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LIST OF ACRONYMS

- ABNJ: Areas Beyond National Jurisdiction
- ACCOBAMS: Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and neighbouring Atlantic Area
- CBD: Convention on Biological Diversity
- CFP: Common Fisheries Policy
- CIESM: Mediterranean Science Commission
- COP: Conference of Parties
- EBM: Ecosystem Based Management
- EAF: Ecosystem Approach to Fisheries
- EBSA: Ecologically or Biologically Significant Area
- EC: European Commission
- EEA: European Environment Agency
- EU: European Union
- FAO: Food and Agriculture Organization of the United Nations
- FRA: Fisheries Restricted Areas
- GES: Good Environmental Status
- GFCM: General Fisheries Commission for the Mediterranean
- ICZM: Integrated Coastal Zone Management
- IUCN: International Union for the Conservation of Nature
- IMO: International Maritime Organization
- MAP: Mediterranean Action Plan
- MPA: Marine Protected Area
- MEDPAN: Network of managers of marine protected areas in the Mediterranean
- MSFD: Marine Strategy Framework Directive
- MSP: Marine Spatial Planning
- NGO: Non Governmental Organization

RFMO: Regional Fisheries Management Organization

PSSA: Particularly Sensitive Sea Area

RAC/SPA: Regional Activity Centre for Specially Protected Areas

SAP BIO: Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean region

SPAMI: Specially Protected Areas of Mediterranean Importance

TEEB: The Economics of Ecosystems and Biodiversity

UNDP: United Nations Development Programme

UNEP: United Nations Environment Programme

WWF: World Wide Fund For Nature

1. FOREWORD

Marine Protected Areas (MPAs) are increasingly being globally recognized as one of the **most effective tools** for the conservation and protection of the marine environment when they are managed effectively and have sufficient resources to address the local management issues.

In addition to their biodiversity conservation role, **MPAs have proved their usefulness in recovering species, habitats and populations in decline** and are recognized as reinforcing ecosystems' resilience. Through a shared management approach (co-management), **they can contribute to the sustainable development of socio-economic activities such as artisanal fishing and eco-tourism.** They are a useful fishery management tool which the fishing sector is beginning to use as fishery reserves or MPAs. The services they provide contribute to the population's well-being and beauty of their surrounding territory which in turn contributes to their socio-economic development.

The benefits and services provided by biodiversity conservation, the difficulties associated with the management of MPAs and marine natural resources (particularly fisheries) now **brings conservation supporters closer to the fishing sector than ever before and in a broader sense includes biodiversity governance through an integrated process with other sectorial policies.** The period ahead offers a great opportunity for reconciliation and synergies, even if pressures exist and tensions are still high between some institutions. Indeed, some have evolved towards taking into consideration the issues and socio-economic stakeholders, whilst others tend to develop policies and management tools based on ecosystem or eco-responsibility approaches.

Several objectives in the Aichi **Strategic Plan for Biodiversity 2011-2020** now consolidated by decisions taken at Rio + 20 or at the Convention on Biological Diversity (CBD) COP 11 in Hyderabad in 2012 and reinforced by several Protocols of the Barcelona Convention and several European directives (see context) highlight the **commitments and international frameworks which show the efforts to be undertaken to improve the status of biodiversity and management of marine resources in the Mediterranean.**

Countries have made a commitment that by 2020, *"10% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures"*¹.

The MPAs in the **Mediterranean region** as a whole are not yet a regional ecological network of marine protected areas, despite the fact that a network of MPA managers exists (MedPAN). Given the magnitude of the pressures and challenges, achieving the objectives of the CBD, Barcelona Convention, or those associated with EU policies and frameworks will only be possible **in the short and medium term if there is a renewed, stronger, and coherent commitment from all the stakeholders** (international organizations, conventions, agreements), riparian states, NGOs, the scientific community, national institutions, MPA managers, private sector,

¹ Target 11 of the Aichi Strategic Plan for Biodiversity 2011-2020.

local populations/communities, etc.), and on every geographic scale (local, national, Mediterranean, European and international).

