrepreneurial innovation ecosystem. The mapping, assessing and planning phase was carried out and submitted as a project deliverable (D4.2 Roadmap and recommendations for training and transfer activities to market). Partnerships with existing investing networks, industry alliances and supporting structures, including BlueInvest, Sustainable Ocean Alliance, World Ocean Council and ISSS (Innovation platform Sustainable Sea and Ocean Solutions) have been established, as well as the first matchmaking session with several stakeholders joining this event. The Atlantic Arc Commission of the CPMR has promoted the engagement and mobilization of 15 Atlantic Regions through various communication channels, such as newsletters and presentations at technical and statutory meetings with Member Regions. This has helped connect regional authorities' expertise in innovation and RIS3 (Research and Innovation Smart Specialisation Strategies) with the BlueMissionAA thematic areas and outcomes. Additionally,



the Atlantic Arc Commission of the CPMR released a Technical Paper in January 2021 analysing the RIS3 (Research and Innovation Strategy for Smart Specialization) of Atlantic Regions in relation to the blue economy that was presented during the Atlantic Stakeholder Platform Conference in Oporto in October 2023. This paper together with additional research on Arctic S3 were used as baselines for the delivered recommendations on the alignment of S3 towards the Mission Ocean objectives. Recommendations were submitted in a Deliverable – D4.3. Recommendation for future development of Smart Specialisation Strategies - and can be found here: bluemissionaa.eu/deliverables.

2.2.5. Citizen Engagement & Knowledge Transfer

To support the dissemination of services and solutions developed by Mission Ocean & Waters and All-Atlantic projects, BlueMissionAA established a weekly webinar series - the Atlantic & Arctic Lighthouse Weekly Hour. The series currently has 31 episodes (15 in RP1) and more than 4400 viewers on YouTube. The main theme of this series is the preservation and restoration of marine and coastal ecosystems and biodiversity, in addition to promoting solutions for the restoration of freshwater systems, marine pollution, and carbon neutral blue economy developed in other basins that could be of interest for the Atlantic and the Arctic. The citizen engagement activities aim at promoting interaction, knowledge exchange, and cooperation between citizens and other stakeholders such as researchers, NGOs, policymakers, companies, and other projects involved in the preservation and restoration of marine and coastal ecosystems and biodiversity in the Atlantic and Arctic basins. Three citizen campaigns have been organised so far, with a fourth to be carried out during the European Maritime Day in May 2025. Other citizen engagement activities are being planned for the coming months with families and schools in outdoor activities, such as snorkelling trails as well as with members of the public, which will involve art-based methodologies (e.g., poetry, folk stories, as well as the application of interactive digital platforms).



2.3. BlueMissionMed

The BlueMissionMed CSA is a multi-actor, trans-sectorial and multidisciplinary Consortium, consisting of 6 R&I public institutions, 6 NGOs, 2 MED industrial associations and 2 SMEs from 7 countries of the Mediterranean basin. BlueMissionMed has set up, structured and empowered the Mediterranean Lighthouse through the development and deployment of transformative innovative solutions in all forms (technological, social, business, governance) across the Mediterranean basin. The Project's implementation pathway builds on, connects and structures existing relevant initiatives and activities to share and upscale solutions and mobilise relevant actors with the aim of preventing and reducing pollution of our ocean, seas and waters.

BlueMissionMed (BMM) answers the request of the <u>Mission Implementation Plan</u> for a systemic approach to the depollution and restoration of the Mediterranean basin hydrosphere (hence tackling primarily the Objective number two of the Mission), and, in particular, for a dedicated basin Lighthouse built on existing governance structures, initiatives, networks, and public and/or private organizations and networks, able to align priorities, policies and programs of the 22 Countries of the basin. Thus, maximizing the deployment of the Mission objectives in the area.

With an overall duration of 36 months (January 2023 – December 2025), the Project has developed through three main phases (Figure 5):

- 1. Inspire and Inform;
- 2. Assess and Mobilise;
- 3. Connect and Empower.

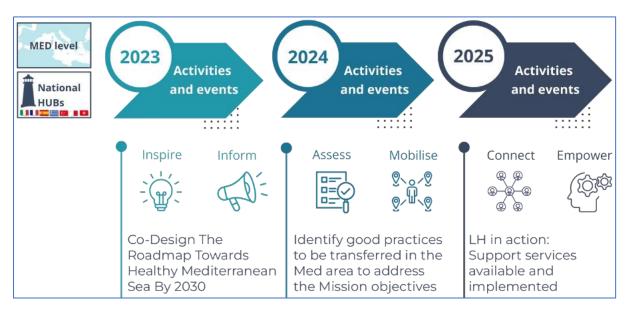


Figure 5. BlueMissionMed's process overview



2.3.1. Co-Design the Roadmap Towards Healthy Mediterranean Sea By 2030: Inspire and Inform

In the first year, the focus was mainly on co-designing a roadmap for a healthy and clean Mediterranean, and the development of the Operational Implementation Roadmap (OIR) for the Mediterranean basin followed by a two-stage, participatory co-design process:

- Stage 1: A comprehensive literature review identified gaps and needs related to de-pollution in the Mediterranean. This informed the thematic framework for the co-design process. Initial stakeholder engagement included the 1st Stakeholder Forum in Palermo (May 2023), three online sectorial workshops (July 2023), and targeted interviews. A bottom-up approach identified sector-specific leverage points, which were further reviewed by high-level governing bodies (e.g., UfM, UNEP/MAP, BLUEMED GSOs) during the Compass Workshop (November 2023). This stage culminated in the submission of the 1st OIR version (D2.2) in November 2023.
- Stage 2: An online survey engaged 123 Mediterranean stakeholders from 7 National and Regional HUBs to assess the maturity of proposed priority actions/solutions across key sectors (e.g., plastic production, aquaculture, tourism, waste management). Respondents classified actions based on a five-level maturity scale, providing valuable insights for refining the roadmap.

In total, 382 external stakeholders and around 30 BMM Consortium members actively participated in shaping the OIR, ensuring alignment with regional strategies and the objectives of the EU Mission "Restore our Ocean and Waters".

2.3.2. Identify good practices to be transferred in the Med area to address the Mission objectives: Assess and Mobilise

During the second year, the Consortium worked towards delivering a list of good practices that can be replicated in the Mediterranean basin. After a thorough analysis of 375 entries, 239 projects and initiatives were identified as relevant to Objective 2 of the Mission (prevent and eliminate pollution). This sample of projects was taken as a basis for a project analysis exercise, aimed to make an estimation of coverage of the following variables: Coverage of the Zero Pollution Hierarchy dimensions; Coverage of Objective 2 targets; Connected sectors (as per the project's Operational Implementation Roadmap); and Types of services and/or solutions provided.

Afterwards, a detailed screening of the 239 projects and initiatives was conducted between January and March 2024 to extract transformative and innovative solutions for addressing the de-pollution challenges in the Mediterranean. A set of criteria was applied to evaluate solutions based on their level of innovation (transformative, disruptive, or incremental), maturity, alignment with the Operational Implementation Roadmap (OIR), and sectoral representation. This analysis resulted in 86 solutions being identified, clustered by economic sectors (e.g., agriculture, aquaculture, tourism), pollution prevention strategies (e.g., prevention, minimization, remediation), and the type of innovation (technological, societal, policy, financial). Solutions related to monitoring and control, which apply across multiple sectors, were grouped separately.



The portfolio of solutions was shared with National and Regional HUB coordinators, who selected 32 solutions for further evaluation on gaps (including R&I needs at basin level), barriers and resistances (e.g., innovation readiness, cultural, economic, regulatory framework, etc.) and needs for the implementation. To deepen the analysis, 21 interviews were conducted with solution providers to identify barriers, needs, and opportunities for scaling and implementing these innovations. The findings, summarized in Deliverable D3.3, include a comprehensive analysis of the portfolio and insights from the interviews. This work highlights the conditions necessary to upscale solutions within the Mediterranean region and supports alignment with EU and regional R&I priorities.

2.3.3. LH Support services and monitoring: Connect and Empower

Ultimately, the Project is now in its third and final year. BlueMissionMed is designing, implementing, and will soon make available a comprehensive catalogue of services to empower and support targeted stakeholders in deploying OIR-relevant (OIR: Operational Implementation Roadmap) transformative innovative solutions (see Figure 6).

The Project will activate the Lighthouse to serve as an ecosystem facilitator, enabling systemic OIR implementation in the Mediterranean basin. Additionally, it will leverage the Lighthouse's multidimensional expertise to provide both on-site and remote support, enhance stakeholders' capacities, and facilitate networking to advance OIR and Mission implementation.

Through workshops and tailored services, BlueMissionMed aims to foster joint actions with key actors across the Mediterranean basin. These efforts will help consolidate the Project's experience and lessons learned into actionable recommendations for transferability and replicability, ultimately strengthening the region's innovation ecosystem and advancing Mission Implementation.



Figure 6. BlueMissionMed: Support the development, deployment and up-scale of transformative innovative solutions



2.3.4. National and Regional Hubs

All the aforementioned activities have been possible because BlueMissionMed has been working not only at the basin level, but, building on the BlueMed Pilot architecture, it has strategically structured a network of 7 National and Regional HUBs (see Figure 7) that allowed the project to work capillary and territorially as Territorial Multistakeholder Communities which implement the activities and priorities of BlueMissionMed. Their core role is to facilitate and support individuals and organizations willing to contribute to achieving the objectives of the Project. The HUBs are present in the seven countries directly represented in the Consortium: France, Greece, Italy, Malta, Spain, Turkey, Tunisia, with the aim of expanding the network to all basin's countries. This crucial structure allowed BMM to mobilize the HUBs to become "competence centres" to support the deployment of the BlueMissionMed OIR and activities, considering the specificities across Countries and Regions (language, cultural and socio-economic factors, innovation maturity, capacities, infrastructures, policies and governance). By operating at both national and regional scales, the HUBs create a connected net of actors, experts, and institutions, facilitating knowledge exchange and playing a pivotal role in providing them with the necessary content and expertise, empowering participants to develop and implement their ideas effectively in alignment with the overarching Mission Restore our Ocean and Waters.

The 7 National and Regional HUBs are integral components of the BMM governance structure (see Figure 7): they serve as catalysts for collaboration, knowledge exchange, and coordinated action, contributing significantly to the collective effort to safeguard the Mediterranean from pollution. Through these HUBs, BlueMissionMed transforms ideas into impactful initiatives, creating a lasting legacy for a cleaner and healthier Mediterranean.



Figure 7. BlueMissionMed governance



2.4. EcoDaLLi

EcoDaLLi serves as the Coordination and Support Action (CSA) for the Danube and Black Sea Lighthouse of the EU Mission "Restore our Ocean & Waters by 2030", spanning 42 months starting in January 2023. Its overarching objective is the protection and restoration of the Danube River Basins ecosystems and biodiversity, and it aims to support this objective by centralizing Danube governance structures in terms of innovative solutions by fostering a stronger innovation ecosystem within a well-connected Practices Living Lab System. EcoDaLLi is supporting the Mission by engaging and supporting the Danube Lighthouse Innovation Action projects as well as stakeholders across the Basin in developing and adopting innovative solutions for a better restoration and protection of the Danube. The implementation of EcoDaLLi's Living Labs takes place in three different phases:

- 1) Mapping of the current status of the region, identifying stakeholders and launching the Living Labs,
- 2) Engaging with stakeholders, ongoing projects and governance institutions in the design of a roadmap towards the restoration of the Basin, and
- 3) Following-up on the identified actions.

2.4.1. Phase 1: Mapping of the current status of the region, identifying stakeholders and launching the Living Labs

The first phase of the project was dedicated to identifying relevant stakeholders and projects in the Danube and Black Sea region. A <u>list of stakeholders</u> including researchers, businesses, policy makers, NGOs and others has been created as well as a <u>database of Danube and Black Sea projects</u> contributing to the Mission Ocean and Waters' objectives. These lists form the basis for all activities of EcoDaLLi and are used to disseminate information and build collaboration.

Additionally, a thorough analysis of the current status of the Danube region was performed involving the development of catalogues of best practices and the identification of available innovation support services. Stakeholders were invited to participate in several workshops and share their insights into gaps, weaknesses and barriers that hinder the restoration and protection of the Danube River Basin. These exercises have created a solid basis for the development of the EcoDaLLi roadmap and Action Plan.

2.4.2. Phase 2: Engaging with stakeholders, ongoing projects and governance institutions in the design of a roadmap towards the restoration of the Basin

In the second phase of the project stakeholders were invited to participate and co-create solutions. This work was mostly coordinated in four Living Labs, each focusing on a specific region of the Danube River Basin ensuring that regional and local stakeholders have the opportunity to make their voices heard. Each Living Lab was centred around a specific topic (biodiversity, water management, climate change, innovation ecosystems) and stakeholders had the opportunity to learn about existing initiatives and solutions as well as contribute ideas and develop action points. The culmination of these Living Labs is the development of a roadmap outlining the main steps to take in the development of a more protected and resilient Danube River Basin.



