



# PHAROS4MPAs PROJECT

## FINAL INTERNAL EVALUATION REPORT

**Project deliverable n° 1.3.1**

April 28, 2020



Project co-financed by the European  
Regional Development Fund

Author: Pierre-Yves Hardy

Review: Catherine Piante

English revision: Russel Gill and Catherine Roberts

This report corresponds to the deliverable 1.3.1 of the PHAROS4MPAs project application form.

Published in July 2019 by PHAROS4MPAs.

© PHAROS4MPAs. All rights reserved.

Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged. Reproduction of this publication for resale or other commercial purposes is prohibited without prior written permission of the copyright holder.

## Financial support



Project co-financed by the European  
Regional Development Fund





## Table of contents

Introduction .....	4
PHAROS4MPAs in a nutshell .....	7
Timeline and participation at events .....	9
Project results .....	13
Evaluation indicators .....	26
Conclusion .....	33



## List of acronyms

CPMR	Conference of Peripheral Maritime Regions
CNR-ISMAR	National Research Council – Institute of Marine Sciences
EBSAs	Ecologically or Biologically Significant Areas
EU	European Union
IRSNC	Institute of the Republic of Slovenia for Nature Conservation (Slovenia)
LIFE	European Commission funded projects
MPAs	Marine Protected Areas
MSP	Marine Spatial Planning
NAPA	National Agency for Protected Area (Albania)
NGOS	Non-Governmental Organizations
NGOS	Non-Governmental Organizations
OFB	Biodiversity French Office
PAP/RAC	Priority Actions Programme of the Regional Activity Centre
PTABA	Regional Development Fund of North Aegean (Greece)
RAC/SPA	Regional Activity Centre for Specially Protected Areas
REMPEC	Regional Marine Pollution Emergency Response Centre
UfM	Union for the Mediterranean



# Executive Summary

As a capitalization project, the PHAROS4MPAs has produced 8 reports with specific recommendations covering the majority of maritime sectors: small scale fisheries, recreational fishery, aquaculture, leisure boating, tour boats, cruise, maritime transport and offshore wind farms. It has brought together institutions, MPAs managers, scientists, NGOs and maritime sectors to set the conditions for a sustainable development in the most fragile and productive areas of the Mediterranean Sea which importance is recognized through establishment of spatial protection designations. Interacting with the decision maker of 9 countries, the PHAROS4MPAs recommendation has been carefully presented to more than 200 people, reaching a critical mass of Maritime Spatial Planning authorities in France, Italy, Slovenia and Albania and a critical mass of Marine Protected Areas managers in France, Spain, Greece, Slovenia, Turkey, Morocco, Algeria and Albania. The project thus transmitted precious insights on the condition to combine marine environment protection and blue growth, setting the path to sustainable development of maritime sectors in the Mediterranean Sea.



The template on which the PHAROS4MPAs reports' production is based and which has allowed consistency of the publications for easy reading.

# 8 maritime sectors involved

(8 specific recommendation reports)



4 Countries MPS Authorities with adoption of PHAROS4MPAs recommendations

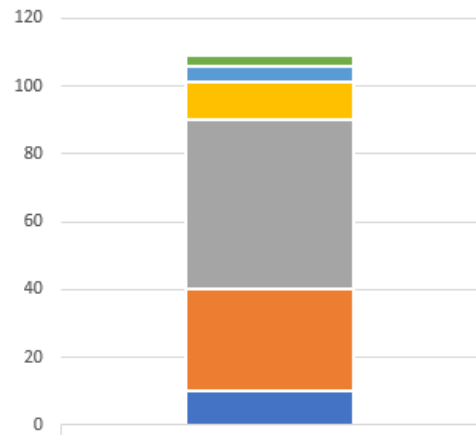


1 Regional report



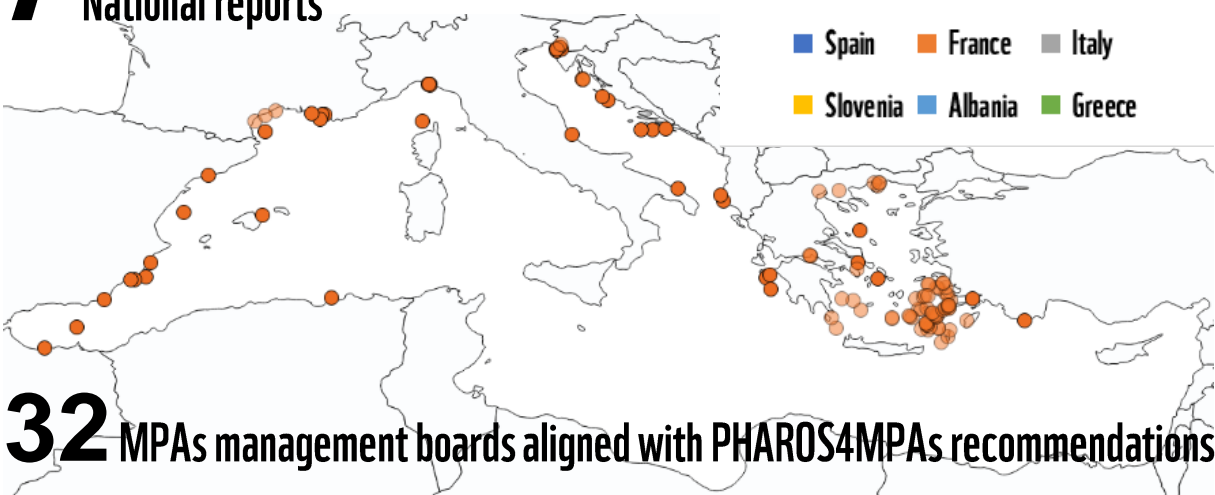
7 National reports

very positive feedback



number of decision makers convinced by the PHAROS4MPAs project

Spain France Italy  
Slovenia Albania Greece



32 MPAs management boards aligned with PHAROS4MPAs recommendations

# Introduction

PHAROS4MPAs is a capitalization project funded by INTERREG MED which was implemented over 2 years, from February 1, 2018 to January 31, 2020 to explore how Mediterranean Marine Protected Areas (MPAs) are affected by several maritime sectors, and how the environmental impacts of those sectors can be prevented or minimized.

The project is aimed at people engaged in the management of the Mediterranean Sea and the many maritime sectors that benefit from it, namely: maritime transport, offshore wind farms, cruises, leisure boating, small-scale commercial fisheries, recreational fisheries, tour boats and marine aquaculture. This project combines a whole set of knowledge to provide indications as to how to build a sustainable blue economy in the Mediterranean Sea, protecting the most vulnerable or valuable places, including MPAs.

The issue underlying the sustainable management of the Mediterranean Sea is the detrimental use of its many marine resources; fish stocks, coastal landscapes, natural barriers against coastal erosion such as *Posidonia* meadows. Marine related activities in the Mediterranean generate an estimated economic value of US\$450 billion, and a substantial part of this natural capital lies in MPAs where fish stocks and marine habitats are healthier, where the wealth of flora and fauna offer protection from the ongoing crisis of climate change. Although we still need to reach higher targets of spatial protection (potentially up to 30%) of the Mediterranean Sea to ensure the continuity of marine resources for the next generations, it is possible to act on the 9,68%<sup>1</sup> of the Mediterranean Sea already designated as MPAs.

A large part of already designated MPAs concerns multi-use MPAs which tolerate the activities of various maritime sectors, activities which reap economic benefits without investing in natural capital, that is, without ensuring the renewal of resources and other marine assets. The unsustainable use of the sea as a result of human pressure and its associated impacts requires a systematic response from the public authorities. However, the diversity of maritime sectors and their practices presents a challenge for both the managers of the maritime domain and for the managers of MPAs. The PHAROS4MPAs project provides recommendations per maritime sector and guidelines for an inclusive approach to help decision makers.

This report addresses the results of the project and considers whether the project has effectively provided useful outputs for decision makers which set the conditions for a sustainable blue economy in the Mediterranean Sea.

---

<sup>1</sup> Gomei M., Abdulla., Schröder C., Yadav S., Sánchez A., Rodríguez D., Abdul Malak D. (2019) TOWARDS 2020, How Mediterranean Countries are performing to protect their sea. 12 pages.

# PHAROS4MPAs in a nutshell<sup>2</sup>

With the exception of commercial fisheries, the maritime sectors covered by the project – maritime transport, offshore wind farms, cruises, leisure boating, recreational fisheries, and marine aquaculture – have developed significantly in recent decades in the semi-enclosed Mediterranean Sea, and are expected to keep growing. Competition for maritime space is increasing, reflecting the pressing need to manage our waters more coherently. At the same time, Mediterranean countries need to reach global conservation targets by designating new MPAs. At the site level, MPA managers must deal increasingly with new or expanding uses, which require new capacities and skills.

The Mediterranean Sea hosts a multitude of areas of important ecological value that deliver a wide range of ecosystem services and are rich in biodiversity. Some ecologically or biologically significant areas (EBSAs) in the Mediterranean have already been identified under the UN Convention on Biological Diversity. This web of valuable areas needs to be linked by so-called blue corridors – connecting important ecological features like stepping stones and currents, and free of disconnecting factors like physical infrastructure, noise barriers, polluted areas, heavily used shipping lines, and regular trawling grounds.

The region's existing MPA network covers part of this web of important areas. MPAs are the best-known and most effective tool developed so far to protect marine ecosystems. However, marine management and planning needs a much broader perspective that will accommodate not only MPAs but all other areas of high ecological value too. This is addressed by Marine Spatial Planning (MSP) which considers the entire maritime domain, with distribution of marine space between the users of the sea and limitation of maritime activities in the most vulnerable or valuable zones. Most Mediterranean countries are currently in the process of writing their first binding marine spatial planning document that should regulate harmful practices from most maritime sectors. This is a crucial time in the history of maritime management.