Of all the oceans, the Mediterranean Sea is unique by its geography, the intense pressure from populations and pollution, but also because it suffers the most from the impacts of climate change. Consequently, it should not only receive more support than other areas of the world to restore its ecosystems, rebuild its resilience and continue to provide goods and services, but also remain a key innovative region and a model for other regions in the world.

The following proposed aims to demonstrate the efforts which each Mediterranean country and stakeholder needs to deploy in their own way, for the short and medium term, in order for their MPA network to be operational and in accordance with international objectives.

This roadmap will also contribute to identifying measures to be taken during future discussions (the Barcelona Convention COP 18, SAP BIO updating, European policies, IMPAC III, etc.).

Why do we need a roadmap?

The complexity of spatial management and issues linked to the co-management of MPAs means that a synergy needs to be developed between different stakeholders because of their cultural, geographic diversity or their position on a local, national or transnational level in the governance of MPAs. It is thus essential to define a common vision and it is proposed to develop it through a roadmap which takes into account the following points:

- The needs of all the stakeholders and local populations are identified and taken into account,
- The constraints and obstacles which stakeholders encounter, at every level, are identified and solved,
- A given stakeholder must feel that they are being heard and understood by others,
- The coordination process is well informed and if necessary adaptable.

This roadmap was developed by the Secretariat of the MedPAN network jointly with RAC/SPA and in coordination with other regional partners (UNEP/MAP, WWF, IUCN) using a collaborative approach involving many representatives and stakeholders from the Mediterranean (donors, scientists, managers, fisheries representatives, NGOs,).

This proposed roadmap was drafted taking into account the provisions, targets and current recommendations on an international level to improve the network of MPAs (some of these elements are set out in the context section) and adapting them when appropriate to the Mediterranean context.

Thus, this roadmap aims to **define steps** that Mediterranean States, relevant organizations and other stakeholders could

individually and/or **jointly undertake to achieve**, by 2020, the objectives set for the network of MPAs.

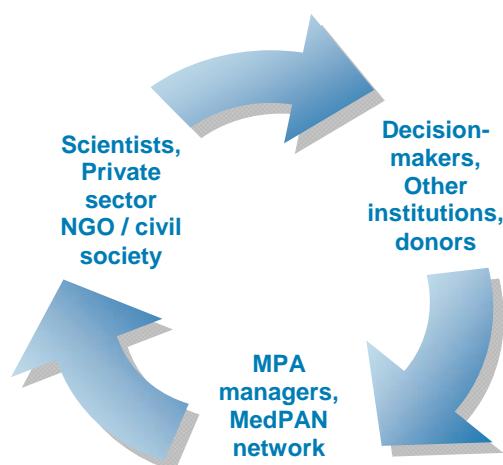
Despite the difficulties in achieving the assigned objectives many elements and examples of knowledge confirm that whatever the country it is possible to take action. However, political commitment needs to be re-affirmed and associated to actions.

The roadmap could contribute to improving decision-making processes and programmes already established under several conventions, agreements and policies (Barcelona Convention, Convention on Biological Diversity, European policies, etc.). It could also contribute to identifying actions to be undertaken during the process of updating the SAP BIO (Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean region) which is being led by the Regional Activity Centre for Specially Protected Areas (RAC/SPA) in 2012-2013.

The roadmap has been finalized based on the conclusions and recommendations made during an extensive **consultation process** between all the participants of the **MPA Forum** held in Antalya (Turkey) on 25th to 28th November 2012.

For whom is this roadmap intended?

This roadmap is addressed to **national, European, Mediterranean and International** stakeholders who are involved in MPA policies, planning and management in the Mediterranean region; the different type of stakeholders are shown below.



2. CONTEXT

2.1 The Mediterranean Sea, a hotspot for marine biodiversity

The Mediterranean is a semi-enclosed sea whose waters bathe the coasts of twenty one countries of a region that has been for centuries the cradle of great civilizations. Its geological and human history has given the **Mediterranean region its richness** in terms of biodiversity, but also in terms of social, cultural and political diversity.