2.4.3. Step 3: Following-up on the identified actions

The final phase of the EcoDaLLi project will focus on supporting the implementation of the results of the Living Labs by supporting and training innovators, developing policy recommendations and Action Plans, disseminating results from the Danube and Black Sea Lighthouse and creating the EcoDaLLi portal as a platform for accessing support and information for all stakeholders interested in contributing to the protection and restoration of the Danube River Basin.

2.5. BlueMissionBANOS

In BlueMissionBANOS, we support Mission Ocean and Waters by inspiring, engaging and supporting stakeholders across the Baltic and North Sea to reach a carbon-neutral & circular blue economy. Even though the blue economy is a focus, we also included the other two Mission Ocean and Waters objectives right from the start, as this was strongly requested by stakeholders.

Our implementation takes several steps:

- 1) Identification of relevant stakeholders and mapping of current status quo in the BANOS region;
- 2) Engaging with stakeholders, ongoing projects, and institutions active in the region to codesign roadmaps for the future and identify next steps;
- 3) Support and coordinate stakeholders taking actions to improve the blue economy of our region.

These three steps are not only the pathway throughout the entire project period (2023-2025), but are also on a sub-level followed through in each of our four innovation cycles, which focus on a geographically delimitated cross-border region within the BANOS region (see Figure 8).



Figure 8. BlueMissionBANOS four innovation cycles focusing on geographically delimited cross-border regions (Mission Arenas)



2.5.1. Identification of relevant stakeholders and mapping of current status quo in the BANOS region

In the first stage of our project, significant time was dedicated to identifying relevant stakeholders in the BANOS region. Building on the extensive stakeholder list of the SUBMARINER Network generated by its previous Blue Platform initiative, BlueMissionBANOS extended this list systematically not only through inputs of its partners and their networks, but also through a systematic screening of the EU project dashboard. Relevant projects as well as the Mission Charter pledges have continuously been screened regarding actions/actors within the BANOS area.

The important additional step in this work was not merely the compilation. To make it useful for targeted stakeholder engagement and interaction, the important additional two steps were:

- 1. To break down projects not only by the three broad Mission objectives, but to specify more concretely, which specific field projects were/are targeting (*i.e.*, Algae, Multi-Use, MPAs, Carbon-Neutral Ports) (see Figure 9).
- 2. To identify the national / regional institutions involved and even more importantly and difficult to identify the individual experts and hence Email addresses involved.

Only through these two additional steps, it has been possible to expand the original stakeholder lists at hand of the BMB partners to by currently now a list of over 7,000 Mission Ocean and Waters relevant stakeholders in the BANOS region, who receive regular correspondence regarding Mission Ocean and Waters news in our region. This stakeholder list is made up of researchers, policymakers, businesses, private citizens, students, and others and represents the blue economy sector of the BANOS region very well due to the way it has been created and is continuously updated.

In addition to compiling a <u>list of individual stakeholders</u>, the process described above has also allowed us to collate projects / actions funded through the whole diversity of resources (*i.e.*, private, national, various EU funding programmes), which target similar themes and issues in the same region. These mapping processes have allowed us to build bridges between projects, create synergies, and increase cross-fertilisation within the BANOS region.

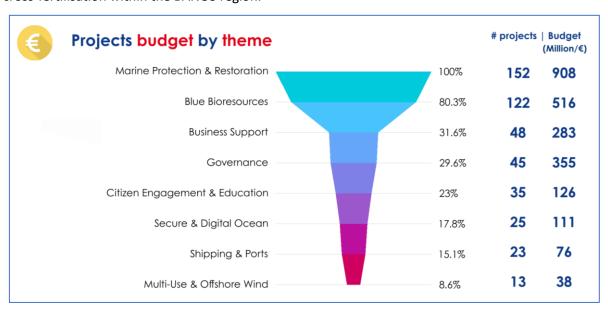


Figure 9. BANOS LightHouse projects by budget and theme



The first step to implementation within BMB has also involved mapping the status quo within the BANOS region related to our work packages 2 – Governance, 3 – Citizen Engagement, 4 – Business and Innovation, and 5 – Monitoring. These exercises have resulted in a number of deliverables and has also enriched understandings of the blue economy sector of the BANOS region. From our initial mapping and stakeholder identification exercises, we have been able to create a solid foundation on which to build further project work.

2.5.2. Engaging with stakeholders, ongoing projects, and institutions active in the region to co-design roadmaps for the future and identify next steps

In the second phase of project implementation, efforts have shifted from identification and mapping to engagement and co-creation. Much of this coordination work has been done as part of our Innovation Cycles connected with our four Mission Arenas (see Figure 10), which will be described in detail below. However, each of our six work packages have also worked closely with stakeholders, ongoing projects, and institutions to strengthen our impact and to encourage cross-fertilisation and co-design of future actions among all actors from our region.

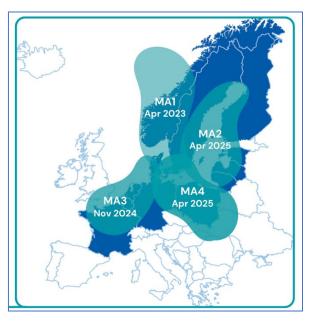


Figure 10. BlueMissionBANOS Innovation Cycles

In WP 2, we have hosted two high level governance workshops, bringing together important policy actors from across the region to discuss governance challenges and opportunities for collaboration. In WP 3, our citizen engagement reference group and frequent workshops with citizens have enabled strong local and regional connections, have uplifted citizens' voices, and have ensured that our work has stayed closely connected with stakeholders' interests. In WP5, our monitoring reference group has come together to co-design a series of KPIs which can be used to monitor progress toward the third Mission Ocean and Waters objective; aiming to turn the blue economy more carbon-neutral and circular. Whereas environmental monitoring frameworks exist, a framework for measuring progress in the sustainability of the blue economy are widely missing. Here again, it is close collaboration and coordination that have allowed us to ensure our work is applicable and relevant across our region.



Much of our work on implementation has come out of our innovation cycles, in which geographically delimitated cross-border regions within the BANOS lighthouse area are individually given the opportunity to be highlighted and to collaborate to co-design their futures.

Building on our work as described in step one, we begin each innovation cycle by identifying projects/actions and their actors/stakeholders relevant to this given regional context. We map and analyse them by the given Mission Ocean relevant theme (*i.e.*, Algae/Mussels; Multi-Use, Ports, Tourism, Education, Business Support) as well as stakeholder type (*i.e.*, policymakers, scientists, researchers, and business-people). These actions/stakeholders are then invited to attend and to coorganize our Mission Arena events.

During our Mission Arena events workshops on all aspects of the blue economy as well as blue environment are then taken place, organized by local and regional actors. These workshops focus on all topics relevant to Mission Ocean and Waters implementation, such as ocean multi-use, algae product development, nature-based solutions, and much more. As mentioned above, an early decision was made, that while we focus on the Carbon-neutral, circular blue economy, we also always included topics on the other two Mission objectives. This was a strong demand of stakeholders from across the Lighthouse area.

During the Mission Arena workshops, participants focus on sharing results, practices and solutions developed in their respective actions/projects; discuss whether and which of them should be upscaled and/or mainstreamed across the region and what is still missing. These discussions result in the cowriting and creation of a list of action points to be taken up in the region in the near future. The culmination of the Mission Arenas occurs during our final sessions, a stakeholder assembly, in which all gathered participants vote on the action points that will be published in their regional roadmap. Our <u>regional roadmaps</u> are then distributed widely and have been influential in the development of actions for the future.

2.5.3. Support and coordinate actors taking actions to improve the blue economy of our region

In the first three Mission Arenas, BlueMissionBANOS has brought together over 1000 participants from across the Baltic and North Sea regions representing 380 unique organisations.

Mission Arena participants have come from a variety of sectors (see Figure 11) including 21% from R&I, 22% from business, 13% from authorities, 12% from clusters, 7% from municipalities, 4% from education, 3% from regions, and 3% from financing bodies. This spread of participants has created a unique networking opportunity at the Mission Arenas, improving the quality and scope of the results.



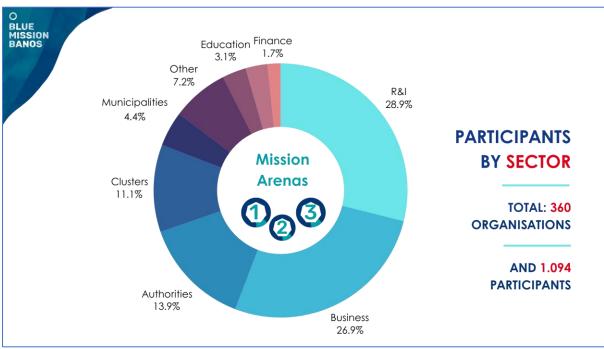


Figure 11. Participants by sectors in the BlueMissionBANOS Mission Arenas

These results have been created through 78 interactive workshops that have taken place during the first three Mission Arenas. The workshops have focused on all aspects of the BANOS regional blue economy (see Figure 12) including shipping & ports, maritime security, governance marine protection, citizen engagement, multi-use, blue bio resources, and business support. Each of these workshops has been an opportunity for collaborative mapping and decision-making, paving the way for the publication of BlueMissionBANOS' three regional roadmaps, which lay out the steps that need to be taken to achieve Mission Ocean objectives in the BANOS region.

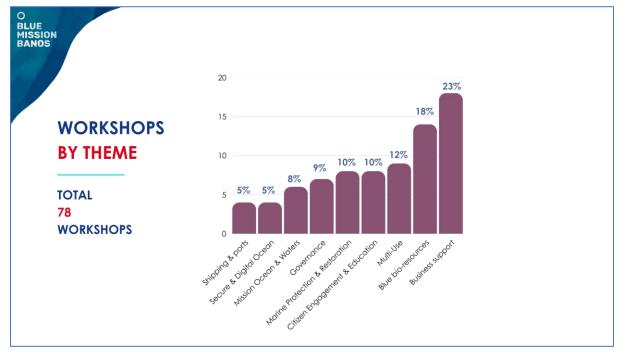


Figure 12. BMB Mission Arenas' Workshops by theme



In the final step of our project, we aim to translate the results of our collaborative work to on-the-ground actions. This takes place through:

- 1) Coordination with other projects within and outside of the Mission Ocean and Waters ecosystem;
- 2) Dissemination of results, both from BlueMissionBANOS and from other projects throughout the region;
- 3) Continuous development of automatic functions on WaveLinks, a platform aimed at providing a one-stop-shop for actors interested in shaping the future of the blue economy.



3. Global results by CSAs

3.1. Prep4Blue

In almost three years, Prep4Blue has produced a number of interesting results for (future) project leaders and stakeholders in the Mission Ocean & Waters. Below you will find a graphic illustration (see Figure 13) of the key results at mid-term of the project (November 2023). You can already find these results on the Prep4Blue website and on our Zenodo Community.

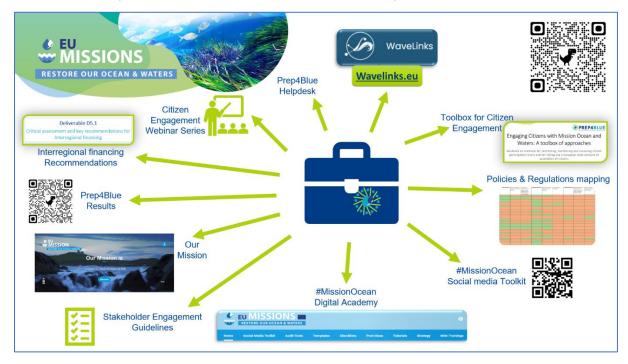


Figure 13. Prep4Blue as a Toolbox full of resources (Version of the 5th of March 2024)

In terms of Mission Communication and dissemination, the main outputs are:

- Digital Academy of the Mission Ocean and Waters
 Available to all signatories of the <u>Mission's charter</u>. It offers training and services to improve communication of the Mission's actions via digital channels.

 Access (for Charter signatories only): https://psmi.kartra.com/portal/missionocean
- Interactive Mission website for the general public
 This interactive website uses explanations, interviews with those involved in the Mission, etc.
 to show how each of the Mission's objectives is addressed at different levels.
 Access (general public): https://missionoceanwaters.eu/
- Communication campaigns carried out by MOJOs (*Mobile Journalists*), young researchers with journalistic skills working in the various *Lighthouses*.
- Implementation of various social Media Channels (see Table 2 below)
- Mission communication toolkit Access: https://trello.com/c/Adz09TaT



Table 2.Communication and dissemination strategy and products for the Mission by Prep4Blue

Mission Communication & Dissemination outputs by Prep4Blue

Missionoceanwaters.eu web-experience

Designed to complement the EC's website, this web-experience features testimonials, interviews, and visually compelling content to capture the public's attention and engagement by showcasing Mission Lighthouses and individual contributions through immersive scenes.