European countries are required to prepare maritime spatial plans by March 31st 2021. Under EU law, those plans should apply an ecosystem-based approach. PHAROS4MPAs project has shown how important it is to include MPA networks – and all other areas of high ecological value – as a central MSP components. MPAs should be treated as an essential function for maintaining critical ecosystems and marine resources, not as simply another marine sector to be accommodated along with the others. To date this has not happened widely enough in European MSP, and this needs to change if we are to achieve Good Environmental Status in the region.

---

<sup>2</sup> Derived from the MPA news article [“Safeguarding MPAs amid the Mediterranean’s growing Blue Economy: recommendations from the PHAROS4MPAs project”](#)



Effective MSP can significantly complement the aims of MPAs by using spatial and/or temporal regulations for specific areas (such as maritime transport regulated areas, marine concessions for aquaculture development, no-mooring zones for leisure boating, or seasonal fisheries closures) and carefully managing the spatial distribution of competing maritime sectors. MSP should:

- Play a critical role in achieving Good Environmental Status in Mediterranean waters.
- Avoid negative impacts on priority areas.
- Minimize negative effects in larger areas with important ecological value.

**In or near MPAs, priority in decision-making needs to be given to impact-avoidance strategies, including locating an activity, marine use, or sector in an area where the pressures it generates will not impact valuable ecosystems.** While this may seem in some cases to place heavy constraints on decision-makers, it is a cost-effective long-term approach: when impacts are avoided in the first place, business sectors will not face mitigation costs, and legal and financial risks are minimized or cancelled. Such an approach can take many forms: locating offshore wind farms outside significant bird areas, fish farms away from sensitive habitats, and maritime shipping routes outside key habitats for marine mammals, as well as forbidding ships from anchoring on *Posidonia* meadows, and so on.

To address the whole range of impact-avoidance and impact-reduction strategies for the most fragile and valuable areas, PHAROS4MPAs reviewed the solutions already effective through the capitalization work of European projects, and involved partners from 10 countries to assess the feasibility of these strategies in as many Mediterranean countries as possible. The project identifies pragmatic ways of tackling the negative impacts of marine economies at a regional scale while offering an integrated vision of sustainability to MSP authorities and MPAs managers.

The project reviewed **a list of more than 40 key EU projects** (see Annex 1) as well as the results of a large number of initiatives, from international publications to local case studies. The project **produced a review of successful avoidance and mitigation measures that are action-oriented and based on a methodological approach.** These measures and guidelines constitute our recommendations, organised according to maritime sectors with ready-to-use reports containing

- 1) a list of pressures and impacts from the sector
- 2) a description of the interaction with MPAs and
- 3) a set of environmental measures for MSP authorities and MPA managers to guarantee nature conservation objectives.

The PHAROS4MPAs recommendations reports are available for **8 maritime sectors in 8 languages.**

# Timeline and participation at events

Over a two-year period, PHAROS4MPAs involved partners from maritime sectors (Windfarm French Association, European Boating Industry), national institutions (OFB, IRSNC, NAPA, PTABA) and regional institutions (RAC/SPA, CPMR) as well as scientific teams (CNR-ISMAR from Italy, Girona University from Spain) and NGOs (WWF France, WWF Greece and the WWF Mediterranean).

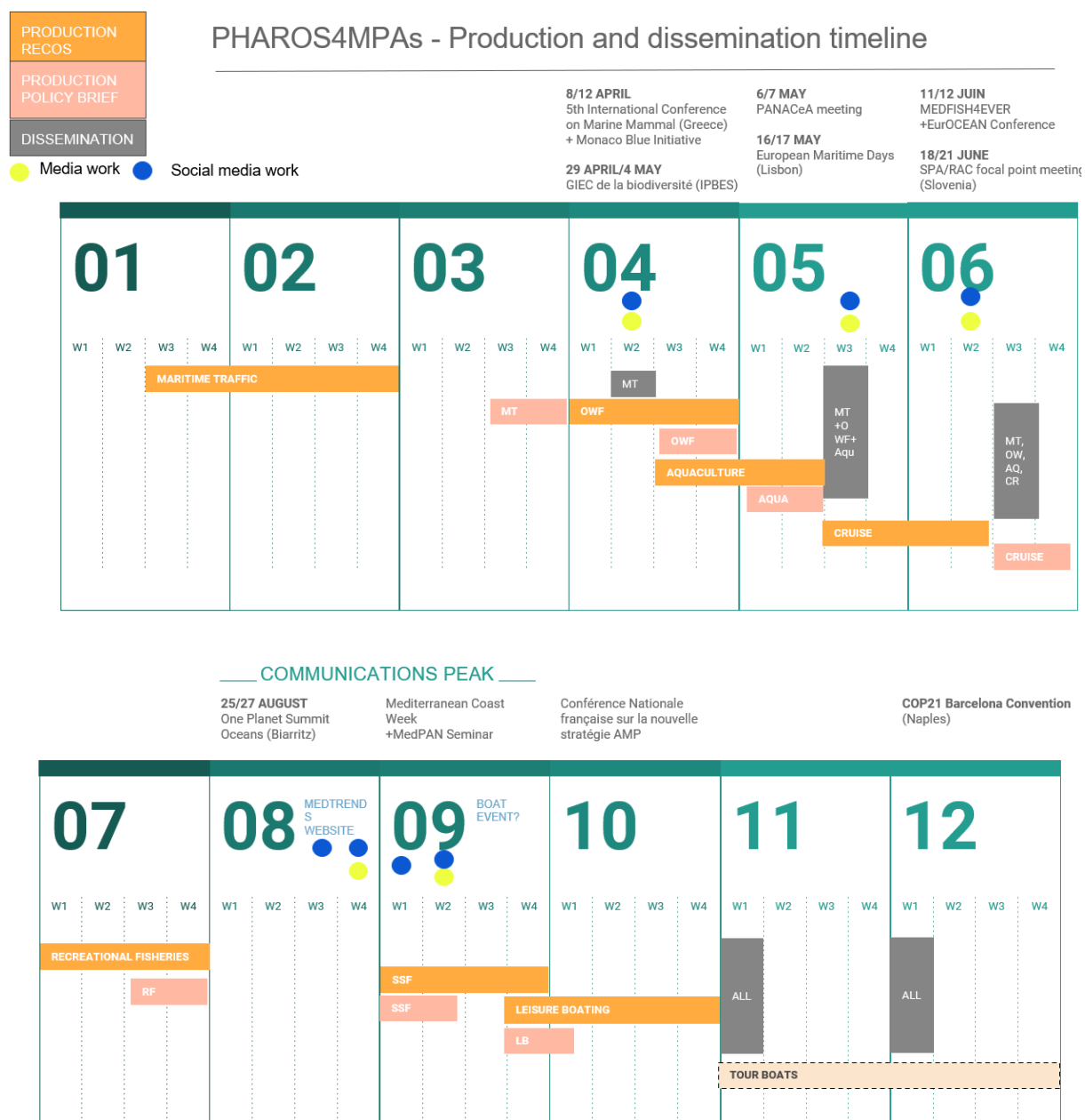


Figure 1: the PHAROS4MPAs timeline showing the production phases

With the inclusion of most maritime sectors, it took some time to bring all the partners together in the production of the 8 recommendation reports based on 7 capitalization baselines (the cruise sector and tour boat sector were combined). Preparing the material and gathering all the relevant information for the capitalization baseline required a whole year (2018). The subsequent steps of the second year (2019) are outlined in the previous figure.

WWF Mediterranean and WWF France coordinated the production of the reports, which were released progressively up to the final steering committee meeting in Venice on 19 December 2019.

The project ended in January 2020. With the EU Marine Spatial Planning process ending in March 31st 2021, there is just a year left to push the PHAROS4MPAs recommendations and have them adopted in MSP plans. All project partners have agreed to dedicate their time after the project in spreading the recommendations.

Once the project recommendations were produced, **the project team allocated a significant part of their time to reaching out to the main target audience – MSP authorities and MPA managers – at dedicated meetings and conferences.** The project targeted maritime sectors to a lesser extent. The assessment below gives a sense of the scope of our efforts over a short period. Here we focus on presenting the main results as the outputs were numerous despite the short window of opportunity. Between the end of 2019 and the beginning of January 2020 we dedicated a total of **45 days to the presentation of our recommendations to all the project targets. In total, the PHAROS4MPAs partners attended or organized 38 events** (see figure 2 for a timeline). The table below gives the details of these events, including the number of people reached in each event.



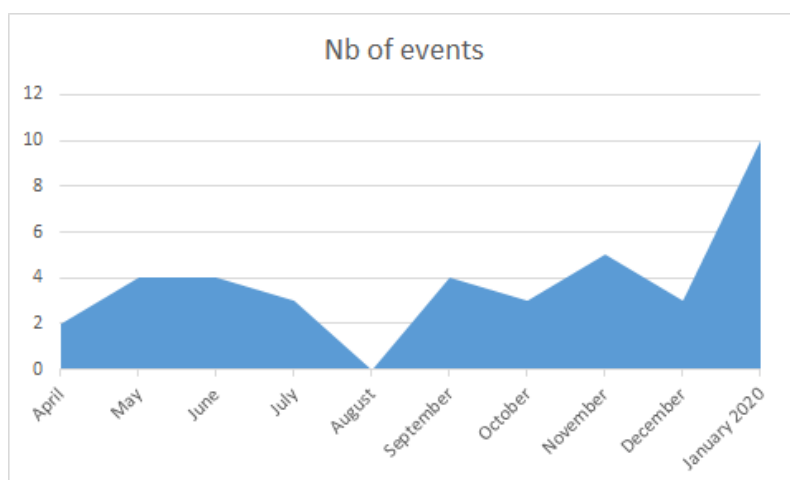
**A superyacht leaving the port of Argostoli along the marine Natura 2000 site of the Kefalonian coast, Greece © David Peperkamp Shutterstock**