Known as one of the **planet's key areas for marine biodiversity**, the Mediterranean Sea hosts habitats, species and assemblages of particular ecological importance. Its richness and quality contribute to the populations' well-being and to the development of coastal areas.

Although there are still significant gaps in information and reliable data on the biodiversity of many Mediterranean zones, a recent scientific assessment coordinated by the RAC/SPA identified 10 unprotected pelagic areas that conform to the criteria² set out under the CBD for Ecologically or Biologically Significant Areas (EBSAs).

² Uniqueness or rarity, Special importance for life history of species, Importance for threatened, endangered or declining species and/or habitats, Vulnerability, fragility, sensitivity, slow recovery, Biological productivity, Biological diversity, Naturalness (CBD Decision IX/20, Annex 1):



Other regional initiatives have contributed to identifying some key areas to be protected: WWF identified 13 key areas to protect (2001), Greenpeace identified 33 marine reserves (2004), ACCOBAMS identified 15 areas to protect (2007). More recently, Oceana, in the MedNet report, proposed 100 sites for a network of MPA (2011, 2012), CIESM identified 8 zones for future transnational Marine Peace Parks (2011).

A study was done in 2012 by MedPAN and RAC/SPA on the Status of MPAs in the Mediterranean³. This roadmap has used the study's results and conclusions to define its objectives.

2.2 Pressures

Mediterranean marine ecosystems are under significant pressure. The risks are linked to the intrinsic value of ecosystems, but also the loss of biodiversity and natural habitats which play a major role in human health, lifestyle, food production and availability of natural resources for the economic development and well-being of coastal populations.

The Mediterranean Sea is subjected to **anthropogenic disturbances** especially along the coasts and new potential or real pressures are emerging in the open sea. It

³ Gabrié C., Meola B., Webster C. 2012. *The Status of the network of Marine Protected Areas in the Mediterranean*. MedPAN & RAC/SPA. Ed: MedPAN Collection.

is also faced by a transformation of its environmental characteristics due to **global changes**.

The impacts of coastal development (agricultural, industrial) and **urbanization** are among its main threats and these have intensified over the last few years. 450 million people live in the Mediterranean basin, 40% of whom live on the coast. This significant coastal demographic growth contributes to degraded landscapes, soil erosion, increased waste discharges into the sea, loss and fragmentation of natural habitats as well as deteriorating the state of vulnerable or endangered species.

The development of activities in coastal areas (fishing industry, aquaculture, tourism, urbanization,...) has created economic opportunities, but also affected the local people's standard of living.

Being one of the world's most important **tourism** destinations, the Mediterranean region attracts about 30% of international tourism which, while generating benefits to the countries' economy, also generates significant negative impacts on the marine environment through uncontrolled coastal zone development, its impact on the degradation of seagrass meadows, increased use of water resources and production of solid wastes and sewage.



Maritime transport is another important economic activity for the region: it represents about 30% of the international shipping trade and 25% of maritime oil transport. The associated risks of

accidental or deliberate pollution, transport of exotic species are still poorly controlled.



Fishing is also an important activity in the Mediterranean in terms of employment, income and food security. Recreational fishing is an important sector for certain territories. Its continual development is poorly controlled. The uncontrolled rise in fishing efforts registered over the last decades in a number of Mediterranean countries has led to the decline of many fish stocks. According to recent evaluations made within the framework of the General Fisheries Commission for the Mediterranean (GFCM), 90% of the assessed fish stocks were overexploited.

The Mediterranean Sea is also considered to be one of the seas where the consequences of **climate change** will be the most visible in the years to come. Many areas are already affected by these impacts, particularly coastal erosion. Many scientists and sea users have observed the arrival and spatio-temporal evolution of **new marine species, some of which are invasive**.

Aquaculture puts a localized and relatively strong pressure depending on the site and its development which is backed by many public policies raises questions in terms of its impact especially on the environment, fisheries and the associated stocks of raw material required to supply it.