Link: https://missionoceanwaters.eu

Social media channels

Seven social media channels are utilised to disseminate calls to action, event updates, videos, photos, and relevant information tailored to the target audience, including specialised campaigns.

Facebook: https://www.facebook.com/missionoceaneu

Twitter: https://twitter.com/ourmissionocean

LinkedIn: https://www.linkedin.com/company/missionocean/ Instagram: https://www.tistok.com/missionoceanwaters/ Pinterest: https://pinterest.com/missionoceanwaters/

YouTube: https://www.youtube.com/channel/UC8ZjI1TyDAUuDO8QNLnd9zw

Trello Board

A comprehensive Trello Board serves as a centralised repository of public information, tools, resources, and links related to the Mission, facilitating accessibility and dissemination of information.

Link: https://bit.ly/MissionOceanSocialMedia

PREP4BLUE Communication Toolkit

This toolkit, available in PDF format, serves as a resource for new projects, equipping them with the necessary materials to promote the Mission effectively

Link (to pdf): https://trello.com/c/Adz09TaT

Mission Ocean & Waters Digital Academy

An exclusive platform for project partners and charter signatories established to provide training on utilizing social media and other communication tools to promote the Mission and their respective roles within it. Link: https://psmi.kartra.com/portal/missionocean

With regard to citizen engagement, the following have been produced

- Two guides:
 - Toolkit for designing a citizen engagement programme (live document, to be updated in May 2025): https://prep4blue.eu/portfolio/toolbox-for-citizen-engagement
 - Best practices and recommendations guide for citizen science: https://prep4blue.eu/portfolio/prep4blue-report
- Series of 9 webinars on citizen engagement in the Mission and recommendations: https://prep4blue.eu/portfolio/prep4blue-citizen-engagement-webinar-series
- Database of citizen science initiatives across Europe (over 950 initiatives listed): https://wavelinks.eu/explore/citizen-science
- Synthesis report on bespoke legacy training resources to support citizen action: https://doi.org/10.5281/zenodo.14800485
 - Series of workshops and training courses for those wishing to implement citizen engagement
 https://www.youtube.com/watch?v=4an9pVR4qag&list=PLDhDEq9GPrZSy7507u9P
 GM9KaR03 hR o
 - Best practices on storytelling and the restoration of ecosystems: https://www.youtube.com/watch?v=ps_tKOUHOMY
- Citizen engagement pilot activities portfolio evaluating Prep4Blue citizen engagement tools and methods and feedback: https://doi.org/10.5281/zenodo.14771622



In terms of **knowledge transfer and solutions transfer/upscaling** contributing to the Mission's objectives, the outputs are:

- WaveLinks (<u>wavelinks.eu</u>), a website, hosting numerous databases of interest on the Mission: Projects and (innovation) Solutions contributing to the Mission's objectives, Stakeholders, Citizen Science Initiatives, Factsheets on stakeholder engagement methods, Types of funding, etc.
- Development of a Mission ontology to enable harmonisation and interoperability of data and information: https://doi.org/10.5281/zenodo.14872572
- Knowledge and Solutions Transfer methodology: https://doi.org/10.5281/zenodo.12527755
- Online showcasing module for impact pathway and upscaling of solutions: https://wavelinks.eu/explore/solutions

With regard to the **regulatory, financial and economic aspects** to support an enabling environment required for the Mission, the main results focus on:

- Critical analysis and recommendations for inter-regional funding (including RIS3): https://doi.org/10.5281/zenodo.10944502
- Recommendations in terms of sustainable business models likely to generate public/private investment: https://doi.org/10.5281/zenodo.11395090
- Analysis of theoretical financing models for the Mission's deployment
 - Series of factsheet on the financing models and recommendations: Cascade financing;
 Concessional and blended finance; Crowdfunding; Grants and donations; Precommercial procurement and public procurement of innovative solutions (PCP &PP);
 Equity and debt financing; Recommendations
- Mapping of existing policies and regulations with the Mission's objectives in order to strengthen incentives and remove regulatory barriers: https://doi.org/10.5281/zenodo.11641104
- Report, based on 12 case studies, on successful interactions between companies, public bodies and other organisations contributing to the Mission's objectives: https://doi.org/10.5281/zenodo.14872607

Various tools and guides are available for **stakeholder engagement**, which should be distinguished from citizen engagement (see above):

- Guide to stakeholder engagement in the Mission: https://doi.org/10.5281/zenodo.10944583
- Online toolbox containing 47 factsheets on stakeholder engagement methods: https://wavelinks.eu/explore/engagement-methods
- Helpdesk for (future) project managers and stakeholders, with resources, FAQs and a panel of experts: https://prep4blue.eu/helpdesk/
- Testing certain engagement methodologies through Pilot Stakeholder Assemblies
- Recommendations on the skills and capacity required, and if necessary to be developed, within the communities, for the Mission.



3.2. BlueMissionAA

BlueMissionAA is in its final year and has produced several reports to support restoration in the Atlantic and Arctic basins in the next phase of the EU Mission Ocean and Waters Implementation phase. All <u>Project resources</u> are shared via <u>BlueMissionAA.eu website</u>.

Mission Governance and Implementation in the Atlantic & Arctic (Work Package 1) aimed at delivering an effective governance framework aligned with policies, initiatives and actions at national, regional and EU level has produced the following outputs.

- To support effective governance, a comprehensive baseline analysis on marine governance across the Atlantic and Arctic, focusing on area-based management measures and restoration was conducted and reported. It identified key governance gaps and differences, offering recommendations to enhance strategic, legal, and participatory frameworks: <u>D1.2 Report on</u> <u>Atlantic and Arctic policy and Governance Frameworks</u>
- Selection of six biodiversity/ecosystem restoration case studies to deliver guidelines and recommendations in respect of best practices and optimum governance approaches for environmental protection and restoration: <u>D1.3 Ecosystem Restoration Case Studies Best</u> <u>Practices and Opportunities for Scalability and Replication</u>
- Establishment of international expert panel for lighthouse governance: https://bluemissionaa.eu/resources-2/#experts.
- A BlueMissionAA helpdesk service has been established to provide guidance and support for Atlantic and Arctic stakeholders. This service is fully operationalized in coordination with the MIP, PREP4BLUE, and other LH CSAs: https://bluemissionaa.eu/resources-2/

Monitoring and Reporting (Work Package 2) aimed at building a well-coordinated monitoring framework to assess the progress of the implementation on an ongoing basis has produced the results described below.

- WaveLinks (<u>wavelinks.eu</u>), a platform that provides a comprehensive stakeholder database, mapping the research and innovation landscape of the Mission Ocean and Waters. Codeveloped with PREP4BLUE and BlueMissionBANOS, it serves as a crucial resource for connecting key players in the ecosystem restoration domain.
- Complementing WaveLinks, a baseline inventory of ongoing ecosystem restoration activities, key actors, and key performance indicators (KPIs) has been compiled. This inventory is instrumental in tracking scientific, technical, and data flow metrics aligned with Mission KPIs:
 D2.1 Baseline inventory of ecosystem restoration activities actors and KPIs from recent and ongoing projects
- Produced and delivered a revised indicator framework suited for the Atlantic and Arctic (D2.4)
 designed to enhance the monitoring of restoration activities effectively, with the codevelopment of monitoring indicators in collaboration with relevant Mission structures
 (bluemissionaa.eu/deliverables).
- A workshop involving various stakeholders was held, facilitating the integration of diverse
 perspectives and feedback into the indicator development process, enhancing the relevance
 and applicability of these tools for ongoing monitoring efforts.
- Contributed to the Mission's mid-term evaluation and successfully established collaborations
 with Mission coordination and monitoring bodies and relevant Projects and Initiatives through
 an active dialogue and collaboration with the Mission system.





Figure 14. Example of an Atlantic restoration solution uploaded to Wavelinks.eu

Innovation Support Systems (Work Package 3), aimed at providing a wide range catalogue of **supporting services**:

- An interactive <u>catalogue detailing restoration solutions</u>, <u>services</u>, <u>and expertise</u> has been completed and submitted. This lays the groundwork for a comprehensive repository of technical expertise and innovative solutions related to ecosystem restoration and biodiversity protection
- Work is actively ongoing on developing guidelines to enable safe demonstration activities in marine space, through the review of previous and ongoing initiatives around testing and classification of innovative technologies.
- Developed and delivered the <u>curriculum of training and knowledge transfer activities</u> (D3.4), focusing on capacity building for stakeholders in the Atlantic and Arctic regions, aligning with the project's goal of transferring innovative knowledge from research to industry and public stakeholders, enhancing their skills and expertise in ecosystem restoration and biodiversity protection.

Transfer Support Systems (Work Package 4) aimed at fostering an attractive innovation ecosystem for ecological restoration has produced the results described below:

- An assessment tool to evaluate the market readiness and societal value of technologies related
 to marine and freshwater ecosystem protection and restoration, involving the creation of a
 framework using Readiness Levels to categorize maturity across various dimensions, aligned
 with EC guidelines and academic literature.
- <u>Recommendations for the development of Smart Specialisation Strategies in the Atlantic and Arctic</u>, ensuring that regional innovation efforts align with broader sustainability goals. The document was subsequently discussed and politically endorsed by the CPMR General Assembly in October 2024.
- A <u>roadmap and recommendations for training and market transfer activities</u> have been formulated, focusing on the provision of appropriate development and financial support for market-ready solutions



- Ongoing discussions with stakeholders, particularly within the CPMR Member regions, to further align project findings with regional strategies, is contributing to the uptake of the future recommendations by regional authorities.
- To ensure responsible innovation, the first version of the <u>Responsible and Sustainable</u> <u>Research Assessment for Ocean and Waters</u> has been successfully submitted. This framework enables the measurement of responsibility, sustainability, knowledge transfer, social impact, and ethics, ensuring that all efforts align with high ethical and sustainable standards.

Citizen Engagement & Knowledge Transfer (Work Package 5) aimed at giving the opportunity and empowering EU citizens to engage in the preservation and restoration of oceans and waters through participative means:

- Report with <u>best practices for increasing the participation of citizens</u> and ensure that existing knowledge outputs and new knowledge, co-designed and co-implemented with citizens will be implemented in the mission
- Three citizen engagement activities—online, hybrid, and in-person—have been conducted, specifically targeting marine restoration efforts. Others are being planned for the coming months, namely in Ireland, Norway and Portugal.
- The "Atlantic & Arctic Lighthouse Weekly Hour" webinar series, featuring 31 episodes to date, with over 4400 views on YouTube, focused on the dissemination of solutions developed by Mission Ocean & Waters and All-Atlantic projects.
- As part of EMDInMyCountry, BlueMissionAA developed an <u>BlueMissionAA Booklet tailored for our younger generation</u>. This educational resource dives deep into Marine Protected Areas, ocean habitats, and how to help ocean restoration and conservation:
- A Holistic RRI, SDG, Open Science and Social Impact evaluation framework was developed
- <u>Helpdesk</u> created to provide interested citizens and Mission Ocean charter signatories access to experts.

Other results and or achievements include:

- BlueMissionAA idealized and organized together with MPA Europe the MPA award which was
 delivered during the Mission Ocean and Waters Forum 2023. The Award was also promoted
 in BlueMissionAA YouTube and with ample dissemination in Italian and French media
 channels.
- BlueMissionAA Received the Atlantic Project Award during the 10th Atlantic Stakeholder
 Platform Conference



3.3. EcoDaLLi

The EcoDaLLi project has achieved significant progress in supporting the objectives of the Danube and Black Sea Lighthouse under the Mission Ocean and Waters framework. Through a combination of innovative tools, strategic stakeholder engagement, effective communication, and dedicated support for interproject collaboration, EcoDaLLi has contributed to the implementation of the Mission in the Danube River and Black Sea basin. Living Labs have been created and used as a tool for co-creation and uptake of solutions to defined challenges in the different regions of the Danube River Basin.

The following sections outline the key results achieved across these areas:

Tools & solutions for Nature-Based Solutions and Innovation Support

To support the implementation of Nature-Based Solutions (NBS) and enhance innovation potential across the Danube and Black Sea region, EcoDaLLi has developed a suite of tools and resources. These solutions aim to facilitate effective project development, citizen engagement, and strategic policy integration.