Targets	N° of Events	N° of people	N° of printed copies distributed	Main message
MPA managers	<b>Total: 7</b> Spain 2 France 1 Italy 1 Slovenia 1 Albania 2 Greece 1	<b>Total: 62</b> Spain 2 France 40 Italy 10 Slovenia 4 Albania 6 Greece 9	<b>Total: 70</b> Spain 6 France 10 Italy 30 Slovenia 4 Albania 20 Greece 0	“The PHAROS4MPAs recommendations is a tool which will enable you to better manage and protect the area. By sharing best practices and solutions, we want to help you mitigate the negative effects of the maritime sectors on marine ecosystems.”
National MSP ICZM authorities	<b>Total: 14</b> Spain 3 France 4 Italy 2 Slovenia 3 Albania 2 Greece 0	<b>Total: 96</b> Spain 20 France 20 Italy 20 Slovenia 20 Albania 16 Greece 0	<b>Total: 380</b> Spain 60 France 20 Italy 200 Slovenia 20 Albania 80 Greece 0	“The Marine environment is crowded; all sectors are planning important increases in activities and negative impacts have already been felt. Including MPAs issues in the MSP process is key to ensuring the management of marine resources. Working first at the level of MPAs will potentially lead to replicating results on a broader scale.
National representatives of maritime sectors	<b>Total: 17</b> Spain 5 France 6 Italy 1 Slovenia 3 Albania 2 Greece 0	<b>Total:120</b> Spain 15 France 80 Italy 10 Slovenia 10 Albania 5 Greece 0	<b>Total:52</b> Spain 15 France 20 Italy 0 Slovenia 7 Albania 20 Greece 0	“Business sustainability depends on the good environmental status of the seas. Taking part in marine spatial planning with key players will lead to taking leadership in blue economy sustainable development.”
Total	<b>39</b>	<b>187</b>	<b>502</b>	

**Table 1: Summary of the targets reached in the project, the event details are provided in Annex.**

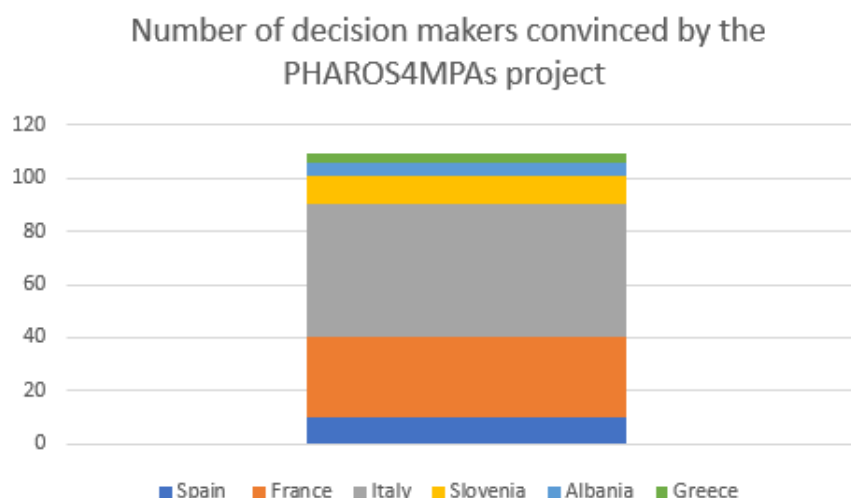
Overall, **at least 187 relevant stakeholders are now fully informed of PHAROS4MPAs’ recommendations.** To give more perspective, if we consider the relatively small number of people working for national MSP authorities, one hundred actually means that most staff in charge of maritime spatial planning in the northern Mediterranean responded. The same

applies for MPA managers with 62 people. Looking at the numbers of Mediterranean MPAs with active management bodies and management plans, we see that according to a recent [WWF report](#), only a tiny percentage have a dedicated management plan. With this in mind, we can say that we reached a great part of MPA managers.



**Figure 2: The 38 events in 2019-2020 identified in the project capitalization plan**

Regarding the feedback related to these events, usually collected through email, we received 109 positive answers demonstrating a high interest in our recommendations. Since each email corresponds to one person mostly from MPA and MSP targets, there were **109 active respondents for the northern Mediterranean** (see Figure 3). The term "active" refers to people who have expressed an interest in going further with the PHAROS4MAPs approach. **Over a hundred people have thus been convinced by the approach of the project which results are presented in the next section.**



**Figure 3: The distribution of the positive feedback received from the decision makers of the countries involved in the PHAROS4MPA project**



Finally, referring to the Table 1, we have reached a critical mass of MSP authority people in France, Italy, Slovenia and Albania to bring a long-lasting message which will be taken into account in the following months and years (in Spain the number of decision maker is twice bigger due to the provincial organization). The following section details the project's results by targets.

## Project results

### **Target audiences**

As presented in the project Application Form, the target audiences of the PHAROS4MPAs project include:

#### **Mediterranean MPA managers**

Represented by the MedPAN network, national MPA agencies (AFB, IRSNC, NAPA), regional MPA agencies, marine LIFE projects (through the LIFE INTEMARES project which concerns Natura 2000 marine sites in Spain) and local MPA management to bodies to some extent.

#### **Maritime Spatial Planning / Marine Strategy Framework Directive Authorities**

Represented by national and regional authorities in the 6 Mediterranean EU countries of the project (+ Albania) in charge of MSP and the Marine Strategy Framework Directive. This target is absolutely key and reflects the fact that MPA management effectiveness cannot only be addressed within the boundaries of MPAs but urgently needs to be taken into account in maritime spatial planning development outside the MPAs.

#### **Maritime business sectors**

Represented by business associations and federations (Windfarm Energy French Association European Boating Industry) at country and EU levels, as well as sectoral agencies (REMPEC).

#### **Other targets**

In order to embrace regional institutions, we involved RAC/SPA, PAP/RAC, CPMR, Plan Bleu and REMPEC, and worked in close collaboration with RAC/SPA and CPMR. In the meantime, we involved the EU commission to increase our influence with the MSP authorities in EU countries.

Following is feedback we collected from the targets.



Marseille harbor in the Calanques National Park, France © AFP

### Target one: MPA managers

MPA managers can make a transformative link between the MSPs and the maritime sectors. They relate to Marine Parks, marine Natura 2000 sites and other designations. Their scope for action depends on the progress of MPA management plans and the participative management they rely on (see the WWF report<sup>3</sup> for an overview). In Albania, Slovenia and Croatia MPA managers applied the most suitable PHAROS4MPAs recommendations to fill their management plan gaps. In France, MPA management bodies were more advanced on the recommendations, most of which already applied. In Spain, there was clearly room for improving the management plans of nationally managed marine reserves. The LIFE INTEMARES program in Spain, dedicated to management plans, came with a window of opportunity in terms of PHAROS4MPAs recommendation implementation. In Italy, most management plans of Natura 2000 marine sites were under discussion and the recommendations introduced important inputs. In Greece, a major change in the legislation created much uncertainty among MPA managers with a draft law open for consultation at the end of the project.

A more detailed description per country is provided in the table below.

<sup>3</sup> [https://d2ouvy59p0dg6k.cloudfront.net/downloads/towards\\_2020\\_scorecard\\_27\\_nov\\_low.pdf](https://d2ouvy59p0dg6k.cloudfront.net/downloads/towards_2020_scorecard_27_nov_low.pdf)

Spain		Catalan MPA managers aligned with the PHAROS4MPAs approach. They showed overall good acceptance and welcomed the project's intentions which argues for more collaboration with the MSP authorities (the Spanish ministry and the Catalan government) to achieve several of the recommendations mentioned in the PHAROS4MPAs' reports. On a national scale, the Spanish Ministry of Agriculture, Fishery and Food, the general secretary of fisheries (in charge of marine reserves) showed a strong interest for the PHAROS4MPAs recommendation with a special concern on the risk of low conservation induced by the development of some activities such as aquaculture and offshore wind farm.
France		Four MPA managers from four French MPAs (Côte Bleue, Parc des Calanques, Golfe du Lion, Cap d'Agde) were associated in the early phase of the project, they actively participated and confirmed all the relevance of the PHAROS4MPAs recommendations which are mostly already in the implementation phase
Italy		The time limitation at the end of the project and the specificity of the Italian partners have favored the MSP dedication rather than a MPA focus. Recommendations and national report have been disseminated to all Italian MPAs managers, with some positive direct feedbacks and participation in the Ecomondo event.
Slovenia		The recommendations were presented to the two MPAs management bodies in the country and their possible implementation discussed. The representatives of the two MPAs welcomed the results and stated that they would include them in the drafting and/or revising processes of the MPA management plan.
Albania		The Regional Administration of Protected Areas, Vlore expressed that the PHAROS4MPA products are very useful. The PHAROS4MPAs' recommendations will be taken into consideration in the review of the Management Plan of Marine National Park Karaburun – Sazan this year. The MPA managers will distribute the materials to all the members of the management committee and with all the workers in the marine park.
Greece		In Greece, most MPA management bodies were not able to use PHAROS4MPAs recommendations in the short term, whilst waiting for new official status. The Greek partners faced difficulties due to the decision of the government to change the whole governance status of MPAs at the time of PHAROS4MPAs' reports diffusion. However, PHAROS4MPAs' recommendations will be taken into account as soon as the new management plans are discussed.

**Table 2: The MPA management feedback received during specific meetings on PHAROS4MPAs recommendations. In orange, the preliminary stage of management plan of MPAs (MPA designation step or MPA national regulation definition), in green, the writing stage (All recommendations apply, the management plan is under discussion for revision or construction), in yellow, the final stage (No recommendations apply, the plan is adopted and at an implementation phase)**

The table above summarizes the management plan implementation stages and illustrates readiness for the integration of PHAROS4MPAs recommendations as well as improved management effectiveness (implementation of the best environmental standards in the field). The main recommendations apply (Monitoring, Surveillance and Control) even in MPAs where management plans are finalized and implemented, as in France.