Ongoing changes in the availability of resources and the cost of **energy** has led to a growing variety of pressures and makes spatial planning more difficult for stakeholders interested in the area (desalination, wind/tidal turbines,...) or the deep sea resources (aggregates, oil, gas, rare minerals, biotechnology). This reduces the surface area available for MPAs or traditional stakeholders (artisanal fishing) and affects the required connectivity or representativity of the network of MPAs.

It is essential to take into consideration the vulnerability of coastal and marine ecosystems and to balance the socio-economic and cultural aspects of traditional stakeholders in such a pressurized context, to ensure the resilience of these ecosystems and to promote sustainable exploitation practices of renewable resources.

2.3 The current institutional framework

2.3.1 On an international level, applicable to all the Mediterranean countries

Within the Convention on Biological Diversity (CBD) framework, countries have committed to the "Aichi targets" which aim to ensure a better protection of biodiversity via a strategic plan for the 2011-2020 period.

Through the Aichi Target 11 of the Strategic Plan for Biodiversity 2011-2020, countries have pledged to improve the biodiversity's state by protecting ecosystems, species and genetic diversity.

Moreover, MPAs through their multiple functions are important tools to achieve the Aichi target n°14 by highlighting the benefits of biodiversity and ecosystem services.

In addition to the Aichi targets, the commitments made at the 11th Conference of Parties of the CBD in Hyderabad (8-19 October 2012) confirmed the importance of developing economic approaches and to highlight ecosystem services and strengthen national and international funding mechanisms for biodiversity. A decision was taken to double the funding linked to biodiversity in developing countries by 2015 and maintain it to 2020 and to strengthen national policies and plans for biodiversity.

One of the elements at the CBD Conference in Hyderabad was also to recognise the importance of communities in supporting policies that integrate biodiversity. Moreover, to formally adopt the work on the State inventories of Ecological or Biologically Significant Areas (EBSAs) and helped to show the importance of quality information on Mediterranean EBSAs in order to achieve an effective setting-up of a global scientific inventory of these areas.

The Millennium Development Goals (MDGs) are strong international commitments that shape development policies in the Southern and Eastern Mediterranean countries. The targets and indicators of Goal 7 "Ensure environmental sustainability" will be adjusted in 2014 and 2015 to integrate MDG and CBD targets and indicators within a sustainable development indicator framework. These adjustments will no doubt have an impact on the regional variations of these commitments, especially in the Mediterranean.

The **Montego Bay Convention** (1982) on the Law of the Sea (UNCLOS) declared that marine resources are a common good and commits States to protect and preserve the marine environment and to cooperate globally for this purpose. However, the development of ecosystem-based approaches, gaps in legal texts are regularly singled out demonstrating the

difficulty of regional agreements, the risks in the context of growing appeal for deep sea resources.

The **international fisheries regulations** plan and implement, through RFMOs such as GFCM in the Mediterranean, the rules of exploitation/extraction in open sea areas and enable to assess whether these States comply with the regulations (prohibition of bottom trawling deeper than 1000 m, closed seasons for tuna fishing,...). Such measures do not exist for biodiversity or MPAs.

The limitations and challenges in developing **MPAs in the open sea** are important and are primarily of an institutional, political and regulatory nature. State positions are very varied and many discussions are underway to change measures or test options in certain sub-regions. Heads of State and governments made a commitment in the "**Declaration of Rio +20**" (*paragraph 162*) to implement the appropriate international instrument under the auspices of the United Nations Convention on the Law of the Sea (UNCLOS).

2.3.2 On a Mediterranean level

It is obvious that one of the challenges for Mediterranean States in the coming years is to **combine their efforts to reverse the degradation trends** in the marine and coastal environment and ensure the long term conservation of biodiversity. This needs a **multi-sector governance approach** using the most appropriate tools, in accordance with the globally and regionally agreed targets for the conservation and sustainable use of natural resources.

In this context, Mediterranean countries have embarked since 1975, through the **Barcelona Convention and its Protocols**, on a series of cooperative, coordinative and mutual assisted

processes aimed at protecting the Mediterranean, conserving its biological diversity and combating pollution.