- Catalogues of best practices on nature-based solutions and spatial policies.
 - o https://portal.ecodalli.eu/de/wp2 catalogue
 - https://portal.ecodalli.eu/de/wp3 practices
- A tool for assessing the relevance of NBS solutions to the Mission Ocean objectives and successfully developing and implementing an NBS project.
 - o https://portal.ecodalli.eu/de/wp2_nbs
 - o D2.1 NBS methodology.pdf
- A collection of tools for stakeholder engagement and a catalogue of available innovation support services.
 - https://portal.ecodalli.eu/de/wp5
 - o D6.2 Created Content Catalogue for Stakeholders' Engagement.pdf
- <u>Catalogues innovation support services</u> created to guide all actors interested in contributing to the objectives of the Danube and Black Sea Lighthouse.

Stakeholder Engagement and Capacity Building

Engaging a diverse range of stakeholders is crucial for the successful implementation of the Danube and Black Sea Lighthouse objectives. EcoDaLLi has organized and facilitated numerous activities to foster collaboration, knowledge exchange, and capacity building among stakeholders at local, regional, and transnational levels.

- Organization of several stakeholder engagement activities including workshops, trainings and Living Labs.
- Regular engagement with governance bodies across the Danube River Basin including transnational bodies such as the EUSDR, national governmental bodies as well as local and regional actors.
- Creation of a stakeholder database listing stakeholders and projects relevant to the objective of the Danube and Black Sea Lighthouse.
 - https://portal.ecodalli.eu/de/stakeholders
 - D4.1 Inventory of Key Players for the Achievement of Mission's Objectives.pdf



Communication and Outreach

Effective communication and outreach are essential for raising awareness and ensuring broad stakeholder participation in the Lighthouse initiative. EcoDaLLi has developed targeted communication tools to disseminate information, share project results, and maintain active engagement with relevant communities.

- Danube and Black Sea Lighthouse newsletter—a collaborative initiative that provides regular updates on all results created in the Lighthouse projects.
 - o https://ecodalli.eu/news.html
- Creation of the EcoDaLLi portal an information hub for all actors interested in engaging with the Danube and Black Sea Lighthouse.
 - o https://portal.ecodalli.eu
- All project news and results can also be accessed via the projects social media and website:
 - o Website: https://ecodalli.eu
 - o LinkedIn page: https://www.linkedin.com/company/ecodalli-project
 - o Facebook page: https://www.facebook.com/ecodalli

Mission Coordination and Lighthouse Support

To enhance collaboration and maximize the impact of the Danube and Black Sea Lighthouse, EcoDaLLi has established a comprehensive coordination framework. This framework fosters synergies between projects and ensures alignment with Mission Ocean and Waters objectives through continuous engagement with the broader Mission community.

- Establishment of a robust cooperation framework for the projects within the Danube and Black Sea Lighthouse including several interproject task forces focused on critical areas such as stakeholder engagement and communication.
- Regular engagement with the Mission community including the Lighthouse CSAs and the Mission Implementation Platform as well as regular attendance of Mission Ocean and Waters events and working groups.
- Regular dissemination of Mission Ocean and Waters news through a joint newsletter of all the Danube and Black Sea Lighthouse projects.



3.4. BlueMissionBANOS

BlueMissionBANOS has successfully undertaken a range of activities to support the advancement of the blue economy towards carbon-neutrality and circularity to meet the third objective of the Mission Ocean and Waters. Following the demand of stakeholders, BlueMissionBANOS has, however, from the very start also covered the other two Mission Objectives (reducing pollution and increasing biodiversity) as well as the Horizontal Aspects of the Mission (Blue Parks, Digital Twin, Citizen Engagement).

The following achievements and outputs have been delivered.

Stakeholder Engagement and Communication

- Developed and maintained an <u>extensive stakeholder database</u> of over 13,000 contacts across sectors, organizing key actors and projects relevant to the regional blue economy.
- Strengthened coordination among BANOS region actors through newsletter, Mission Arena networking events, and close and regular cooperation with other projects.
- Disseminated Mission-related news through a newsletter reaching over 7,000 regional stakeholders, featuring updates from BlueMissionBANOS and other projects and initiatives.
- Organized three Mission Arena events, serving as tools for collaboration and knowledge transfer across Mission Ocean and Waters relevant actions and actors. Over 1000 individuals from across the BANOS region and beyond participated in these events.
- Published presentations and summaries of the 78 workshops organised as part of the Mission Arenas as well as the <u>three Mission Arena Roadmaps</u>, outlining critical action points identified by local stakeholders for advancing Mission Ocean and Waters' objectives.
- Engaged regularly with governance and implementation bodies across the BANOS region and beyond, including the Mission Secretariat, the Mission Implementation Platform, the other Lighthouse CSAs, national governments, and various regional and local stakeholders.
- Regular participation at conferences and events, promoting BlueMissionBANOS and the wider goals of Mission Ocean and Waters, and improving the network between regional actors.

<u>Citizen Engagement and Knowledge Transfer</u>

- Organized three Mission Arena events with 78 workshops featuring the variety of Mission
 Ocean relevant actions and actors in each geographic ecosystem, serving as tools for
 collaboration, knowledge transfer and new knowledge generation. Over 1000 individuals from
 across the BANOS region and beyond participated in these events.
- Organized a series of public events and workshops to serve as forums for dialogue and collaboration between citizens, scientists, and policymakers.
- Co-Created, with Prep4Blue, a catalogue of over <u>900 citizen science projects on the WaveLinks</u> platform.
- Produced the BlueMissionBANOS <u>Helpdesk</u> to provide citizens with resources on how to get engaged with Mission Ocean.
- Published the <u>Ocean Literacy Repository</u>, providing a centralized location for BANOS-area stakeholders to procure information on Ocean Literacy in local languages.
- Co-Created and maintained, with Prep4Blue and BlueMissionAA, the <u>WaveLinks platform</u>, providing a centralized repository for project results and mapping throughout the Mission Ocean and Waters' ecosystem.



 Publication of a report on <u>citizen engagement</u> in the BANOS region, focusing on types of actions that must be taken to ensure citizens are engaged with the overall goals of BlueMissionBANOS.

Mission Monitoring and Governance

- Published <u>baselines studies</u> providing a comprehensive assessment of the current state of the blue economy in the BANOS region.
- Developed a set of Key Performance Indicators (KPIs) tailored to Mission Ocean and Waters' goals in the BANOS region. These KPIs were developed in close collaboration with key stakeholders from the region.
- Publication of <u>a gap analysis</u> which summarizes the governance structures in the BANOS region.
- Creation of a <u>manual for collaboration</u> in the BANOS region, providing a comprehensive guide for policymakers and administrators and offering best practices for aligning governance structures.
- Worked consistently to promote Mission Ocean and Waters and to increase endorsements of the Mission Charter. This targeted outreach has widened the scope of the Mission's actions in the BANOS region considerably.
- Establishment of Mission Ocean and Waters National Hubs in many of the BANOS area countries. Many of these hubs (e.g., Denmark, Sweden, and Germany) serve as best-practice examples of Mission Ocean and Waters governance at the national level.
- Mission Arenas have been increasingly co-organised with other relevant programmes and structures in the respective region: Mission Arena 2 (Riga) was held back-to-back with the HELCOM Annual Conference; Mission Arena 3 (Amsterdam) featured the North Sea Workshop of the Sustainable Blue Economy Partnership (SBEP) and was held back-to-back with the Ministerial Meeting of the Greater North Sea Basin Initiative (GNSBI) and the Mission Arena 4 (Sopot) is held in conjunction with the Polish EU Presidency and SBEP Baltic Sea workshop.



3.5. BlueMissionMed

BlueMissionMed has been dedicated to fostering collaboration, innovation, and impactful action to restore and protect the Mediterranean basin in alignment with the EU Mission "Restore Our Ocean and Waters by 2030". Through strategic partnerships, stakeholder needs assessment and engagement, and innovative solutions characterization, the project has played a pivotal role in creating synergies, scaling transformative initiatives, and driving systemic change.

Some of the key results already achieved can be summarised as following.

Governance

- Seven National and Regional <u>HUBs</u> established as platforms for collaboration, knowledge exchange, and coordinated action.
- Alignment with key Mediterranean strategies and programs, ensuring coherence with regional and international frameworks.
- Ongoing engagement with Mediterranean stakeholders through surveys, meetings, workshops, and fairs.
- Regular coordination with the Mission Lighthouse CSAs, Prep4Blue, the Mission Implementation Platform, and the Mission Secretariat to ensure strategic alignment and impact.

Roadmaps and Strategic Frameworks

BlueMissionMed helped strengthening collaboration, mutual learning, and feedback mechanisms for the implementation of innovative transformative solutions:

- Operational Implementation Roadmap towards a Healthy Mediterranean Sea by 2030, providing a multi-sectoral strategy to address pollution, conservation, and sustainability.
- Network of Projects established to strengthen collaboration, mutual learning, and knowledge exchange among transformative initiatives.
- Innovative Solutions & Technical Resources
- <u>Catalogue of 239 projects</u> aligned with Mission Objective 2 (pollution prevention and elimination).
- <u>Portfolio</u> of 86 innovative solutions, with an in-depth analysis of 32 solutions addressing implementation challenges.
- Search tools for Innovative Transformative Solutions (showcase and interactive map).
- Search of innovative transformative solutions by geographical distribution map

Community of Actors Engagement

BlueMissionMed has recognized and celebrated **transformative actions** through **four high-impact Awards**, celebrating and incentivizing transformative actions:

- Mediterranean Blue Islands Award (May 2023)
- Blue Ports and Destinations Award (April 2024)
- Society4Med Award (November 2024)
- Blue Rivers and Lakes Award (March 2025)



BlueMissionMed Support Programme to Community of Actors

A **dedicated support programme** launched to connect stakeholders and enhance the implementation of innovative solutions.

- Open call to gather insights on pollution prevention and water management.
- Needs assessment and capacity building to support stakeholders in scaling their solutions.
- Targeted engagement with solution owners, companies, public authorities, and governance hodies
- Strategic guidance, mentoring, and matchmaking to support innovation uptake.

Events and Awareness-Raising Initiatives

BlueMissionMed has organized <u>three large-scale Lighthouse events</u> to amplify Mediterranean-wide engagement:

- May 29-30, 2023 (Palermo, Italy): Common Ground Camp & 1st Stakeholder Forum during
 "The Mediterranean Lighthouse in Action" event.
 - o Outcomes from the 1st Stakeholder forum.
- April and September 2024: A two-stage 2nd Annual Lighthouse Event, first during the United Nations Ocean Decade Conference (Barcelona, April 12, 2024) and then at the Forum Mondial de la Mer (Bizerte, September 12-13, 2024).

At the *National and Regional levels*, the BMM HUBs have organized *over 25 events*, while BMM partners have participated as speakers or co-organizers in *more than 114 dissemination and communication (D&C) activities*, including conferences, workshops, and fairs at the *National, Mediterranean, and International level*.

Citizen and Youth Engagement

- Booklet of Good Practices published, showcasing successful solutions from the Society4Med Award: Booklet of good practices
- Educational initiatives, including:
- Children's book "Our Blue Treasure", complemented by an interactive memory game on marine biodiversity.
- Large-scale event toolkit with interactive installations, an "emotional wall," hands-on activities, quizzes, and the ESCAPE4FUTURE challenge.
- Citizen science initiatives in collaboration with CNR and Plastic Pirates Go Europe Go Italy, including:
 - Capacity-building training
 - Scientific tools (manta, microscope, thermometer, pH meter)
 - Citizen science events (June 2023 & May 2024)

Public Outreach and Large-Scale Exhibitions

• Participation in large-scale exhibitions, reaching over 33,000 citizens through innovative communication formats to promote Mission Ocean and Waters' implementation.

Disclaimer

The results and lessons learned presented here are not exhaustive, as the project is currently in the crucial phase of consolidating its third and final year of activities. For a comprehensive overview of the outcomes and long-term impact of BlueMissionMed, please refer to the BlueMissionMed Legacy Document, that will be available by December 2025 on the project website at the following link: https://bluemissionmed.eu.



4. Connectivity with the Mission Ecosystem

Prep4Blue and the LightHouse (LH) CSAs have actively identified and built synergies with relevant initiatives, projects, and organizations. Through continuous coordination, the CSAs have established several working groups, which include LH CSA representatives and, at times, specific (R)IA (Research and Innovation Actions) projects' representatives. Regular meetings between the Mission LH CSAs and the MIP Ocean ensure that work is aligned, avoiding duplication of efforts on common objectives while amplifying their collective impact.