**The University of Girona and WWF-Spain presented the project's national report to marine policy makers of the Spanish Ministry in charge of managing MPAs at the national level.**

PHAROS4MPAs made an important contribution to MPA management, focusing on the needs for increased integration of MPA management in the MSP process. **It is of the utmost importance to build a link between MSP authorities, MPA managers and maritime sectors. All targeted MPA management bodies agreed on this point.**

#### **Box 1: PHAROS4MPAs session in the French National MPA Conference.**

During the last National MPA Conference, in October 2019, WWF France had the chance to organize a PHAROS4MPAs session on MPA management in a time of blue growth. It raised various issues on sustainability criteria and the application of the Avoid-Mitigate-Compensate approach in MPAs. The feedback from the dozens of participants demonstrated that the relation between blue economies and MPAs is now central and will become even more important in the coming years for all the maritime sectors. MPAs represent the future of a sustainable blue economy. Regarding the relation with MSP authorities, most participants recognized that connections exist between the two legal and binding public policy instruments embodied by MPAs and MSP but no consensus emerged on how to reinforce the link between them. PHAROS4MPAs thus highlighted the fundamental problems to be resolved in the coming year.

**Box 2: PHAROS4MPAs webinars for MPA managers.**

To reach out to MPA managers who embody drivers of change on a local scale, we offered webinar sessions with a 45-minute presentation of recommendations followed by discussion between MPA managers, giving them ample opportunity to interact. While the first webinar on maritime transport had limited success, the 3 others (leisure boating, recreational fisheries and small-scale fisheries) each involved a minimum of 30 participants who expressed strong interest and enthusiasm. This raised the question of more regular webinars, and the project leader will try to organize one every trimester after the end of the project to assist MPA managers in the MSP process.

**Target 2: MSP authorities**

The stage of development of the various European and non-European maritime spatial plans differs between countries; the PHAROS4MPAs recommendations come at different moments of the MSP exercise in each country. To generalize, the PHAROS4MPAs recommendations had more influence in Albania, Slovenia and Spain with greater interest and engagement as the MSP process was at the stage of identifying environmental measures. By comparison, fewer recommendations influenced the French MSP process, i.e. recommendations on offshore wind farms and leisure boating.

Interacting with all the institutions involved in the MSP process took far longer than we had planned, with the involvement of intermediaries and contact people. It required extra effort in Spain with a twofold MSP authority based on a multi-level institution (national and provincial MSP authorities) compared to a single institution as in France, Greece, Albania, Slovenia and Italy. The readiness of MSP authorities to adopt PHAROSMPAs recommendations also depended on their institutional and political power; this power is due to many factors, legal provisions or industrial lobby influence, from low power in Italy, Greece and Croatia to high power in Slovenia. Legal frameworks also influence the rapidity of the integration of PHAROS4MPAs recommendation in official documents. This regards three legal frameworks: the first based on environmental institutions' assent to marine authorities, as in Slovenia; the second based on unilateral decision making, as in Albania; and the last based on a consultation process as in France or Italy. Since the Slovenian environmental institution was a project partner, the Slovenian case presented the most convenient working conditions. A more detailed description per country is provided in the table below.



Spain		At the local level, the Catalan government confirmed the relevance of most of PHAROS4MPAs recommendations. However, during the presentation the government called for more management effort from the MPA managers in the field. On the National MSP authorities' side, the representatives of the Spanish Ministry of Ecological Transition showed a strong interest in the recommendations, many of which are already under implementation or under discussion among stakeholders. The discussion covered a cross-sectoral vision of the recommendations and raised a lot of fundamental questions on the integration of MPAs in the MSP process. The reflection is still under way.
France		The French MSP authorities requested a 3 hours presentation on the PHAROS4MPAs recommendations to all the state employees involved in the MSP process (around 20 people). The recommendations related to offshore wind farm development will be implemented with a participatory study to identify the sensitive areas.
Italy		The PHAROS4MPAs partner CNR- ISMAR is directly involved in the ongoing preparation of MSP plans. They are providing scientific assistance to the national MSP committee. But of course the whole process is not under their direct control, and presently, as everything else, it is heavily affected by the COVID pandemic. Pharos recommendations and messages were widely circulated and very well received by the MSP authorities (national and regional level) and the work will hopefully continue.
Slovenia		The Ministry of Environment and Spatial Planning as well as the company in charge of the drafting of the maritime spatial plan and the Maritime authorities have taken all PHAROS4MPA's recommendations into account. The recommendations were discussed and the Country Report was taken on board as one of the baseline documents for the MSP process
Albania		The National Agency of Territory Planning acknowledged the importance of the PHAROS4MPAs' recommendations especially for the aquaculture sectors and they will take them into consideration. In addition, these products will be analysed to see the local impact of the blue economy. The National Agency for the management of Water Resources and the Fishery Management Organization also acknowledged the importance of the recommendations. From a more general perspective, the key message from all participants was the integration of these recommendations in the national frameworks, in the management plans and in marine spatial planning in the future.
Greece		Still waiting for MSP Authorities feedbacks. The MSP process is lagging behind in Greece. The state's services willingness to respond to PHAROS4MPAs recommendations and adopt them depend on whether they have the mandate to do so and the opportunity and both are still under discussion.

**Table 3: MSP authorities' feedback received during specific meetings on PHAROS4MPAs recommendations. In yellow, the concept stage of the MSP process (main recommendations apply, the plan is not yet designed), in green, the writing stage (all recommendations apply, the plan is under discussion), in orange, the final stage (no recommendations apply, the plan is adopted).**

MSP authorities, as the first decision-making level, were subject to a special effort for the communication of recommendations. **We produced National Country reports adapted to each country and translated into each language (Spanish, French, Italian, Slovenian, Albanian, Greek and Croatian).** Each partner adapted the content of PHAROS4MPAs recommendations to their respective country (deliverable 2.3.1 of the project). The national reports made an important contribution in reaching the MSP target audience.

All partners established relationships with their respective MSP authorities, especially Slovenia and Albania (project national partners are institutional workers) and Italy and France (project national partners are part of the MSP consultation process). WWF Spain helped to reach the MSP authorities thanks to the national report. These national reports are also available to MPA managers to continue advocacy work<sup>4</sup> with MSP authorities after the project.

**In Spain, France, Italy, Slovenia, Croatia, Albania and Greece, all state agencies or institutions were convinced by PHAROS4MPAs recommendations.** However, any concrete outcome will stem from the commitment of these decision makers to implement the recommendations. So far, **Slovenian MSP institutions have officially adopted the PHAROS4MPAs recommendations, with direct integration in national planning documents.** Albanian institutions have also expressed several engagements for future commitment on the recommendations. Concerning the other countries, it is most important to ensure that institutions take the recommendations into account during the planning phase of the MSP. The PHAROS4MPAs project comes at a critical time of consultation and public policy design before the MSP Directive application deadline of March 31st 2021. Regarding this deadline, partners will pay attention to MSP commitments for the next year. Endorsement of PHAROS4MPAs recommendations is also expected in southern Mediterranean countries (Tunisia, Morocco and Algeria) in the near future.

PHAROS4MPAs was also able to fill a gap in MSP transnational cooperation, with its regional scope. Some recommendations respond specifically to transnational issues. However, due to time restrictions, we mainly worked in the Adriatic, between Italy, Croatia, Slovenia, Albania and Montenegro. For instance, recommendations on cruising and tour boating were used as reference documents in a report being prepared by PAP/RAC on Adriatic-Ionian cooperation towards MSP. Interaction between Turkey and Greece was addressed by the project partners and additional effort should be made in the near future on transnational cooperation in the Aegean Sea.

---

<sup>4</sup> The reports present some spatial environmental measures stemming from MPA experiences that should be integrated in the MSP of Mediterranean countries.

### **Box 3: The complicated link between MSP authorities and MPA managers**

Regarding the feedback we collected from the Spanish MSP authorities, it seems that the engagement of MPA managers in the MSP process is not entirely clear. Feedback from Spanish MPA managers includes criticism of the MSP exercise in which they were not sufficiently involved by the MSP authorities. They also admit to not investing sufficiently in the MSP process. The fact that MPAs are not always included in the MSP process raises concern in terms of the consequences for biodiversity conservation. This situation seems to be the case in most countries. The PHAROS4MPAs webinar session (see Box 1) provided MPA managers with some useful suggestions for pushing forward their collaboration with MSP authorities. As the project aims to foster cooperation between MSP authorities and MPA managers, we worked to build bridges by organizing meetings between them and bringing national reports to the center of promising bilateral discussions. In doing so, we noticed that organizing events with both MPA managers and MSP authorities was complex and not so common. In Slovenia, project partners made the link through a series of collective and bilateral meetings to share a common understanding and effort between MPAs and MSP targets. In Albania and Spain, several events were also organised, and each time the project partners called for some formal measures to bridge MPAs and MSP. In terms of the MSP and MPA link, the webinar also provided an important outcome as we strongly encouraged MPA managers to engage more strongly with MSP authorities. MPA management plans are generally not taken into account within MSP documents and MPA managers' outputs (either participative assemblies, management plans, conservation objectives) are not mobilized enough by MSP authorities. We contributed to reconciling the two aspects of marine environment management through a presentation during the MSP forum on the specific issue of MPAs' integration in the MSP approach, having noted that the subject of MPAs subject was almost absent from the forum overall.

### **Box 4: Striving to reach a double target concerning the port authorities somewhere between MSP authorities and maritime sectors.**

Port activities are included in the MSP exercise although they usually refer to national or sub-national authorities which are additional targets to reach in support of maritime sectors and planning decision makers. While further port authorities may be contacted after the project, three port authorities have responded so far: Genoa, Valencia and Koper. PHAROS4MPAs results concerning maritime transport and ports were presented to the Port of Koper and two main points were discussed: the reshaping of the anchorage area in front of the harbour – moving its border further away from the MPAs – and the closing to cargo ships of the waters bordering the MPA Debeli rtič. Both points are supposed to be included in the maritime spatial plan and the maritime authority already reported that they are also moving in this direction within the port operation protocols. Meanwhile, the PHAROS4MPAs recommendations were welcomed and acknowledged by the port authorities of Genova through the BlueBoatMed project workshop and the port of Valencia through the international conference on maritime transport (Rome, September 2019).