The Mediterranean countries thus dedicated one of the Convention's Protocols to the conservation of biodiversity, especially by developing MPAs. This protocol (SPA/BD) enables the creation of Specially Protected Areas of Mediterranean Importance which include areas beyond national jurisdiction.

Determined to give new life to their collaborative effort, the Parties to the Barcelona Convention started in 2008 a process that led in 2012 to a high level of commitment by the riparian States in applying an ecosystem-based approach to the management of the Mediterranean's marine environment.

In parallel to this process, the development of a strategy has been underway since 2008 to promote protected areas incorporating areas beyond national jurisdiction.

An important effort has been made by the Mediterranean States to ensure a harmonization with the European Union's Marine Strategy Framework Directive (MSFD).

During their 17th meeting, held in Paris (February, 2012), the Contracting Parties to the Barcelona Convention renewed their pledge to reinforce effective regional cooperation for the protection of the marine environment and to take all necessary measures to make the Mediterranean clean, healthy and productive with preserved ecosystems and biodiversity. They adopted **11 Ecological Objectives to be achieved by 2020** as part of the application of the Ecosystem Approach (Decision IG 20/4). They particularly emphasized:

- The need to implement the CBD recommendations regarding the designation of EBSAs and the use of MPAs as an instrument for protecting the marine environment, including in the open sea.
- The importance of taking into consideration innovative governance options promoting the concepts of “Blue Economy” and “Ecosystem services”. Many of the Mediterranean MPAs have the potential to serve as case studies for the application of these concepts.

There are other agreements which are applicable to the Mediterranean Sea and promote MPAs among the tools required to achieve their objectives.

The **ACCOBAMS⁴ Agreement** provides for the establishment of MPAs in areas which serve as habitats for cetaceans and/or which provide important food resources for them.

The **General Fisheries Commission for the Mediterranean (GFCM)**, one of the regional fishery management

organizations (RFMOs) created under the auspices of the FAO, recommends establishing **fishing reserves and Fisheries Restricted Areas (FRAs)** as tools for the management of fisheries and for the preservation of the marine environment, including in areas beyond the States' jurisdiction. To date four FRAs have been established by the GFCM. ICCAT (another RFMO to manage tuna) has established, particularly for bluefin tuna, various restrictions associated with stock recovery. Discussions among its members regularly address the relevance or not in using the "MPA" tool in the management of large pelagic species.

The **Convention on Wetlands, commonly known as the Ramsar Convention** is an international treaty which was adopted in 1971 and entered into force in 1975. Its purpose is the conservation and sustainable use of wetlands and aims to halt their degradation or disappearance by recognising their ecological functions and their economic, cultural, scientific and recreational value. A Mediterranean initiative for these wetlands called "MedWet" was started in 1991 and aims under the Ramsar Convention to stop the erosion and degradation of Mediterranean wetlands and promote their sustainable use. All the Mediterranean countries, the European Union, UNDP, NGOs and international scientists are involved in this initiative towards the conservation and management of these areas, several of which are key interfaces between land and sea.

CIESM is a scientific commission set up at the States' initiative and which has grown from its original eight founding countries to **22 Member States** today. These support a network of several thousand marine researchers, applying the latest scientific tools to better understand, monitor and protect a **fast-changing, highly** impacted Mediterranean Sea. Its aim is to enhance

⁴ Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area

knowledge, promote exchanges between scientists, improve the quality of scientific output in the region and give impartial advice on various topics relevant to the Mediterranean's marine area.

2.3.3 On a European level

As members of the European Union, 7 Mediterranean countries⁵ are also bound to the **European Directives** applicable to the preservation and sustainable use of the marine environment.

The **Marine Strategy Framework Directive (MSFD)** is the most recent of them. It aims to achieve by 2020 a **Good Environmental Status (GES)** for the marine environment in European waters by following an integrated process involving initial assessments, descriptors, indicators, measures and monitoring programmes on a national level. It includes steps for establishing a **network of MPAs**, which will reconcile the protection of the environment with sustainable fishing practices.

This directive also complements the measures taken under the **Water Framework Directive (WFD)** and in the forthcoming years it will be necessary to develop strong synergies between the following two directives.