As the overarching CSA for the Mission Ocean and Waters, Prep4Blue plays a key role in the "development and piloting" phase of the Mission (2021-2025). It serves as the connecting agent between the four Mission LH CSAs (BlueMissionAA, BlueMissionMed, BlueMissionBANOS, and EcoDaLLi), the MIP Ocean, and the Mission Secretariat (see Figure 15). Prep4Blue is crucial in aligning the efforts and expectations of all CSAs with both the MIP Ocean and the Mission Secretariat.

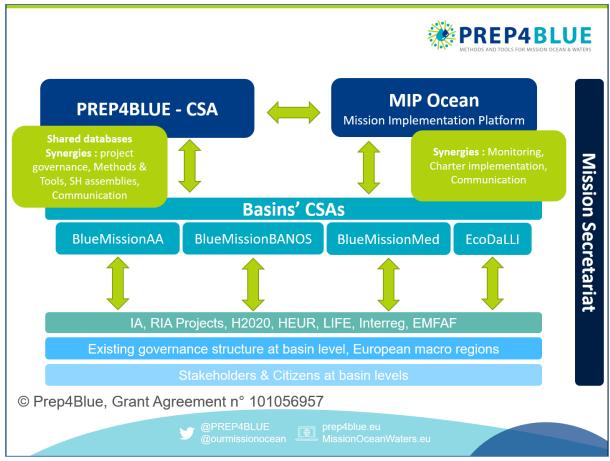


Figure 15. The Mission Ocean & Waters projects' Ecosystem



4.1. MIP Ocean

Because the MIP wasn't established at the beginning of Prep4Blue and neither were the Mission LH CSAs, these hindered actual coordination in the first six months with the CSAs and up to eight months with the MIP. As such, there were some delays in the implementation of those interactions and coordination. This also partly hindered the coordination with the EC in the first year of the CSAs.

However, past this first period, the interactions between the MIP and the CSAs were more frequent as they took over some transversal working groups and were integrated within the others. There have also been monthly meetings between MIP and the CSAs since March 2024, which has further enhanced work alignment between all and avoid duplication of efforts.

Prep4Blue has also established a direct collaboration with MIP to discuss and exchange insights, particularly regarding the identification of suitable business models for scaling up the Mission Ocean and Waters

One challenge encountered with MIP is related to the CSAs 'Help Desks and MIP's helpdesk. As the CSA's helpdesk are not always perceived as a service available to end-users. This results in the overlap of tools and they risk losing visibility to MIP's helpdesk, although all helpdesks (MIP and CSAs) have complementary the functions, not substitutive.

The CSAs also contributed to the campaigns initiated by MIP to increase the number of Charter signatories.

There have also been several exchanges on the topics of Mission monitoring and indicators. However, this challenging area progressed slowly due to the highly diverse objectives handled by the CSAs, which contributed to difficulties in establishing harmonized procedures for monitoring and indicators across all CSAs.

4.2. Between CSAs

Prep4Blue through its implementation role in this *first phase "development and piloting"* (2021-2025) of the Mission is considered as the overarching CSA of the Mission Ocean and Waters. As such, Prep4Blue is the linking agent between the four Mission LH CSAs (BlueMissionAA, BlueMissionMed, BlueMissionBANOS and EcoDaLLi), but also between the LH CSAs and the MIP Ocean as well as with the Mission Secretariat (see Figure 15). Prep4Blue helps to align the expectations and efforts of all the CSAs with the MIP Ocean and the Mission Secretariat.

The interactions between Prep4Blue, the LH CSAs, MIP Ocean, and the Mission Secretariat have been both intense and frequent, taking the form of monthly meetings that often extend beyond this regular cadence. Notably, work is underway to align monitoring procedures across the CSAs, enhancing their collaboration and creating synergies while minimizing duplication of efforts on shared objectives. These efforts promote greater coherence in project monitoring and reporting. The monthly back-to-back one-hour online meetings, organized among the CSAs, Prep4Blue, and MIP, play a critical role in synchronizing activities, aligning objectives, and effectively sharing outputs. They provide a structured and consistent platform for coordination, ensuring all parties stay aligned and informed.



Additionally, the constant coordination of the CSAs has led to the formation of several working groups that includes the LH CSAs and, at times, specific (R)IAs (Research and Innovation Actions) projects.

- Communication collaborative
- Citizen engagement Collaborative
- Helpdesk Working group
- Monitoring, Indicators and KPIs across Mission CSAs.

Other key collaborative areas, beside the working groups, included:

- Co-organization of communication campaigns
- Co-organization of workshops for the European Ocean and Waters Days in March 2025
- Monthly meetings for ongoing coordination.
- Co-organization of Pilot assemblies in each LH area.
- Regarding the organization of the Pilot Stakeholder Assemblies, Prep4Blue coordinated with
 the LH CSAs to identify synergies with their event calendars, aiming to prevent stakeholder
 fatigue and duplication of efforts. To facilitate this, seven online coordination meetings were
 held, along with informal one-on-one meetings with individual CSAs to address specific issues.
 These sessions involved representatives from all four CSAs and were designed to assess the
 stakeholder engagement needs of each CSA project.
- BlueMissionAA and Prep4Blue have co-designed and hosted a workshop on citizen engagement at the third Mission Arena of BlueMissionBANOS in Amsterdam in November 2024.
- Co-organization by CNR, Rotary Distretto 2080, Prep4Blue, and BlueMissionMed (with support from the Italian HUB) for the event <u>"Sustainable Rivers: Bridging Local and European Initiatives"</u> (May 21, 2024, Rome) as a pilot initiative to address the EU Mission 'Restore Our Ocean and Waters' objectives on river system management and to scale up local impact to the Mediterranean and beyond.

4.3. Mission projects (IAs & RIAs)

4.3.1. BlueMissionAA

BlueMissionAA had 26 meetings with the Atlantic & Arctic Innovation Actions, along with 22 other meetings with Mission Ocean and Waters' ecosystem projects and stakeholders. In addition, BlueMissionAA coordination attended 13 project kick-off and annual meetings from Mission Ocean and Waters and other funding schemes. A further 19 key European and Mission events were attended as either a co-organizer, panellist, or presenter. BlueMissionAA also participated in six international events as a speaker at two AAORIA events, EU-Caribbean workshop, Ocean Decade Conference 2024, Fórum de Cultura e Ciência Oceânica e Economia do Mar no Ceará, and 6th Global Sustainable Technology & Innovation Community (G-STIC) Conference.

4.3.2. EcoDaLLi

EcoDaLLi is an integral participant in the Mission Ocean and Waters' ecosystem, actively contributing through regular meetings, working groups, and key events such as the Annual Forum.

A significant achievement of EcoDaLLi has been the establishment of a robust cooperation framework for the projects within the Danube and Black Sea Lighthouse. This framework has led to the creation of several interproject task forces focused on critical areas such as stakeholder engagement and communication. One notable outcome is the Danube and Black Sea Lighthouse newsletter—a



collaborative initiative that provides regular updates on project progress and activities across the broader Mission Ocean and Waters community.

Additionally, EcoDaLLi has hosted Innovation Action (IA) projects within its Living Labs, providing a platform for co-creation and collaboration. The project has also consistently participated in meetings organized by other Lighthouse projects, further strengthening connections and fostering a cohesive approach to achieving the Mission's objectives.

4.3.3. BlueMissionBANOS

Our first and most important target group are the active drivers of the blue economy from our region, and especially those who are engaged and have influence on transforming it towards more carbon-neutrality and circularity, while also reducing pollution and increasing biodiversity. This encompasses institutions, but especially also their individual staff members, who are often connected to Mission Ocean and Waters as Charter signatories or are involved with Mission-relevant projects.

These connections are facilitated through the fact that BlueMissionBANOS partners are also highly engaged in the Mission Innovation Action Projects implemented within its Lighthouse Area. There is not one single Mission-funded project within the BANOS ecosystem which does not entail at least one BlueMissionBANOS partner and/or at least SUBMARINER network member (which acts as BMB coordinator). In the Mission Ocean and Waters funded projects ULT Farm, OLAMUR, AlgaeProBANOS, Locality, REFEST, Blue4All, BlueConnect, CoolBlue or TIDAL ArtS at least one Blue Mission BANOS and/or SUBMARINER network member are direct partners.

But these connections extend also to the many other projects and actions. BMB partners are also highly engaged and connected in other Mission Ocean and Waters relevant projects/actions; *i.e.*, those which are not directly funded through the Mission Ocean and Waters HEU scheme, but other EU, transnational, national or regional public or private funding streams.

Engagement is done with these projects through regular correspondence. In addition, the SUBMARINER Network acts as a connecting point, collecting and distributing information from all Mission relevant projects in the BANOS region.

Significant engagement with this Mission ecosystem and the many cross-related projects/actions is especially done at our Mission Arena events, which bring together all relevant regional stakeholders under one roof and foster exchange and collaboration between projects/actors working in the same topical fields. These events are the epitome of Mission Ocean and Waters related work, highlighting collaboration, co-design, and uptake of blue solutions. Mission Arenas have by now turned into signature events in the Lighthouse Area; which are more and more understood by actors/actions as the key event for their projects to reach out to stakeholders together and hence significantly increase their impact. Their success is also evidenced by the fact, that they are financed through crowd-funding of all projects involved.

4.3.4. BlueMissionMed

BlueMissionMed has identified the consolidation of collaborative links, exchanges, feedback, and mutual learning between the LH Innovation Actions (IAs) and other projects and initiatives aligned with the BlueMissionMed OIR (Operational Implementation Roadmap) as a critical step toward achieving the Mission Objectives. To this end, BlueMissionMed has actively collaborated with Innovation Actions and associated projects through various initiatives, including dedicated online meetings and participation in multiple events organized by BlueMissionMed. These engagements have provided a platform for knowledge exchange, synergy identification, and the development of



joint activities. To strengthen cooperation, facilitate knowledge exchange, and enhance mutual learning, BMM has established a <u>Network of Projects</u>. As part of this initiative, dedicated workshops are being organized to foster synergies and collaboration among sister projects, ensuring a more coordinated and impactful approach to achieving the Mission's targets.

An outstanding example of collaboration is the event "Sustainable Rivers: Bridging Local and European Initiatives" (May 21, 2024, Rome) co-organized by CNR, Rotary Distretto 2080, Prep4Blue, and BlueMissionMed (with support from the Italian HUB) as a pilot initiative to address the EU Mission 'Restore Our Ocean and Waters' objectives on river system management and to scale up local impact to the Mediterranean and beyond. The event saw the participation of local and regional authorities, ministries, NGOs, students, researchers, and SMEs, as well as case studies from major European rivers, including the Danube, Thames, Rio de Aveiro, and Po, with contributions from EU-funded projects A-AAGORA, DALIA, INSPIRE, and organizations such as Thames21, Legambiente, OneWater, CPMR, EcoDalli, and BlueMissionAA. The event, focused on good practices for river management and the enabling conditions for scaling up successful approaches across regions, demonstrated strong stakeholder commitment to collaborating at local, basin, and European levels to advance the Mission's goals, marking a first-of-its-kind initiative in fostering multi-level engagement for sustainable river management.

By fostering these collaborations, BlueMissionMed plays a pivotal role in disseminating the objectives of the Mission Ocean and Waters across the Mediterranean basin. This approach ensures that the Mission reaches all levels of actors and stakeholders, from local initiatives to broader regional strategies, thereby enhancing the collective effort to address marine pollution and also promote sustainable blue economy practices. Such inclusive and multi-level engagement is crucial for achieving the transformative impact envisioned by Mission Ocean and Waters in the Mediterranean region.

4.4. Working groups

4.4.1. Communication collaborative

Communication Collaborative (monthly meetings): to discuss all Communication aspects linked to the Mission with Mission projects, DG MARE, CINEA and MIP Ocean.

To supplement the Communication Strategy and other related tools/resources and ensure their use, Prep4Blue created a Mission Ocean and Waters Communications Working Group. Known as the "Communications Collaborative", it facilitates information sharing between PREP4BLUE partners, Lighthouse CSAs, the Mission Implementation Platform, EC communications leaders, and other EC Mission-funded project stakeholders to ensure all parties have the necessary and proper information, tools, and assets for communicating Mission Ocean and Waters' endeavours.

While started by Prep4Blue, it is now administered by the MIP to avoid duplicating efforts and because the MIP was tasked with creating a similar platform after Prep4Blue had established this one. CSA partners take turns leading the monthly meetings.

The network enables us to share information and establish linkages more easily. Regular engagements with the MIP and EC allow us to stay informed of EC products and utilize hard-to-access resources, such as email lists and databases without comprising rules and regulations. On average those monthly meetings have close to 50 participants, suggesting a positive uptake.



4.4.2. Citizen engagement Collaborative

Citizen engagement Collaborative: community of practices on citizen engagement with Mission projects.