### Target 3: Maritime sectors

Business was not a primary project target considering the short timeframe and the risk of the recommendations being weakened. Project communications did not focus on this audience as a priority, even though we wanted them to read the recommendations and take them into account. **We had many informal discussions with important business leaders** (CMA-CGM for maritime transport, Gloria Maris for aquaculture, Bénéteau for leisure boating to cite the French corporate examples) **and European and national business organizations** with a good reputation and leadership among the sectors. The table below illustrates the official bilateral discussions we initiated with maritime sector representatives on an EU level (first table) and on a national level (second table).

To summarize, maritime sectors were generally interested in PHAROS4MPAs recommendations and admitted (informally) that the recommendations provide an opportunity for them to rate their sustainability. The recommendations can be taken as sustainability criteria regarding compliance with the Marine Strategy Framework Directive and related good environmental status which the MSP has to fulfill. One of our business partners, the French WindFarm Association has engaged in the application of the PHAROS4MPAs recommendations.

EU level		<b>Presentation of the PHAROS4MPAs recommendations at the European Boating Industry's 10th anniversary event.</b>
		<b>Presentation of the PHAROS4MPAs recommendations to the Aquaculture Advisory Council in Brussels.</b>

Spain



Presentation to the national association APROMAR led by Javier Ojeda González-Posada during the European Maritime days in Lisbon.



Presentation to the leisure boating sector in Spain at the Barcelona International Boat Show.

France



Presentation to the Windfarm Energy French Association and its Deputy CEO, Matthieu Monnier, at the ENERGIA conference in Montpellier.

Presentation to the maritime transport sector in France through a presentation at Armateurs de France, the main sector association.

Italy



Presentation to several maritime sectors at the ECOMUNDO conference



Given that PHAROS4MPAs proposes constructive solutions to maritime sectors we expected greater interest from the sectors most exposed to MSP decision making, such as offshore wind farms and aquaculture, the siting of which depends on environmental quality. The need to combine conservation goals with fish aquaculture and large offshore wind farms raised many questions and important discussions on development (in)compatibilities. The offshore wind farm sector in particular demonstrated a willingness to include an MPA perspective in their activities.

For sectors such as maritime transport and cruising the sea is considered infrastructure, not as a resource, and the link with biodiversity conservation is not of direct concern to them. However, both sectors took note of the recommendations. They reacted positively to the environmental measures linked to collisions with marine mammals and confirmed the importance of reducing direct pollution by gases (SOx, NOx) and gas emissions (CO2, methane), explaining that it is the biggest challenge for the sector.

For other maritime sectors such as recreational fishery, their lack of strong representation jeopardized our attempts to communicate the project recommendations to them. Most recreational fishers are not members of associations, and have little contact with MSP authorities. Many of the MPA managers who attended our webinars told us they would communicate themselves with the various leisure boaters and fishers' associations along the northern Mediterranean coasts, although we managed to have in depth-discussions with the local associations at Cape de Creus (Catalunya, Spain) through our Spanish partner (See Box 6) to present our recommendations.

Overall PHAROS4MPAs recommendations and guidelines have provided fresh ideas and new visions for the future of the Mediterranean blue economy which attracted the interest of all maritime sectors regarding their responsibilities in terms of sustainable development.

#### **Box 5: MPAs as a sustainable blue economy laboratory**

The project partners participated in building links between MPA managers and maritime sector businesses in Spain, France, Italy, Slovenia and Albania, organizing meetings between representatives of both groups. We observed that maritime transport and leisure boating lack MPA sustainability standards. Standards exist for other sectors but they are not particularly rigorous. Some companies would like to communicate their efforts towards the implementation of sustainability measures and are ready to work with MPA managers. However, most MPA managers lack information on the regulations that apply to sectors as well as to sustainability standards. The sets of measures per maritime sector in the PHAROS4MPAs reports are a powerful tool for management bodies for future collaboration, participation and co-management with maritime sector businesses. It is expected that some MPA managers will start to work with some companies; the French Biodiversity Agency in charge of the management of many French MPAs, for example, has recently begun to work with La Méridionale, a French maritime transport company. .

### Box 6: Reaching the recreational fisheries sector

On a more local level, at the Cap de Creus MPAs, our Spanish partner, the University of Girona, worked with the associations of recreational fishers and leisure boaters. The recreational fisheries association from Cap De Creus was in favour of all the recommendations, although they are afraid of strong measures, with heavier bans on certain practices. Some of the recreational fishers are also part of leisure boating associations in the Cap de Creus area which were interested in the recommendations but were able to provide little feedback due to time limitation (discussion among association members is still ongoing). Some exchanges with professional fishing associations in Cap de Creus indicated that PHAROS4MPAs recommendations could contribute to resolving conflict with the recreational fisheries sector. In general the associations found the recommendations interesting and relevant, but expressed concerns about the consequences of their implementation.

### Other targets

Most partners are subject to European regulations relating to the MSP Directive. As such the EU commission represents an additional target. At the MSP global conference we presented **PHAROS4MPAs project results to the EU commission (more than 40 people from DG Mare)** and received very positive feedback. We were pleased to hear Felix Leinemann, in charge of the MSP Directive application at the EU commission, pay special attention to the potential of project outputs. In fact, the EU's wide range of goals are far from being met on national levels and the Directives have not been fully enforced. **PHAROS4MPAs highlights the gap between MSP and MPAs reinforcement**, with the recommendations as a solid bridge between them, towards the development of a sustainable blue economy. More specifically, the project addresses the many contradictions that arise between EU blue growth (Blue Growth Strategy, SWD (2017) 128 final) and EU conservation policies (Habitats and Bird Directives, MSFD). We managed to have a dedicated page on the EU MSP Platform with all deliverables online.

On a Mediterranean scale – covering both EU and non EU countries – we worked in association with as many regional institutions as possible. Among them, RAC/SPA were one of the most dedicated associated partner, circulating the PHAROS4MPAs recommendations to all their focal points during the last months of the project. The MedPAN network also showed strong support. MedPAN reviewed the small-scale fisheries recommendations and communicated heavily on the project's activities and results. MedPAN quoted PHAROS4MPAs 5 times in the inputs received from the UfM Blue Economy Stakeholders Community (on-line consultation, March, 2020) and MedPAN, national protected areas agencies and RAC/SPA capitalized with individual MPAs. CPMR mentioned PHAROS4MPAs in point 57 of the Final Declaration of the CPMR Intermediterranean Commission (General Assembly, June 2019). REMPEC as an associated partner also participated but at a lesser level due to capacity constraints. Plan Bleu also communicated on the project results in several conferences dedicated to maritime sectors (during Euromaritime Conference on maritime transport, February 2020, and during the BlueBoatsMed Workshop on cruise and leisure boating in

November 2019). **RAC/SPA, PAP/RAC, CPMR, Plan Bleu and REMPEC capitalized on the project's results in the Policy Agenda related to the Mediterranean Action Plan.** The results of the project were well received during the side events of the COP21 of the Barcelona convention in December 2019.

### Feedback from PAC/RAC

Decades of excessive and unregulated maritime activities have seriously impacted the Mediterranean marine environment. The project PHAROS4MPAs is about to build a new sustainable model.



### Feedback from Raffaele Mancini from Plan Bleu:

*“Plan Bleu fully supports PHAROS4MPAs’ approach to put MPAs at the core of marine conservation and local sustainable development, thus the need to prevent or minimize any detrimental impact on them due to economic activities. Plan Bleu highly values the project's results and deliverables and commits to disseminate its recommendations, in particular in the framework of its forthcoming activities dealing with the cruise and recreational boating sectors, sustainable aquaculture and blue energy. Plan Bleu believes that recommendations put forward by PHARO4MPAs are built on solid facts and figures, generally well-argued and enshrined in a document easily understandable and usable. In this sense, it can be a valuable tool to approach decision makers.”*

### Feedback from Frédérick Herpers from the WestMed initiative:

*“The work and results of the Pharos4MPAs project characterize the level of expectations of stakeholders to understand and integrate the issues to ensure the sustainability of activities at sea. Applied and managed in particular in the context of the protection of marine protected areas, the results can be transposed to all maritime areas under jurisdiction, in particular in the context of the planning of maritime areas and the implementation of the framework strategy directive for the marine environment. Indeed, if MPAs are defined areas, the challenges of protecting ecosystems and recovering good ecological status go beyond the geographical limits of MPAs. We have decided to promote and share the results of the project both within the framework of the WestMed initiative as well as on the EU MSP platform, either by inviting the project to workshops or by uploading the documents produced. in the form of "good practices".”*

# Evaluation indicators

Above all, **the project reached all the identified primary targets<sup>5</sup> in the 9 Mediterranean countries involved in the project** (see the figure below) **as well as in Morocco, Algeria and Turkey**. The following impacts can therefore be considered to apply to the majority of Mediterranean countries involved in the MSP process.

We expect the project to have an impact in the coming year of the MSP process, because the majority of the targets showed a strong interest in the PHAROS4MPAs recommendations with arguments for further implementation. Slovenia has demonstrated the highest commitment to the PHAROS4MPAs recommendations since the MSP authorities will take all the recommendations and guidelines as the backbone of the Slovenian MSP process. In Albania, the MSP authorities also stated that a number of PHAROS4MPAs recommendations will be integrated in their final strategy.

According to the MSP agenda, the implementation of the PHAROS4MPAs recommendations should be immediate. As a consequence, a strong and rapid mobilisation by MPA managers would be the most expected impact of the project. Most urgently, MPAs should embrace the driving role they have, putting nature conservation at the core of the MSP picture. According to our evaluation needs, we focused on the MPA managers' commitments to the project recommendations. We calculated quantitative indicators based on the number of MPAs engaged and the total surface of covered habitats. The quantitative indicators derive from the expected outputs of the project associated with objective, namely output 3.2 labelled 'Number of Joint Governance Plans', output 3.3 labelled 'Number of protected areas engaged in implementing management strategies' and the output 3.4 labelled 'Surface of habitats supported to attain a better conservation status'. In addition, we looked for semi-quantitative indicators. We built a method to analyse MPA managers' intentions using a questionnaire and webinars. In total, 60 MPA managers from 38 MPA management bodies (see table 11 in Annex 4) attended our webinars and 32 of them provided feedback on the relevance and usefulness of the recommendations by answering our questionnaire<sup>6</sup>.