The two European Directives "Birds" (EC 79/409) and "Habitats" (92/43).

Faced with a significant erosion of marine biodiversity, the European Union has decided to provide an excellent and coherent network of natural sites which relies on the two European Directives: "Birds" (EC 79/409) and "Habitats" (92/43): the Natura 2000 Network. It is a network of sites which are of European interest and

whose management will balance the conservation of biodiversity and maintaining human activities through a local think tank consisting of all the stakeholders within each site. This network will complement the other networks of existing reserves or national parks.

The European Union's **Biodiversity Strategy** for 2020 shows the importance of protecting biodiversity, developing networks of MPAs and managing Natura 2000 sites (Objective 1). It also reflects a desire to integrate biodiversity and other policies and tools by specifying in one of its objectives (e.g. Objective 4) the importance of developing ambitious sustainable fisheries objectives, managing stocks *"through fisheries management without adverse effects on other stocks, species and ecosystems, in order to achieve a good ecological status by 2020, complying with the marine strategy framework directive"*.

The **Common Fisheries Policy (CFP)** is another instrument that involves binding measures and rules for the sustainable management of European fisheries for countries belonging to the European Union.

Established in 1983, the CFP has been revised to reverse the decline of European fish stocks and reduce the negative impact of fishing on the marine environment. The **new CFP** will enter into force in 2013 and specific measures are being finalized and raise many technical and political arbitrations.

2.4 The efforts to be undertaken

Many initiatives were undertaken by international and national organizations to help Mediterranean countries develop MPAs and improve their management, based on the measures and

⁵ Cyprus, France, Greece, Italy, Malta, Slovenia and Spain. Croatia will join European Union in 2013.

recommendations issued under the above international agreements.

The actions put in place include studies and field surveys to identify marine areas which are important to preserve, give assistance (scientific, technical and legal) and capacity building and awareness raising actions as well as networking initiatives aimed at promoting exchanges of experiences and lessons learned.

However, despite the efforts deployed and an existing network of MPA managers, **the Mediterranean's network of MPAs is still suffering from significant weaknesses⁶**, in particular the lack of coherence and representativity, as well as inadequate management in a number of existing MPAs. This observation shows that even if a group of individual sites exist, it is not a network yet. In addition, the difficulties to achieve the internationally defined objectives must lead us to develop new intervention methods and revise each and everyone's policies (managers, national authorities, institutions, donors, NGOs, researchers, etc.).

Improving the state of the Mediterranean MPA network requires **the following challenges to be met:**

- Make the current system of MPAs in the Mediterranean more ecologically representative and coherent in terms of its representativity, its geographical coverage and the connectivity between MPAs.
- Increase human and technical resources (exchanges of experience, tools, methods, etc.) linked to the

⁶ See the 2012 Mediterranean MPA Status Report (RAC/SPA, MedPAN)

management of MPAs.

- Increase financial resources and mechanisms linked to biodiversity and MPAs.
- Manage effectively and efficiently existing MPAs in the Mediterranean.
- Strengthen the synergies between all stakeholders on a local, national and international level.
- Integrate governance and legal-institutional frameworks in order to clarify action plans and ensure the sustainability of measures and MPAs.
- Enhance the MPAs laboratory and innovative role (technical, social, governance).
- Ensure the sustainability and efficiency of a MPA managers' network.
- Contribute to a sustainable management of Mediterranean resources.
- Develop activities to inform and educate on the MPAs environment, marine biodiversity and the interaction with sea users.

Valuable **opportunities** which could help improve the Mediterranean network of MPAs are the following:

- The ongoing revision of the SAP BIO⁷ within the Barcelona Convention's framework.

⁷ The SAP BIO is a comprehensive strategy for the conservation of Mediterranean biodiversity. Its objectives and orientations are derived from in-depth assessments carried out on national and regional levels to identify gaps and define priority actions. Although it was elaborated and adopted before COP 10 of the CBD, the SAP BIO provided elements for most of the Aichi Targets. The process being launched by RAC/SPA (2012) to revise the SAP BIO provides an excellent opportunity to incorporate this roadmap's recommendations into national and regional policies for biodiversity conservation.