As part of the effort to seed a Mission Ocean and Waters' citizen engagement Community of Practice, PREP4BLUE's organised a meeting with the 4 LH CSAs and the MIP on 14th March 2023. This was a key first step in establishing links between the citizen engagement teams of the Mission-funded projects.

This effort has continued to the point that now almost all 60 projects' engagement teams are networked, co-organise events (e.g., PREP4BLUE's presentation in BLUEMISSIONAA's weekly networking events), cross-promote citizen engagement activities, attend each other's training, and generally grow citizen participation in Mission-related activities.

4.4.3. Helpdesk Working Group

Helpdesk Working Group: to discuss all Helpdesks aspects linked to the various resources developed by the CSAs and the MIP Ocean for the Mission.

To prevent duplication of efforts, the Helpdesk teams from each Lighthouse Coordination and Support Action (CSA) and the Mission Implementation Platform (MIP) held regular meetings, led by CETMAR as the partner responsible for the Prep4Blue helpdesk. This collaboration facilitated information sharing and streamlined outputs. Resources were exchanged among CSAs; for instance, Prep4Blue incorporated the Q&A developed by BlueMissionBANOS, and BlueMissionAA adopted Prep4Blue's Helpdesk structure. These interactions provided a framework to discuss technical aspects, such as recording support tickets and the necessity for a common Mission glossary. On average those monthly meetings have close to 6-10 participants.

4.4.4. Monitoring, Indicators, KPIs across Mission Ocean CSAs

In order to avoid duplications of what has been already developed in the first phase of the Mission, in the second phase of the Mission, the CSAs (PREP4BLE, BMAA, BMBANOS; BMMED, ECODALLI) meet regularly since 2024 and with MIP since 2025, to exchange on and to harmonise the approaches in the development of Indicators, KPI and Monitoring Frameworks, and to communicate the outputs from the CSAs and MIP among each other, and in the Mission-Context.

Based on these discussions, it was proposed to hold a workshop during the Ocean Days in March 2025 to validate the uptake potential of the developed Indicators, KPIs and Monitoring Frameworks with key stakeholders. We think a joint, co-creation effort is of value to find complementarities and to fill gaps towards harmonising the monitoring frameworks and indicators across the Lighthouse CSAs, and with MIP and EEA. The workshop outcomes are aimed to be reported in BMB deliverable D5.3.



5. Barriers and Challenges

The implementation of the Mission Coordination and Support Action (CSAs) projects has encountered a series of challenges that have impacted their overall progress and effectiveness.

One significant issue has been the *changing landscape* of the Mission's context, which has created a constantly evolving environment for project stakeholders. Additionally, the *staggered starts of projects*, with not all projects launching simultaneously, has resulted in coordination difficulties and delays. This has been further exacerbated by the *delay in the start of the MIP* (Mission Implementation Platform), and the *delay in obtaining the Baseline studies* necessary for the initial assessments of the Mission's progress.

There have also been *over expectations from the European Commission (EC)* regarding the role and outcomes of citizen assemblies. These high expectations have not always aligned with the capacity or readiness of the stakeholders involved.

Moreover, there has been a *silo effect* between key platforms, such as Blue Parks, PREP4BLUE, and the various Coordination and Support Actions (CSAs) and Research and Innovation Actions (RIAs), limiting collaboration and integration across different parts of the mission.

Another challenge involves the *duplication of work* across various projects, particularly between the MIP and CSAs, which have overlapping databases and Communities of Practice (CoPs). Similarly, *Lighthouse CSAs* have led to duplicate efforts in terms of databases, platforms, deliverables, and engagement activities. Though there have been some streamlining efforts between BlueMissionAA, BlueMissionBANOS and Prep4Blue through their common platform WaveLinks hosting various shared databases (Stakeholders, Projects, Solutions). This redundancy in work has created inefficiencies and confusion among stakeholders. Also, the *duplication of deliverables*, such as the *Helpdesks* spread across CSAs and PREP4BLUE, has compounded these issues.

This is even more regrettable in light of the relatively small resources that CSAs have spread over their individual countries to be covered in each Lighthouse Area. All CSAs could only compensate for this, in that their consortia are made up of partners, who are *per se* institutionally highly engaged and supportive to Mission Ocean and Waters' implementation.

A critical point of confusion has been the *unclear purpose of the Charter*, which has left stakeholders, particularly at regional and local levels, questioning its added value beyond. Up until now, all CSAs found it difficult to get a common agreement with the Mission Secretariat on what a charter pledge shall represent within the European landscape. Numerous requests to make the charter pledging submission system more user-friendly and to subsequently provide more value as a searchable database have been voiced, taking on board the many reactions voiced to CSAs by their stakeholders in their Lighthouse Areas. These have, however, so far not been taken on board. This lack of clarity has resulted in limited buy-in from certain stakeholders. Hence current numbers can also to a very limited extend serve as Key Performance Indicators.

Additionally, communication and branding efforts have been perceived as overly focused on ocean-related issues, while river and freshwater stakeholders feel excluded from the narrative, exemplified by the hashtag #MissionOcean. At same time, the Mission was not strongly represented by the



Commission itself in numerous highly relevant events, such as EMD; which also raised questions among stakeholders as to its place within the European landscape.

In addition, the work of CSAs would be facilitated, if there were a better joint understanding with the Mission Secretariat on the expected timing of when 'results' can be expected from Mission implementation. As mentioned before, not only are many of the Mission-funded IAs only starting with their activities at the time of writing, but almost all these projects will only produce tangible results in the coming years. This is actually in the very nature of such projects. There seems to be a certain overexpectation by #MissionOcean funders on what should have already been achieved by now.

At the current stage, it has been slightly unclear whether the Mission is a specific 'research funding' program or whether it should extend and especially focus on uptake by governments, agencies, and companies involved in implementing measures.

In some countries, there has been a *lack of clear national support* for the Mission, hindering its smooth integration into local and national policy frameworks.

Finally, there is a growing recognition of the *need for time for "acculturation"* of researchers and other stakeholders to the Mission, ensuring they fully understand the Mission's objectives and their roles in its success. Indeed, especially now in light of new political measures such as the Ocean Pact, it is highly important that these build on and integrate the Mission into their processes.



6. Recommendations

6.1. Citizen engagement in Mission Ocean

6.1.1. Context/Issue

A need remains to much more broadly and deeply communicate Mission Ocean and Waters and its value beyond the core stakeholder groups and across European society at large. The European Commission's aim of having coastal communities and on-the-ground stakeholders across the continent take ownership of the Mission in a meaningful way has yet to be achieved.

A key issue here is a perceived lack of tangible benefit or added value to communities (*i.e.*, fishers, coastal community members, youth organisations, community led local development organisations, marine advocacy groups, citizen science groups, etc.) offered by the Mission. We often encounter the complaint that on-the-ground organisations such as these are doing great work for years with little to no budget, when large scale projects or programmes are receiving millions and having very superficial impacts.

Stakeholder fatigue about being asked to participate without compensation in more and more initiatives and a more general societal perception of increased regulation/requirement relating to sustainability without reward.

6.1.2. Recommendation

Stipulate much more use of Financial Support to Third Parties (FSTP) in Mission Ocean and Waters Call Topics to provide consistent and tangible benefit to the communities and small organisations that engage with research projects but are not yet sufficiently capable of becoming involved in project consortia.

It was very positive to see the community call that was centred around an FSTP mechanism in the 2024 Mission calls. This FSTP provision could be made mandatory in some/most/all of the remaining work programmes for Phase 2 of the Mission, to provide a number of small grants (of perhaps €5000 - €20000, representing 5%-10% of the total call value) for different activities depending on the project's focus. This would give small groups, communities, citizen science initiatives, *etc.*, a reason to consistently engage with the Mission on a yearly basis, investigate what the projects are, who is providing funding, what is the Mission doing, and overall to see its benefit via small scale funding.



6.2. Stakeholder engagement

6.2.1. National Hubs

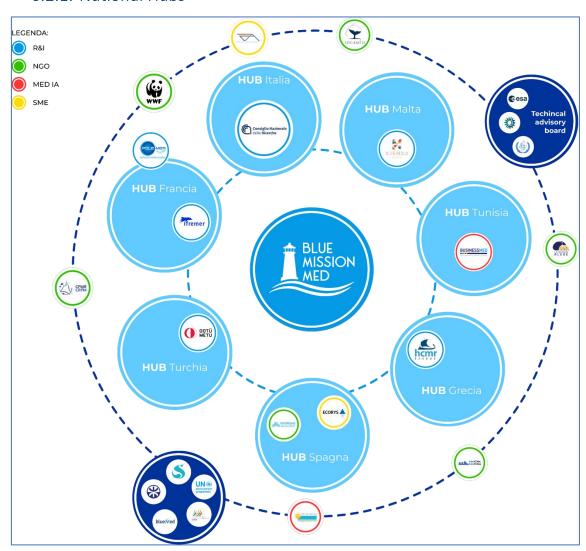


Figure 16. BlueMissionMed HUBs: Strengthening Mediterranean Cooperation for Lasting Impact

The Role of National and Regional HUBs

BlueMissionMed's National and Regional HUBs (see Figure 16) serve as key platforms for collaboration, knowledge exchange, and action. Designed as Territorial Multistakeholder Communities, they implement the project's priorities while ensuring long-term stakeholder engagement. Each HUB is managed by project partners, bringing together local actors, experts, and institutions to foster innovation and address pollution challenges in the Mediterranean.

HUBs enable localized leadership, allowing stakeholders to take ownership of solutions, ensuring relevance, and facilitating long-term engagement. Their flexible structure allows stakeholders to self-identify with a HUB based on geographic and cultural alignment, strengthening cooperation across diverse Mediterranean contexts.

Additionally, Enablers, such as associations and thematic groups, support multiple HUBs by acting as horizontal connectors, bridging sectors and strengthening synergies across regions. This structure fosters a more cohesive and adaptable ecosystem, reinforcing BlueMissionMed's impact.



Key Lessons from HUB Implementation

The Mediterranean's local ecosystems hold untapped potential for implementing Mission-driven solutions. Many stakeholders who are not traditionally involved in EU projects, such as small businesses, local authorities, and community groups, are often best positioned to deliver real change. By integrating these actors into HUBs, the project has ensured that the Mission's objectives translate into concrete, context-specific actions.

Aligning local initiatives with the Mission Restore Our Ocean and Waters has created momentum, accelerating the deployment of solutions by leveraging existing networks and strategies rather than starting from scratch. HUBs act as catalysts, bringing together local actors to scale up impact effectively.

Preliminary Lessons Learned:

- 1. Localized leadership amplifies impact Engaged stakeholders take ownership, driving proactive action.
- 2. Continuous dialogue fosters long-term commitment Regular interaction strengthens engagement and prevents initiatives from losing momentum.
- 3. Cross-sector collaboration enhances scalability Bringing together policymakers, researchers, industries, and communities maximizes replication potential.
- 4. Engaging non-traditional stakeholders unlocks new solutions Small-scale actors are often the most effective in implementing tangible actions.
- 5. Aligning local efforts with the Mission accelerates implementation A clear framework provides direction and speeds up action at the territorial level.

HUBs as Living Labs for Mission Deployment

The HUBs function as living labs, sustaining stakeholder engagement through co-creation and solution deployment. By February 2025, they have hosted 25+ events, strengthening Mediterranean-wide collaboration. Their work demonstrates the importance of:

- Localized leadership for relevant and context-specific solutions.
- Multi-actor knowledge co-creation to foster shared strategies.
- Long-term capacity building to ensure sustainable impact.

Despite ongoing challenges, particularly regarding financial sustainability, HUBs remain key enablers of systemic change. Their role in structuring local ecosystems, mobilizing diverse actors, and accelerating Mission-aligned solutions reinforces the vision of a cleaner, more resilient Mediterranean.

A final integrated assessment of the HUBs' impact will be included in a dedicated project deliverable by December 2025.



6.2.2. Mission Arenas

In BlueMissionBANOS, Mission Arenas serve as best-practice example of stakeholder engagement within Mission Ocean and Waters. The Mission Arenas bring together local and regional actors to codesign and discuss the future of their region. In the first two years of the project, BlueMissionBANOS has hosted three Mission Arenas in three distinct regions: 1) Mission Arena 1 in Gothenburg, Sweden; 2) Mission Arena 2 in Riga, Latvia; 3) Mission Arena 3 in Amsterdam, Netherlands. The fourth and final Mission Arena will be hosted in Sopot, Poland in April 2025, and will close the final innovation cycle in the project.

Mission Arenas are an ideal forum for stakeholder engagement as they bring together stakeholders from a variety of sectors and with a variety of forms of expertise for in-depth hands-on discussions. Thus far, over 1000 participants have attended Mission Arenas and the responses to the event have been overwhelmingly positive, with participants reporting that the Arenas provided them with new and important contacts, new ways of approaching problems, and new solutions to be implemented via their work.