Following is a summary of results and a description of the expected impacts collected from MPA managers.

---

<sup>5</sup> One exception to the initial plan fulfillment lies in the difficulties we had in reaching all the maritime sector representatives. However, they were not our priority target.

<sup>6</sup> The method we use is based on a questionnaire made up of 4 questions: 1) Are the outcomes from the PHAROS4MPAs project relevant to your work? 2) How are you going to use the materials and recommendations produced by the project? 3) What is your main takeaway message from today's presentation? and 4) Would you like to receive more information about the project?



**Figure 4: The PHAROS4MPAs project had a clear transnational approach and addressed common territorial challenges through the creation of a specific partnership built around 17 partners from 10 countries (France, Spain, Italy, Greece, Albania, Slovenia, Croatia, Belgium, Tunisia, Malta).**

#### Percentage of goals achieved

A first indicator corresponds to the number of goals achieved. The objective was to obtain expressions of interest from at least: 5 MPA authorities in the countries of the project; MedPAN; 20 MPA management bodies; 7 national MSP Authorities in the countries of the project; the EU MSP platform; the EU MSP Working Group; CPMR; Mediterranean Action Plan; 9 maritime sectors. We reached most of the initial objectives (see table 6 in Annex 2). The table below gives another view of the project involvement and the following achievements focus on the most effective results:

- Four MPA institutions were influenced by the project (MAPA from Spain, OFB from France, IRSNC from Slovenia, MEFWA from Albania).
- The MedPAN network emphasized PHAROS4MPAs on many occasions, in communications activities and also pushed its recommendations in the [UfM consultation on sustainable Blue Economy](#).
- We produced 16 maps of maritime sectors spatial distribution which revealed to be powerful tools for communication purposes
- We received testimonies from 17 MPA managers that the PHAROS4MPAs recommendations will be used for management plan revision<sup>7</sup>.

<sup>7</sup> The complete list: Dodecanese MPA, Thermaikos Gulf MPA, Delta Nestos, Lakes Vistonida-Ismarida and Thassos Island MPA, Miramare Marine Reserve, Masía Blanca MPA, Levante de Mallorca-Cala Rajada MPA, Islas Columbretes Marine Reserve, Isla de Tabarca Marine Reserve, Cabo de Palos-Islas Hormigas Marine



- The national MSP authorities of Spain, France, Italy, Slovenia, and Albania indicated they will take the recommendations into consideration for their respective marine spatial planning exercise (5 countries).
- The project deliverables are now available on the EU MSP platform<sup>8</sup>.
- Our Italian partner was actively engaged in the EU MSP Working Group.
- Regional institutions (CPMR, PAP/RAC, Plan Bleu) were involved in the project production and dissemination.
- Two national maritime sectors have endorsed the PHAROS4MPAs recommendations (French offshore wind farm association, Slovenian maritime transport and port).

Target groups	Description	Target aim (number of organisations)	Targets reached	%
Sectoral agency	Business sector representative organisations at national and EU level / REMPEC (a UNEP MAP office which deals with maritime traffic impacts in the Mediterranean)	10	<b>3</b> (Aquaculture Advisory Council, WindEurope, European Boating Association)	30%
Business support organisation	Business sector representative organisation	10	<b>6</b> (Aquaculture: Gloria Maris [France], APROMAR [Spain] / <u>Maritime transport</u> : Armateur de France [France], <u>Leisure Boating</u> : Bénétéau [France], <u>Recreational fishery</u> : cap de creus spanish recreational fishery association [Spain], <u>Offshore Wind Farm</u> , FEE [France])	60%
Interest groups including NGOs	MedPAN / Some business sector representatives at national or EU level / NGOs managing Mediterranean MPAs / NGOs support the management effectiveness of MPAs	10	<b>10</b> (MedPAN, Sunce, Oceana, Blue World Institute, Laskaridis charitable foundation, Society for Protection of Turtles in Northern Cyprus, Birdlife, Akdeniz Koruma Mediterranean Conser.	100%

Reserve, Cabo de Gata-Níjar Marine Reserve, Isla de Alborán Marine Reserve, Torre del Cerrano MPA, Debeli rtič MPA, Kaş-Kekova MPA, Al Hoceima Marine Park, Management body of Alonissos MPA, Schinias - Marathon National Park. Mount Ymittos and Southeast Attica Region, MPA managed by the LIFE INTEMARES

<sup>8</sup> <https://www.msp-platform.eu/projects/pharos4mpas-blue-economy-and-marine-conservation-safeguarding-mediterranean-mpas>

			Society, Blue Seeds, Les Aquanautes, Thalassa Foundation)	
Higher education and research	Universities working on marine protected areas and maritime spatial planning	10	<b>6</b> (CNR-ISMAR, Girona University, ETC-UMA, Nice Sophia Antipolis, Spanish Institute of Oceanography, University of Malaga)	60%
International organisation, EEIG	Mediterranean Action Plan of the United Environment Programme / European Commission / Business sector representatives / IUCN / Convention for Biodiversity / International Maritime Organisation	12	<b>7</b> (RAC/SPA, PAP/RAC, Plan Bleu, REMPEC, UNEP MAP, IUCN, EU commission)	60%
Local public authority	Here we target mainly the management bodies of marine protected areas and possibly nearby cities when they are involved in MPA management	50 MPAs	<b>38</b> (the list of MPAs is in Annex 4)	80%
National public authority	National authorities in charge of marine protected areas in the 7 countries of the project / National authorities in charge of maritime spatial planning and integrated management of coastal zones in the 7 countries of the project	14	<b>11</b> MPA authorities: French Biodiversity Office (France), IRSNC (Slovenia), NAPA (Albania), MAPA (Spain), Ministerio para la Transición Ecológica y el Reto Demográfico (Spain) MSP Authorities in the 6 countries	80%
Regional public authority	Regional authorities in charge of marine protected areas / Regional authorities in charge of maritime spatial planning and integrated management of coastal zones / Coastal regions	40	<b>36</b> (Intermediterranean Commission of the CPMR, with a focus on Region Sud (France), Region Occitanie (France), North Aegean Region (Greece)	90%

**Table 4 : The list of the PHAROS4MPAs objectives of project targets**

## Number of joint governance plans

We were able to produce 7 National Country Reports in the local language. These reports essentially constitute an action plan for the authorities of the MSP. They embody a national roadmap, focusing on the country's most driving maritime sectors and advocating for a full integration of activities into a comprehensive and inclusive strategy based on pragmatic environmental measures. One regional report is also available, made of recommendations extracted from the 7 capitalization baselines for the whole Mediterranean basin. It includes technical recommendations as well as policy recommendations. **We thus produced a total of 8 dedicated governance plans, exceeding our objective of a single regional report.**



PHAROS4MPAs national country reports

## Number and surface area of fragile and vulnerable areas

Referring to the project description, the final evaluation indicators of the project are 1) the number of protected areas engaged and 2) the surface area of habitats supported to attain a better conservation status.

**Number of MPAs:** The map below illustrates the scope of the project in terms of potential engagement in the PHAROS4MPAs recommendations by MPA managers. We have tagged all the MPAs which expressed motivation to engage in one or more recommendations. **59 sites are concerned with 38 MPA management bodies** (see Figure 5). Most of the MPAs are located in the northern part of the Mediterranean. An additional effort to reach southern MPA managers was provided at the end of the project, using the French National Country report to assist the MPAs in Morocco and Algeria as well as in Tunisia through the WWF North Africa.

**Surface of habitats:** We made an estimate of the total area influenced by the project results. Based on responses from MPA managers, the total surface involved covers more than 18000 square kilometers: 4000 km<sup>2</sup> of Natura 2000 sites and 14 600 km<sup>2</sup> of National MPAs for a **total of 18 600 km<sup>2</sup> surface area of habitats which were supported to attain better conservation status. We thus have overreached the initial objective level of 1000 km<sup>2</sup>.**



**Figure 5: The map of targeted MPAs (Dark red points refer to National MPAs and light red points refer to marine Natura 2000 sites).**

#### Number of MPA managers engaged:

The duration of the project was not enough to see a change, however, we collected some commitments before the end of the project. The impacts are thus described in terms of relevance and usefulness, assuming that a minimum of contacted MPA managers will effectively implement a number of environmental measures.

*Relevance:* **all of the 32 MPA managers that responded to our questionnaire** affirmed that the projects and the related recommendations are very relevant **thus giving the project a 100% relevance rate**. They explained that the webinars increased their **understanding of the sectors and enabled them to share successful experiences**. They were also interested in more information and requested more capacity building on the whole set of maritime sectors. The project team will remain available for this purpose.

*Usefulness:* we received mixed feedback concerning the usefulness of the PHAROS4MPAs recommendations; 70% of the MPA managers who responded stated that they would use the recommendations. The others considered the recommendations as critical knowledge to follow up. Generally, the webinar participants that want to engage focus on several environmental measures depending on their respective situations. Their use of the project outputs are twofold, either as **a discussion tool to engage with stakeholders or for internal work with formalised ideas in an MPA management plan**. The most cited recommendation deals with conflict resolution, especially between recreational fisheries and small-scale fishery, and MPA managers emphasize the implementation of spatial exclusion measures and the prohibition of certain gear and practices. Overall, MPA managers also posed a fundamental problem in raising the issue of control and surveillance.

Following are quotes from MPA managers.