- Applying the ecosystem approach within the Barcelona Convention's framework.
- Implementing international agreements for the open sea associated to its biodiversity.
- The remaining steps for implementing the MSFD, Natura 2000 at sea, the new CFP by EU Member States.
- The implementation of recommendations made at the Rio+20 Conference and meetings of the Parties to the CBD, including the main commitments expressed at the conference ("The Future we want").



Furthermore, the momentum started by the **CBD Strategic Plan for Biodiversity 2011-2020** should be maintained and regularly reinforced to help Mediterranean countries achieve the Aichi targets and in particular Target 11⁸:

The prospect of achieving the Strategic Plan for Biodiversity in the Mediterranean on time will only be possible if national authorities, NGOs, scientific research organizations, national agencies responsible for MPAs, MPA managers, local communities, private sector stakeholders (fishing, tourism, etc.) as well as donors **not only renew and reinforce their commitment to this strategy, but also develop synergies** and economise resources by working together in a more collaborative and significant way.

⁸ Target 11 of the Aichi Strategic Plan for Biodiversity: "By 2020, at least 17% of terrestrial and inland water areas, and 10% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes".

3. COMMON VISION

THE COMMON VISION

“To achieve by 2020 a connected, ecologically representative, effectively managed and monitored network of Marine Protected Areas in the Mediterranean which ensures the long term conservation of key elements of the marine biodiversity and gives significant support to the sustainable development of this region.”

4. STRATEGIC OBJECTIVES FOR 2020

Based on this vision and taking into account the context as summarized above, the activities presented in this roadmap will be geared towards achieving the following strategic objectives:

- **Strategic objective 1:** Establish an ecological network of MPAs which is representative and connected.
- **Strategic objective 2:** Establish an effective, efficient and sustainable management as well as good governance in Mediterranean MPAs.
- **Strategic objective 3:** Develop governance of Mediterranean MPAs which is integrated on a territorial level and with other sectors while promoting the sharing of environmental and socio-economic benefits.
- **Strategic objective 4:** Increase the allocation of financial resources to establish and maintain an ecological network of effectively managed MPAs.

Note: The numbering of these objectives and associated actions do not correspond to a specific hierarchy.



5. IMPLEMENTATION PRINCIPLES

- Develop new **synergies** within the MPA community and between conservation and stakeholders from other sectors (among the different scientific fields of study, between stakeholders: decision-makers, socio-economic players, MPA managers, local communities or the civil society at large, donors, etc.).
- Develop synergies and an institutional coherence between the various management levels (local, national, transnational).
- Promote **collaborative approaches** for managing MPAs based on an ecosystem approach (EBM) and integrated coastal zone management (ICZM) and integrating them in the marine spatial planning process, particularly the land and sea link and their interfaces (coastal, wetlands, adjacent territories).
- Strengthen the commitment of the **local population, particularly artisanal fishermen** and other stakeholders in the management and monitoring process.
- Enhance the MPAs role as a **laboratory** for conservation and their innovative role in terms of management and territorial governance.
- Capitalise on examples of **good practice** in the sustainable development field (sustainable use of natural resources, implementation of policies and "green" activities).
- Strengthen collaboration, exchanges and mutual assistance between MPAs and ensure the sustainability and effectiveness of a **network of MPA managers**.
- Encourage Mediterranean countries' decision makers to **meet the commitments** made in relevant regional and international agreements.
- Plan and implement the activities proposed in the roadmap according to the **international and regional agreement measures in force**, taking into account the role of implicated international/national institutions.
- On the one hand, strengthen the effective collaborations between the respective national and international agencies responsible for biodiversity (and the environment) and on the other socio-economic development.
- Consider the evaluation and monitoring of MPAs, public policies, funding in the Mediterranean as a cornerstone for improving the network's performance. The roadmap's results will be assessed to define new targets beyond 2020.
- Take into account the differences and complementarities between the northern, southern and eastern parts of the Mediterranean.
- Develop an adaptive and shared management as well as policies made over the long term through frequent and progressive learning processes which are regularly evaluated and supported by results obtained.