In the first three Mission Arenas, 78 workshops have been organized focusing on all aspects of the regional blue economy including multi-use, blue bio resources, citizen engagement and much more. Each Mission Arena culminates in a Stakeholder Assembly, in which participants have the opportunity to vote on the most important actions to be taken in their region to achieve the goals of Mission Ocean. The results of these Stakeholder Assemblies have been published in three regional roadmaps outlining the actions to be taken in the next step of Mission Ocean implementation.

It is highly recommended to maintain the concept of Arenas also in the second phase of the Mission implementation. Potentially, they may also serve as a good example to other Lighthouse Area CSAs. The Arenas serve as THE hub, where results/solutions are exchanged not only among the Mission Ocean and Waters funded Innovation Actions, but where those are taken out of their silos and are merged with the other relevant projects/actions in their given field. Arenas have proven to be an excellent way of bringing stakeholder systematically together from a distinct geographic area, which are otherwise not in dialogue with each other.

Whereas, as shown above, the organization of citizen assemblies may be beyond the scope of projects like our Mission CSA projects; we have by now successfully established the concept of 'Mission stakeholder assemblies' as an integral part of the Mission Arenas; where all Arena participants have been called in during the last plenary session to collectively vote on the priority order to action points jointly defined and agreed upon in the various workshops/session held during the Arena itself. This voting process has created substantial buy-in of all participants and democratic legitimacy of the resulting Arena Roadmaps.

As highlighted below, it is, however, necessary, that more resources are made available in future as to enable Mission Arena hosts (CSA partners) to more effectively follow up with their Arena stakeholders. The Arenas are ideal opportunities to create longer term 'Communities of Practice' (CoP). Such CoP, however, only exist, if they have a coordinating body and are also recognized by their given national/regional governments/authorities as important stakeholder consultation bodies.



6.2.3. Weekly Hours

The BlueMission Atlantic and Arctic Lighthouse Weekly Hours aim to foster engagement and share knowledge on ocean and lakes governance, literacy, blue economy and restoration initiative. This program has expanded to support all objectives of the EU Mission Ocean and Waters across all basins. Over the past two years, it has hosted more than 40 projects. Moving forward, this initiative will continue to serve as both a platform for collaboration and a repository for EU Mission Ocean and Waters initiatives and projects.

Below we have a set of recommendations, some of which BlueMissionAA will test before the end of the project:

- **Communication:** we will increase our efforts in collaborating with partner organizations to cross-promote the sessions. Additionally, we will create short, engaging teasers to further promote past sessions.
- Format: we are discussing organise thematic weeks or even sessions focusing on specific
 challenges or innovations to attract niche audiences. We will also begin planning for sessions
 featuring successful solutions, listed on WaveLinks platform, to showcase tangible impacts as
 well as invite Associate Regions that have benefited from project initiatives to share their
 experiences.
- **Expand collaboration beyond initiatives and project**: Inviting influencers or thought leaders in ocean governance, sustainability, and the blue economy to co-host sessions.

These strategies can help drive higher participation, create lasting engagement, and ensure the weekly hours are a sustainable and impactful component of the BlueMissionAA initiative.

6.3. Communication

6.3.1. Mission Storytelling Guide

The primary objective of the Mission Storytelling Guide is to assist partners in crafting compelling stories that resonate with and inspire the public. This is achieved through a specific communication style, ensuring the tone, voice, and overall feel of the message aligns with the Mission's objectives. Prep4Blue has made significant strides in building connections within the Mission community, helping to develop a unique and cohesive storytelling style. However, a key challenge remains the tendency of the community to function as an echo chamber, with limited access for the public and low levels of external engagement. To overcome this, it is recommended that communication and media outreach efforts be more focused and collaborative. A core team should manage these efforts, streamlining impact and outreach.

6.3.2. Communication Plan

The goal of the Communication Plan is to provide partners with the necessary tools, templates, and best practices to ensure consistent and effective messaging across different platforms while remaining aligned with the Mission's brand. Prep4Blue has facilitated networking through various meetings and events, with the Communications Collaborative emerging as a particularly successful initiative. It has effectively fostered inclusivity and established a direct connection between projects and the European Commission (EC). However, a challenge arises in ensuring all projects are aware of and actively participate in the Communications Collaborative, as well as dedicating sufficient time to fully utilize its resources. To address this, attendance at Communications Collaborative meetings should be made



mandatory, and its role should be expanded to include the development of guidelines for social media, website content, and other communication channels.

6.3.3. Social Media Channels and Campaign

The objective of using social media channels is to engage both the public and stakeholders, highlighting the Mission's themes and encouraging interaction. Social media has proven successful in connecting partners and engaging a wider audience across various platforms. However, challenges exist due to the ever-changing political climate, which makes it difficult to determine which platforms are most effective, especially with many established ones losing relevance. To improve engagement, it is recommended that all Mission-Oriented projects use at least one common platform, such as LinkedIn, to ensure consistent connections. Additionally, establishing a centralized social media team to collect and distribute information through this primary platform would further streamline communication and maximize impact.

6.3.4. Web Experience/Websites

The Web Experience (missionoceanwaters.eu) aims to provide an informative and user-friendly website that supports dynamic content, multimedia features, and multilingual options. It complements the EC's homepage and the MIP Service Portal, offering a unique perspective on the Mission. Despite these accomplishments, the proliferation of multiple project websites has led to added complexity, making it difficult for the public and stakeholders to find the necessary information. To resolve this, it is recommended that there be a central website housing all relevant information, with individual projects contributing content to ensure consistency. This would eliminate duplicative efforts and offer a true one-stop shop for both the public and stakeholders.

6.3.5. Physical Spaces/Events

The objective of physical spaces and events is to showcase the achievements of the Mission, encourage public participation, and facilitate the exchange of ideas. WP2's V.ECOP Days were a notable success, especially for the ECOPs, and the vision for hosting large-scale events has been well-received. However, a challenge persists for smaller agencies and projects, as hosting large public events can often be cost-prohibitive and time-intensive. To address this, it is recommended that, if large-scale public engagement is anticipated, the corresponding budget and resources must align with the expected outcomes. Adequate funding and time are crucial for ensuring the success of such events.

6.3.6. Communications Collaborative Working Group

The Communications Collaborative Working Group was designed to facilitate communication among stakeholders, share content and stories, and ensure the seamless flow of information across the Mission. The group has been highly successful in connecting various projects and establishing a direct link to the EC. A challenge that remains, however, is ensuring all projects engage with the group and effectively utilize its resources. To strengthen its impact, it is recommended that participation in the group be made mandatory from the outset for all projects, and that its role be expanded to include facilitating the creation of guidelines for social media, website content, and other communication tools.



7. The LH CSAs in the 2nd phase of the Mission

7.1. EcoDaLLi

The first two years of the Danube and Black Sea Lighthouse initiative highlighted the critical need for a coordinated approach to stakeholder engagement and innovation community building. The Lighthouse projects share common objectives and activities while addressing the same stakeholder base. This overlap, if uncoordinated, risks duplicating efforts and causing stakeholder fatigue, as participants are asked to engage in numerous activities without perceiving tangible benefits or outcomes.

As the Coordination and Support Action (CSA) of the Danube and Black Sea Lighthouse, EcoDaLLi has played a pivotal role in supporting Innovation Action projects by providing a framework to navigate the broader Mission context. This includes clarifying the Mission framework for stakeholders, fostering knowledge sharing, and creating meaningful opportunities for engagement with the Lighthouse.

In the next phase of the Mission, EcoDaLLi aims to build on the knowledge base established during the first phase and deliver practical, accessible support to projects, actors, and communities. The focus will be on helping stakeholders:

- 1. Benefit from Mission Ocean and Waters services and the broader community,
- 2. Actively contribute to and collaborate within the initiative, and
- 3. Leverage innovations developed in the first phase for the protection and restoration of the Danube and Black Sea basin.

7.2. BlueMissionBANOS

Over the first two years of the BlueMissionBANOS project we have seen the importance of a regional approach. At our Mission Arenas, participants have the opportunity to connect with others working on Mission-relevant topics in the region. Through our citizen engagement efforts, participants have the opportunity to speak about the blue economy in their local context and language. Additionally, our ongoing collaboration with stakeholders has helped us to establish ourselves as a reliable and trustworthy partner in the region.

In the next iteration of the BlueMissionBANOS project, this regional approach must continue to be central. We have established ourselves as the coordinator of Mission Ocean and Waters work in our region and have become a trusted stakeholder, no longer viewed as a project, but as something larger. In the next years, we hope to continue to pursue the work that we have started with all the projects, institutions, and individuals in our region.

In the next step, we hope to focus on exploitation at the local and sub-regional scale, providing practical and accessible support to emerging projects, communities, and actors in our region, which are realizing the actions suggested in the Mission BANOS Regional Roadmaps co-created in the Mission Arenas

In practical terms this means that we will continuously need to follow up with the collaborative groups of actors created through our Mission Arenas and to support them in creating the right set and combination of actions on the ground for the deployment of the Mission.

It also means that we will in the next steps put a lot of emphasis on extracting practical solutions created within Mission Ocean and Waters relevant projects and to transfer this knowledge to the



actors engaged in implementing the next level of actions. Rather than continuously creating new solutions, we see our focus on building on knowledge created and to mainstream it throughout the BANOS Lighthouse Area.

During BlueMissionBANOS we have set the groundwork, now it is time to take action. The BlueActionBANOS (BAB) funding programme with its technical assistance work stream will highly support this ambition. However, BAB should not be mistaken to be synonymous with the highly necessary continuous implementation of a BlueMissionBANOS CSA 2.0.

7.3. BlueMissionMed

Over the first two years of BlueMissionMed, the project has demonstrated the critical role of regional and national HUBs in creating a structured, multi-level engagement strategy for Mission Ocean and Waters. With a strong presence across Mediterranean territories, BlueMissionMed has activated localized networks of stakeholders, ensuring that the Mission's objectives are translated into tangible actions on the ground.

As supporting the Mission implementation and deployment across the Mediterranean, BlueMissionMed has worked to align governance frameworks, research initiatives, and community-driven efforts, fostering long-term commitment from local, national, and regional actors. The project's HUB model has not only facilitated knowledge transfer and best practice sharing but has also created direct connections between policymakers, researchers, industries, and civil society.

In the next phase, BlueMissionMed will focus on consolidating and expanding the role of its HUBs as reference points for Mission implementation in the Mediterranean. This will include:

- Scaling up engagement, ensuring that more stakeholders actively participate in Missionrelated activities,
- Enhancing territorial coordination, fostering stronger linkages between local and cross-basin initiatives,
- Sustaining the impact of the HUBs, positioning them as key enablers for the Mediterranean Lighthouse beyond the project's lifespan.

However, the full Implementation Plan for transitioning to the next phase of the Mission is still under development and will be finalized at the end of the project.

7.4. BlueMissionAA

In alignment with EU Mission Ocean and Waters, BlueMissionAA serves as a coordination hub to support the mission's implementation in the Atlantic and Arctic basins. During the first phase, BlueMissionAA has been instrumental in collecting and showcasing solutions aimed at restoring marine and coastal ecosystems, eliminating pollution, and promoting a sustainable blue economy.

As we transition into the second phase (2026-2030), BlueMissionAA will prioritize the deployment and upscaling of these demonstrated solutions. This phase will be focused on broad participation across the EU, integrating strong citizen, stakeholder, and community governance elements. The primary objective is to replicate successful initiatives on a larger scale, ensuring effective strategies are implemented throughout the Atlantic and Arctic regions.



Key activities in this phase will include:

- **Replication of Successful Models:** Scaling proven solutions to new areas within the Atlantic and Arctic basins.
- **Stakeholder Engagement:** Enhancing collaboration with local communities, industries, and policymakers to foster collective ownership and action.
- **Policy Integration:** Aligning project outcomes with regional and national policies to ensure cohesive and sustained impact.
- **Monitoring and Evaluation:** Establishing robust frameworks to assess the effectiveness of implemented solutions and make data-driven adjustments as needed.
- **Business Models for Restoration Innovation:** Promoting innovative business models to engage industry and attract investors, enabling them to adopt and scale restoration solutions as viable business opportunities.

By focusing on these areas, BlueMissionAA aims to contribute significantly to the overarching goal of restoring the health of our ocean and waters by 2030, ensuring a resilient and thriving marine environment for future generations.



8. Conclusions

8.1. BlueMissionAA

BlueMissionAA aims to support restoration efforts that enhance biodiversity, conserve rare and threatened species, improve landscape connectivity, and ensure access to environmental goods and services. By bridging the gap between innovative restoration solutions and successful market uptake, the project contributes to implementing environmentally sustainable practices that benefit marine and freshwater ecosystems. These efforts are aligned with the needs of regional authorities, allowing AA Member Regions to better orient regional economic and innovation policies towards biodiversity preservation.