*"The recommendations produced are very interesting for our project because our main aim is the effective management of Natura 2000 sites and to this end we are updating and producing management plans for all sites with a participatory approach. Moreover, the opportunity provided through the webinar knowing other managers, experiences and different approaches from other countries is also very valuable. They will be used as background information in the different workshops organised for the elaboration of management plans and probably in other opportunities that may arise."* (Feedback from several webinars, Victoria Gonzalez Vela, LIFE INTEMARES, marine Natura 2000 sites, Spain)

*"The studies under the project share interesting experiences of MPAs and their management of the SSF in relation to the objectives of conservation of marine biodiversity. For us at Al Hoceima National Park and as a manager, it is important to learn from the recommendations stemming from these experiences while adapting them to our context as part of the planning of our management and conservation approaches."* (Feedback on the Small Scale Fisheries webinar, Otmane BENSOUA, Al Hoceima National Park, Morocco)

*"We are also trying to improve management capacity and effectiveness in Kas-Kekova MPA where there are a lot of boats for mostly daily excursions and scuba diving is the most attractive marine tourism activity, and we are looking for the opportunities to develop a buoy mooring system within the MPA. So PHAROS4MPAs seems pretty relevant to our works and more. As a set of resources presented in your web page especially the reports gives quite a handy guidance. We can use your example as a case study and refer to the recommendations which are provided in your reports."* (Feedback on the Leisure Boating webinar, Eray Caglayan, Kaş-Kekova MPA, Turkey)

*"I work in MPA Debeli rtič, which was established in 2018 – so it's a newly established MPA in Slovenia. In Slovenia, recreational fishing is not allowed inside MPAs, so one of the main changes with establishment of the MPA Debeli rtič is that recreational fishing is now allowed anymore in this area. Main challenges we are facing are effective surveillance on the sea and achieving the acceptance of the ban by recreational fishermen and restrain conflict between recreational fisheries and SSF. We will use it as a base for planning the Management Plan of the MPA and guidance for activities related to recreational fishing."* (Feedback on the recreational fisheries webinar, Neža Gregorič, Debeli rtič MPA, Slovenia)



As an illustrative example, we asked the Cap de Creus MPA manager to rate the feasibility of the environmental measures of the leisure boating recommendations, giving a number from 0, not implementable to 10, fully implementable. The most implementable measures relate to management, awareness campaigns and participatory monitoring. Looking at the figures for leisure boating recommendations, we obtained a mean of 5.5 with a standard deviation of 2 which illustrates the in-the-field difficulties of recommendation implementation. The most cited measures relate to the ban on antifouling painting or anchoring on *Posidonia* meadows. Looking at the figure for the recreational fisheries recommendations, we obtain a mean of 7 and a standard deviation of 1.1. The feasibility of environmental measures thus varies according to the sector, which also depends on the established relationship and the importance of common objectives between the sector and the MPA management board. The implementation of specific measures depends on trust between MPA management bodies and maritime sectors. Concerning recreational fishery, the most cited measure relates to the limitation of fishing effort by setting capture limits while the least cited relates to the implementation of licenses and fees which are already the most efficient ones. The testimonies of recreational fishers confirm their relative reluctance to implement environmental measures, and there is a need for more awareness raising and discussion with fishers.

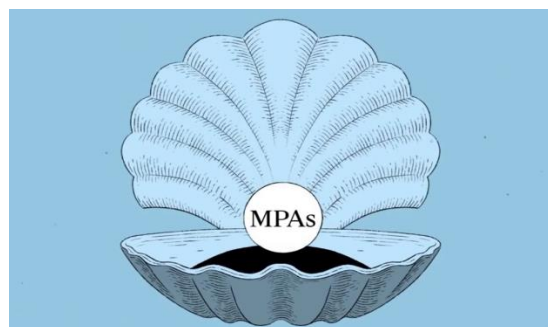
Finally, referring to the Table 11 and the number of MPAs management bodies per countries, we have reached a critical mass of MPAs managers in France, Spain, Greece, Slovenia, Turkey, Morocco, Algeria and Albania to bring a long-lasting message which will be taken into account in the following months and years. At the end, **we have overreached the initial objective level of 20 management plans involved with effective change in the coming years though a better integration of the blue economy in the MSP at the MPA level.**

# Conclusion

Mediterranean MPAs are under pressure and suffer from the general degradation of the environment due to the rapid development of maritime sectors. The PHAROS4MPAs project aimed to identify the sustainable practices and the avoidance and mitigation measures which could provide a road map towards achieving a sustainable blue economy in all Mediterranean MPAs. The project has created a new paradigm, proposing to place MPAs at the center of the ongoing MSP process. It has reached most Mediterranean countries engaged in MSP and convinced more than 38 MPAs to work to influence the MSP in order to take conservation goals into account. The MSP plan will regulate the maritime sector for the future; partners have reached MSP authorities in 7 countries to persuade decision makers to take the necessary action in the coming year to tackle the rapid decline of the marine environment.

**The main result of the project lies in the demonstration that the sustainable and inclusive development of a blue economy is possible within the boundaries of marine conservation. According to those results, the MSP authorities have all the cards in hand to effectively drive blue growth towards a sustainable path that should begin in 2021, starting within MPAs.** By focusing on the maritime sectors, the project establishes a cross-sectoral vision with a quantitative assessment of cumulative impacts made up of a complete matrix of impacts with a corresponding list of environmental measures. In doing so, the project embodies a concrete example of the application of the exosystemic approach, balancing maritime activities according to the state of marine environments.

The project will contribute to the long-term preservation of the marine environment by building the conditions for MPA managers to steer the MSP exercise towards sustainable blue growth and by providing an integrated vision for MSP authorities so that they can explain the range of opportunities for nature protection to maritime sectors. **The project's output also creates new opportunities to integer human activities in marine ecosystems, and call for more collaboration between investors and companies with MPA managers, we all hope that they will accept this invitation to a sustainable blue economy.**



Picture from the project video with MPAs in the centre of a promising seashell

# ANNEX 1

**Table 5: EU projects used in the production of the capitalization baselines of the PHAROS4MPAs project (the tour boat sector does not appear, it was addressed in the capitalization baseline on MPAs and the cruise sector).**

Project name	Programme	Maritime sector
SAMBAH	EU LIFE Programme	Maritime transport - OW
WHALESAFE	EU LIFE Programme	Maritime transport - OW
DEVOTES	EU 7th Framework Programme	OWF
4 POWER	EU Interreg - IVC	OWF
BIAS	EU LIFE Programme	OWF
COCONET	EU 7th Framework Programme	OWF
SEANSE	EU EMFF	OWF
SCP	EU LIFE Programme	Cruise sector
Med-IAMER	EU Interreg-Med	Cruise sector
SIROCCO	EU Interreg-Med	Cruise sector
AquaSpace	EU H2020	Aquaculture
FISH/2004/15	DG MARE	Aquaculture
SUSAQ Project	EU Interreg -Baltic	Aquaculture
BOATCYCLE	EU LIFE	Leisure Boating
COMMON SENSE	EU 7th Framework Programme	Leisure Boating
MARISURF	EU H2020	Leisure Boating
PORTVERT	EU Interreg POSTEFA	Leisure Boating
SIGMAC	EU ERDF	Leisure Boating
BOATDIGEST	EU Lifelong Learning Programme	Leisure Boating
MEDPAN NORTH	EU Interreg-Med	Small Scale Fisheries
FISHMPABLUE	EU Interreg-Med	Small Scale Fisheries
AQUO	7th EC Research Framework Programme	Maritime transport
SONIC	EU 7th Framework Programme	Maritime transport
WHALESAFE	EU LIFE	Maritime transport
MED-lamer	EU Interreg-Med	All
VECTORS	EU 7th Framework Programme	Fisheries / OWF / Marine Transport / Aquaculture
PERSEUS	EU 7th Framework Programme	Fisheries / Maritime transport
MERMAID	EU Interreg-Med	Maritime transport
OPENRISK	EU – Civil Protection Financial Instrument	Maritime transport
SUSTAINABLE CRUISE PROJECT	EU LIFE	Maritime transport
Monalisa 2.0	EU Trans-European Transport Network	Maritime transport
BALMAS (IPA)	Adriatic IPA	Maritime transport
IMPACT	EU Interreg-Maritime	Maritime transport
Hazadr	IPA Adriatic Cross-Border Cooperation	Maritime transport

COEXIST Project	EU 7th Framework Programme	Recreational fisheries
PAMPA PROJECT	EU FP4-FAIR	Recreational fisheries
SAFENET	EU H2020	Recreational fisheries
ANALISIS DE LA PESCA DE RECREO EN LAS 10 AREAS LIC DEL PROYECTO	EU LIFE	Recreational fisheries

## ANNEX 2

**Table 6: Project achievements**

		Expected	Produced	Progress
2.1	Elaboration of the communication plan		A communication strategy, followed by a dissemination plan was produced and shared with project's partners. The aim of these documents were to ease the dissemination of all deliverables at both levels: national (with the help of partners) and regional (led by WWF).	100%
2.2	Producing a high quality editorial content			
2.2.1	Quality rewriting and English revision of key project outputs	1 Unit	All products have been revised by an native English writer	100%
2.2.2	Batch of infographic	1 Unit	Key facts and figures of each sector have been "extracted" and illustrated with infographics	100%
2.2.3	Batch of cartography layout	1 Unit	All the regional maps related to 7 maritime sectors are credited PHAROS4MPAs by Interreg Med and compiled in an open source folder	100%
2.2.4	Batch of pictures	1 Unit	High-quality pictures were collected among partners and network. Some were bought online, through websites to ensure the nice look and feel of the reports.	100%
2.3	Translation, layout and printing			
2.3.1	Translation of project's key outputs and communication tools	7 Units	Translation in 7 languages (French, Italian, Spanish, Greek, Slovenian, Croatian, Albanian).	100%