A key aspect of BlueMissionAA is its enhanced monitoring and data collection capabilities, which have led to better-informed strategies for marine and coastal ecosystem restoration. This approach facilitates significant environmental improvements across the Atlantic and Arctic regions. The project's ability to measure and monitor restoration projects allows for more effective adjustments and increased efficiency in restoration efforts, enhancing ecosystem health and resilience.

The project's environmental impact is further amplified through the development of a comprehensive catalogue of innovative solutions, directly supporting restoration efforts in various ways. This catalogue includes diverse solutions such as seaweed growing, habitat restoration techniques, carbon sequestration methods, and sustainable materials design. By identifying and cataloguing these innovative approaches, BlueMissionAA provides stakeholders with a valuable resource to implement effective ecosystem restoration and biodiversity protection initiatives. The solutions address environmental challenges by enhancing marine and freshwater habitats and mitigating climate change impacts through nature-based solutions.

Additionally, the business models and technical services documented in the catalogue offer pathways for scaling up and replicating successful restoration projects, ensuring that environmental benefits are amplified across the Atlantic and Arctic regions. The catalogue serves as a hub for sharing best practices, fostering collaboration, and accelerating the adoption of innovative approaches. Through this comprehensive, solutions-oriented catalogue, BlueMissionAA significantly contributes to improving biodiversity, ecosystem health, and the availability of critical environmental resources. This empowers stakeholders to take concrete actions to address the pressing challenges facing Europe's ocean and water systems. The project thus delivers on its aim of leaving a legacy by way of an innovative ecosystem portal.

8.2. EcoDaLLi

The EcoDaLLi project has served as a cornerstone in the EU Mission "Restore Our Ocean and Waters by 2030," specifically supporting the Danube and Black Sea Lighthouse in fostering innovation and collaboration for the protection and restoration of the Danube River Basin and its biodiversity. Through a phased approach, EcoDaLLi has successfully mapped the region's existing efforts, engaged stakeholders across the Basin, and co-created actionable solutions to enhance ecosystem resilience.

The project has delivered tangible results, including a robust stakeholder database, catalogues of best practices, tools for assessing and implementing Nature-Based Solutions (NBS), and a dedicated portal to facilitate ongoing collaboration. The establishment of Living Labs has proven critical in engaging



regional and local stakeholders, fostering co-creation, and developing a roadmap to address the challenges facing the Basin. Additionally, EcoDaLLi has strengthened connections within the Mission Ocean and Waters ecosystem by actively participating in working groups, task forces, and collaborative activities, ensuring alignment and synergy among projects.

Despite challenges such as stakeholder scepticism and the complexity of integrating freshwater ecosystems into the broader Mission Ocean and Waters framework, EcoDaLLi has effectively laid the groundwork for future initiatives. The project has demonstrated the importance of a coordinated approach to stakeholder engagement and innovation ecosystem building, minimizing duplication of efforts and ensuring meaningful contributions from all participants.

As EcoDaLLi transitions into the next phase, its focus will shift towards practical implementation and support. By leveraging the knowledge and tools developed in the first phase, the project will empower stakeholders to benefit from the Mission Ocean community, actively contribute to its objectives, and apply innovative solutions for ecosystem restoration. EcoDaLLi remains committed to enhancing the resilience and sustainability of the Danube and Black Sea region through collaboration, innovation, and shared action.

8.3. BlueMissionMed

BlueMissionMed has been working to ensure a threefold leverage effect aimed at:

- 1. Facilitating systemic change by promoting the deployment of transformative innovative solutions.
- 2. Structuring the Mediterranean stakeholder ecosystem to foster long-term collaboration and alignment.
- 3. Paving the way for replicability and EU-wide scalability of the BlueMissionMed model to support the implementation of the Mission.

BlueMissionMed collaborates tirelessly with the Mediterranean actors and stakeholders to achieve the Mission's objectives, particularly Objective 2, as demonstrated, among other activities, by the development of a catalogue of initiatives and projects, a portfolio of Innovative Transformative Solutions, the co-creation of the Operational Implementation Roadmap, and the Network of Projects. Despite the challenges posed by the Mediterranean Basin's vast diversity, spanning 22 countries with significant political, social, cultural, and linguistic differences, BlueMissionMed has made remarkable progress on different levels:

- Governance impact: BlueMissionMed has developed a comprehensive strategy to coordinate
 and align policies, initiatives, and actions across multiple governance levels. This effort directly
 supports the Mission's strategic goals by enhancing cooperation with the European
 Commission's Mission Secretariat and actively engaging a wide range of Mediterranean
 stakeholders.
- Societal impact: the project has laid the foundation to engage a diverse community of stakeholders across the Mediterranean Sea basin. By establishing consistent networks, it fosters collaboration and strengthens connections throughout the region, creating a shared sense of purpose.
- Environmental and Scientific impact: BlueMissionMed is making a substantial contribution to
 environmental and scientific progress by organizing key knowledge, facilitating multi-level
 collaboration, and driving impactful actions. These efforts address critical regional challenges
 in alignment with global priorities outlined by the Sustainable Development Goals (SDGs).



Economic impact: during the first year and a half, BlueMissionMed has focused on structuring
a Mediterranean innovation ecosystem that enables business opportunities and attracts
investments. Efforts have centred on preparing the groundwork for the development of
technical services, governance frameworks, and business models, ensuring capacity-building
support for the deployment of identified transformative innovative solutions, all aspects that
are now being delivered to the community of actors.

As BlueMissionMed enters its third and final year, further impact is being generated through programs and activities directly supporting basin actors, thanks to the constant endeavours of the BlueMissionMed partners and the BlueMissionMed National and Regional HUBs. These initiatives are designed to strengthen regional collaboration, scale up innovative solutions, and address the unique challenges of the Mediterranean Basin. By fostering partnerships, facilitating knowledge exchange, and promoting actionable strategies, BlueMissionMed is empowering local and regional stakeholders to drive meaningful change. This ongoing commitment underscores the Project's role as a catalyst for sustainable development in the region. BlueMissionMed remains deeply dedicated to the Mission's objectives, working tirelessly to ensure a sustainable, inclusive, and transformative future for the Mediterranean region.

8.4. BlueMissionBANOS

The BlueMissionBANOS project exemplifies a collaborative and comprehensive approach to achieving transformative change in the blue economy towards more sustainability and carbon-neutrality. Through its very systematic, innovative way to identify and engage with the relevant stakeholders in the region, the project has successfully bundled existing and future solutions to increase sustainability, carbon neutrality, and circular practices in the blue economy across the Baltic and North Sea regions as well as showcasing the still existing critical challenges ahead to mainstream them. The project's outputs, including the deliverables, the WaveLinks platform, and many opportunities for stakeholder engagement, have laid a robust foundation for continued progress.

Key to the project's success thus far have been the dynamic and participatory nature of the Mission Arenas. These events have brought together a diverse range of stakeholders to identify relevant solutions and co-create actionable roadmaps tailored to regional and sector-specific needs. By fostering dialogue, collaboration, and ownership, the Arenas have substantially increased the understanding of stakeholders of the Mission Ocean and Waters concept; which aims to increase the impact of individual projects by bundling them with focus on their local/sub-regional results and actions. Within only two years of implementation, BlueMissionBANOS has highly increased the understanding of local actors, that it is necessary to continuously work together and to bundle resources across projects as to accelerate progress within the transformation processes necessary to achieve Mission Ocean and Waters objectives within their given region.

Looking beyond its duration, BMB has established a legacy of sustainability and adaptability. Tools like the <u>WaveLinks</u> platform and the monitoring frameworks are designed for long-term use, enabling ongoing collaboration, innovation, and policy alignment. BlueMissionBANOS serves as a model for how research-driven initiatives can effectively contribute to global sustainability goals. By aligning with the European Green Deal and the Mission "Restore our Ocean and Waters by 2030," the project has demonstrated the power of coordinated efforts to achieve tangible and lasting impact. This exploitation plan provides a roadmap for sustaining this progress, ensuring that BMB's vision for a sustainable, circular, and carbon-neutral blue economy continue to be improved upon.



8.5. Prep4Blue

Prep4Blue has played a pivotal role in the first phase of the Mission Ocean and Waters, acting as the overarching CSA for the Mission. Through its strategic coordination and collaboration with the four LightHouse CSAs (BlueMissionAA, BlueMissionMed, BlueMissionBANOS, and EcoDaLLi), as well as the MIP Ocean and the Mission Secretariat, Prep4Blue has helped avoid duplication of efforts, facilitated synergies, and aligned activities toward common goals, thereby enhancing the collective impact of the Mission's initiatives. Its role as a connector between the LH CSAs, MIP, and Mission Secretariat has strengthened the Mission's ecosystem, ensuring that progress continues in a coordinated and efficient manner.

The project has also been instrumental in promoting co-design and co-implementation processes, particularly by ensuring that citizens and stakeholders actively participate in the Mission's activities. Through innovative citizen engagement efforts, such as the creation of toolkits, webinars, and a comprehensive database of citizen science initiatives, Prep4Blue has boosted the Mission's relevance at the local and regional levels. This has helped establish the Mission as collaborative and accessible for various stakeholders working toward the restoration of oceans and waters.

Prep4Blue's contributions extend to knowledge management and the transfer of Key Exploitable Results (KERs), particularly through the development of an ontology and a digital knowledge management system. The <u>WaveLinks platform</u> has become a central hub for Mission stakeholders to access critical resources, including project databases, solutions, and impact pathways. Additionally, Prep4Blue has developed regulatory and financial frameworks essential for the Mission's long-term sustainability, including recommendations for business models and funding mechanisms.

The project's coordinated approach has led to key outcomes, including the Mission Digital Academy, communication tools, and a series of pilot stakeholder assemblies that have demonstrated effective ways to engage various sectors in the Mission's objectives. These efforts have positioned Prep4Blue as a vital link between different Mission entities.

As Prep4Blue comes to an end in 2025, its outcomes—ranging from stakeholder engagement tools to regulatory insights—are already contributing to the Mission's success and laying the foundation for future scaling-up. These results, along with the lessons learned and systems established, will help ensure that Mission Ocean and Waters continues to thrive, make meaningful progress toward its goals, and sustain its impact as it enters its next phase.



8.6. General Conclusion

Overall, it should be noted that the Mission Ocean and Waters approach has proven to be highly successful. The idea to bundle the large variety of individual projects and initiatives as to increase their combined impact on what are in the end the real important three objectives, which shall be achieved by them, has already brought fruit in the past 2-3 years; when the first Mission Ocean and Waters projects and especially the five CSAs presented here have started their work.

It should always be understood that this is a relatively short time-span and that resources for CSAs have been limited. Nevertheless – as shown in this document – substantial progress has been made through the work of all CSAs in the very field they have been designed for:

To identify and engage their stakeholders within their Lighthouse Areas and to support them to better coordinate their actions and results as to increase their impact especially in view of ensuring that those solutions are deployed, upscaled and mainstreamed throughout their Lighthouse Areas.

As shown in this document, each single CSA has taken a slightly different approach on how to achieve this. This is a reflection of the different conditions and structures present in each Lighthouse Area, the different types of consortia and their partners involved within the CSAs, as well as the fact that in this first phase, CSAs were requested to focus on one of three overarching Mission Objectives.

What has proven enormously successful was the Lighthouse Area approach, which allowed CSAs to bring the Mission Ocean and Waters down to national and regional scale; focus their work on engaging the stakeholders within their national and regional scope and showcase concrete actions/initiatives relevant for the specific conditions/needs in these ecosystems. The Lighthouse Area approach is also important as CSAs could better engage with the governance structures present in their geographic reach.

The barriers and challenges identified within the document refer more to implementation issues but do not question the Mission Ocean and Waters approach as such. In fact, all authors of this document agree that it should be relatively easy to address many of them. What remains key is to improve the dialogue between the central European level and the CSAs acting at the Lighthouse Area level so as to better align efforts and develop a joint understanding while also acknowledging Lighthouse Area specificities.

What is needed now is to adhere to the Mission Ocean and Waters approach and consequently pursue it further. With the Mission Ocean and Waters entering now the transition phase from its initial pilot towards the deployment phase, it is important to align efforts between the Mission Secretariat and relevant Commission DGs to engage not only with research actors and authorities but also all actors involved in implementing solutions.

As shown in this document, all CSAs have been very successful in creating structures and processes both across Europe as well as within their Lighthouse Areas. These should now be taken as the basis for simply continuing; further improving and developing the good work already done over the course of the past two years.