2.3.2	Layout and printing of project's key outputs	8 Units	The layout of all the project recommendations reports and policy briefs was done by a creative agency. Hard copies of each report were printed and they are available on the INTERREG website.	100%
2.4.1	Project introduction brochure	1 Unit	It has been decided at the beginning of the project to cancel this product	0%
2.4.2	Website communication		Updates on the project's website were realized according to the news and events on a monthly basis (Uploading information on the project website provided by Interreg Med every month)	100%
2.4.3	Video	2 Units	The video is based on a visual animation with no voice recorded, which gives anyone the possibility of adding subtitles (translated in Slovenian, French and Greek)	100%
2.4.4	Batch of PowerPoints	1 Unit	A "master" PowerPoint presentation (PowerPoint mask) was realized by the creative agency to be adapted according to the sector, country and purpose of the presentation	100%
2.4.5	Implementation of the media plan	2 Units	No media plan has been designed since the target audiences don't fit general media. It has been decided to focus the communications on more relevant communications channels with regard to the targets (events, face-to face meetings etc.)	0%
2.4.6	Implementation of social media activities	2 Units	Regular posts regarding the blue economy issue was done on the WWF MMI twitter account, linking to the PHAROS4MPAs project	100%
2.6	Participation in the Panacea Horizontal Project	3 Units	Final PHAROS4MPAs products were shared with the PANACeA community. A package of standalone maps was also shared with the community and could be reused or integrated in other projects.	100%

3.1	Planning the production of the capitalization baseline			
3.1.1	Terms of reference of the capitalisation baseline	8 Units	8 capitalisation baseline produced: 8 Units produced (initially 10 Units: oil and gas is not compatible with MPAs and no recommendations apply and the cross sectoral vision is addressed in all the other productions)	100%
3.2	Building the capitalization baseline			
3.2.1	Capitalisation reports	8 Units	7 reports produced (heterogeneous format, one report for both cruise and tour boat), the only report online relates to the OWF sector since no case studies existed in the Med (currently no wind farm in the Med)	80%
3.2.2	Cartography	1 Unit	15 maps have been produced with 3 maps based on geographical data information created specifically for the PHAROS4MPAs project	100%
3.3	Appropriation of the recommendations among the partnership			
3.3.1	National and regional capitalisation reports	8 Units	All produced (available on the Interreg website). 7 national reports and a short regional background report	100%
3.3.2	Online decision-making support tool	1 Unit	Available on line with a link on the Interreg website	100%
3.4	Planning how to engage stakeholders and foster ownership of results	1 Unit		
3.4.1	Stakeholder engagement plan	1 Unit	Done	100%

# ANNEX 3

**Table 7: Events with MSP authorities**

Scale	Sector	Representative	Event	Localization
Slovenia	MT	Port authorities	meeting	Koper, Slovenia
Slovenia	MT, LB, SSF, RF, AQ	media	press conf	Koper, Slovenia
Slovenia	SSF, AQ	Ministry for Agric, Food and Forestry	meeting	Izola, Slovenia
Slovenia	MT, LB, SSF, RF, AQ	Local planning authorities	meeting on local SP	Koper, Slovenia
Regional	All	MSP forum/UNESCO	MSP forum "Global meets regional"	Riga, Latvia
Regional	A	MSPGlobal	Training on Marine Spatial Planning and Sustainable Blue Economy	Rome, Italy
Regional	All	Mediterranean Commission on Sustainable Development	meeting	Budva, Montenegro
France	All	Biodiversity French Agency	Conférence Nationale française sur la nouvelle stratégie AMP	Biaritz, France
France	All	Region Occitanie/PACA	EMD	Montpellier, France
France	All	DIRM	Commission spéciale OWF	Marseille, France
France	All	Prefecture Maritime	bilateral meeting	Marseille, France
Italy	All	National Authorities and Regions	Ecomundo	Rimini, Italy
Adriatic-Ionian Region	All	EUSAIR Pillar Coordinators	TSG 3 Conference	Izola, Slovenia
Adriatic-Ionian Region	Cruising and tour boats	EUSAIR MS representatives	EUSAIR Interpillar Conference	Poreč, Croatia
Albania	All	Several representatives	meeting	Vlora, Albania
Slovenia	MT, LB, SSF, RF, AQ	MESP, MSP sector; local authorities	meeting	Ljubljana, Ankaran, Koper, Izola, Piran in Slovenia

**Table 8: Events with MPA managers**

Scale	Sector	Representat	Event	Localization
Italy	All	MPAs Managers	Ecomondo	Rimini, Italy
France	All	MPAs Managers	MPA national workshop	Biarritz, France
France	Offshore wind farms	Biodiversity French Agency	UICN France   Energies marines renouvelables et Biodiversité	Paris, France
Albania	All	MPA managers	MPA PHAROS meeting	Vlora Albania
Slovenia	MT, LB, SSF, RF, AQ	MSP auth; Maritime auth	meeting on the MSP	Izola, Slovenie
Slovenia	MT, LB, SSF, RF, AQ	MPAs Managers	meeting	Ankaran, Slovenie
Greece	LB	MPAs Managers and MSP Authorities from Mediterranean countries	Anchors Away Networking Event	Athens, Greece

**Table 9: Events with international stakeholders**

Scale	Sector	Representat	Event	Localization
Regional	All	MSP Expert Groupe	Workshop	Rome, Italy
Regional	All	Representatives of environmental and planning authorities	Regional workshop on MSP in the Mediterranean	
Regional	All	PAP/RAC NFPs	Meeting of PAP/RAC NFPs	Split, Slovenia
Regional	All	CPs to the Barcelona Convention (various stakeholders)	Mediterranean Coast Day	Ayia Napa, Cyprus
Regional	All	COP	COP 21 Barcelona	Naples (Italy)
Regional	All	Plan Bleu	WESTMED meeting	Marseille, France
Regional	All	SCP/RAC	PANACEA final event	Malaga, Spain
Regional	All	SPA/RAC	14th meeting of SPA/RAC Focal Points	Portorož (Slovenia)



**Table 10: Events with the representatives of maritime transport**

Scale	Sector	Representative	Event	Localization
EU level	All	Several representatives	Ecomundo	Rimini, Italy
EU level	Maritime transport	Several representatives	International Conference on Maritime Transport	Rome, Italy
EU level	Cruise	Cruise association (MedCruise, Marseille Provence Cruise Club) and actors in the value chain (e.g. Port Authorities near MPAs)	BlueBoatsMed initiative (Plan Bleu leader) webinar	Marseille, France
EU level	Leisure boating	Boating Industry	European Boating Industry Anniversary	Bruxelles, Belgium
EU level	Offshore wind farms	WindEurope	FOWT	Montpellier, France
EU level	Aquaculture	Aquaculture Advisory Council	EMD	Lisboa, Portugal
EU level	Aquaculture	Private partners of WWF in the Aquaculture sector	WWF ACAI Europe et US	Paris, France
EU level	Aquaculture	European Commission	brainstorming meeting on sustainable aquaculture	Bruxelles, Belgium
Spain	Leisure boating	Govt. of Catalonia/ Marine Catalan Strategy 2030	Barcelona International Boat Show	Barcelona, Spain
France	Offshore wind farms	Syndicat des energies renouvelables	Conférence annuelle de la FEE	Paris, France
France	Offshore wind farms	France Energie Marine	UICN workshop	Paris, France
France	Offshore wind farms	ENGIE et Quadran	Energiaia	Montpellier, France
France	Recreational fisheries	Senateur Medevielle	NA	Paris, France
Slovenia	Maritime transport	Port of Koper, Maritime authority	meeting	Koper, Slovenia
Slovenia	Cruise	Port of Koper, Maritime authority	meeting	Koper, Slovenia
Slovenia	Leisure boating	Maritime authority	meeting	Koper, Slovenia
Slovenia	Aquaculture	MPAs & MAFF	meeting	Strunjan / Debeli rtič, Slovenia
Slovenia	Recreational fisheries	MAFF	meeting	Izola, Slovenia
Slovenia	Small-scale fisheries	MPAs & MAFF	meeting	Strunjan / Debeli rtič, Slovenia

# ANNEX 4

**Table 11: MPAs reached during the course of the project**

Country	Name
Albania	Karaburun Sazan
Algeria	Jijel MPA
Croatia	Nature Park of Telascica, Nature Park Lastovo, Kornati and Brijuni, Mijet
Croatia	Cres Losinj MPA
France	Cap d'Agde MPA
France	Côte Bleue Marine Park
France	Cap Corse MPA
France	Cap d'Antibes - Iles de Lerins MPA
France	Calanques National Park
France	Golfe of Lion Marine Park
Greece	Thermaikos Gulf Protected Areas Management Authority
Greece	Gyaros MPA
Greece	Laskaridis Charitable Foundation
Greece	Karla - Mavrovouni – Kefalovriso Velestino - Delta Pineiou
Greece	Zakynthos MPA
Greece	Alonissos MPA (Schinias - Marathon National Park. Mount Ymittos and Southeast Attica Region)
Greece	Mt. Aenos National Park
Greece	Management Body of Southern Peloponnese and Kythira Island
Greece	Management agency of Dodecanese Protected Areas

Greece	MPA in the gulf of Corinth
Greece	Management Authority of Koronia - Volvi- Chalkidiki
Greece	Delta Nestos, Lakes Vistonida-Ismarida and Thassos Island Management Body
Italy	Portofino MPA
Italy	Torre Guaceto MPA
Italy	Torre del Cerrano MPA
Italy	Réserve Marine de Miramare
Morocco	Al Hoceima National Park
Slovenia	Debeli rtič MPA
Slovenia	Debeli rtič landscape MPA
Slovenia	Strunjan Landscape park
Slovenia	Sečovelje salina Natura 2000 site
Slovenia	Cape Madona Natural monument
Spain	MAGRAMA (Reservas Marinas de España)
Spain	LIFE INTEMARES related MPAs
Spain	Cap de Creus and Iles Medes
Turkey	Kas Kekova MPA
Turkey	Gediz Delta MPA
Turkey	Gokova MPA

# Acknowledgments:

We thank all the project partners that made the first inter-sectoral study devoted to the development of a sustainable blue economy in the protected areas of the Mediterranean Sea possible. Due to the number of sectors, the project represents an important collective effort to which the advisory committees greatly contributed. We are grateful to all those who expressed their interest during the dissemination phase and will dedicate time to the application of the PHAROS4MPAs' recommendations.