6. PROPOSED ACTIVITIES

The roadmap's proposed activities concern all stakeholders and every intervention level. Each level's integration is an important element of good governance. The details of each activity must be adapted to the stakeholders or countries' level of awareness and advancement, but are key to achieve the objectives.

In order to make each stakeholder more accountable, the roadmap has been built on three geographic levels: local, national and Mediterranean level. Depending on the geographic level, stakeholders are more or less mobilized especially those mentioned below, but not limited to just these:

- **Activities implemented on a local level**
 - The actions led in the MPAs and their surrounding areas will be implemented by MPA managers, but local populations, NGOs, local communities and authorities, socio-economic stakeholders, researchers and other stakeholders will also be involved.
- **Activities implemented on a national level:**
 - The actions will be implemented mainly by local/national authorities with support from NGOs, research institutes, national MPA agencies and organizations and networks representing the civil society, international organizations and donors.
- **Activities implemented on a Mediterranean level:**
 - The actions will be mainly implemented by competent international organizations (IGOs and NGOs), in partnership with donors and funding agencies with the support of national policies and local stakeholders. The Mediterranean level actions are essential to support and harmonize the actions suggested on a national and local level.

A transnational, bilateral or multilateral level applied to an intermediary geographical area situated between the national and regional level is essential and functional to develop agreements, particularly on the open sea or to manage an ecosystem approach which often does not take into account the administrative boundaries. It highlights activities implementing synergy and mutual recognition of national measures (transnational MPAs), defining common rules and institutional innovations. Despite these being developed, they have not been put forward here under the activities section in order to be concise and because feedback has shown that they generally require the mobilization of the same stakeholders as the actions on a national level with certain regional experts (lawyers, researchers, institutions, NGOs, etc.) and a strong political will. If one starts with the lowest common denominator it will facilitate the implementation. The consolidation of national management measures are a priority even in the context of developing transnational actions in order to make this transnational level more efficient and to facilitate the change of levels. Some activities refer to this on a regional or national level in the body of the roadmap.

Communicative activities are transversal and must be developed and adapted to all levels. Targets and messages are differentiated according to the roadmap's key objectives. They will need to be developed in relation to each objective.

The actions are sometimes listed with certain key points highlighted in italics.

Note: The items mentioned in each activity's timetable are only there as an indicator. Sometimes, they indicate actions to be led by 2014 or 2015 and not over the full 2012-2020 period, but this is just to show the preliminary nature and essence of these actions compared to the next or the link between the action and an ongoing international timetable (European, other) without seeking to be specific to the nearest year. However, many of these activities should be carried out over time and these require a continuous effort.



6.1 Strategic Objective 1: Establish an ecological network of MPAs which is representative and connected

From a regional perspective, the current MPA system is **not representative** of the Mediterranean's habitats and ecosystems diversity. Indeed, most Mediterranean MPAs are currently **coastal** and a number of coastal zones are still unprotected despite their essential ecological and socio-economical role on a national or Mediterranean level. **85% of the currently protected coastal sites are along the northern coasts of the Mediterranean basin** which emphasises the low number of MPAs on the southern and eastern coastlines.

Currently, the preservation of deep-sea ecosystems and the creation of MPAs in the **open sea** (high seas) are topics of growing importance due to the presence of key habitats and species which are little known and should be protected.

Deep sea and open sea ecosystems (canyons, abysses) are of great importance in terms of ecological connectivity with surface and coastal waters (sedimentation, terrigenous pollution, nutrient ascents, cycles linked to plankton...). These all play an essential role in supplying a food source for pelagic species such as threatened cetaceans and sharks. Also, they have the spatial capacity to fulfil the target (of 10%) set by international agreements for the creation of MPAs.

However, their size and distance from the shore specification require higher institutional arrangements and legislative harmonization as well as higher budgets to support recurrent management activities.

The expansion of several countries' EEZs can also interfere on some international actions planned for MPAs in the open sea.

Many MPAs in the Mediterranean are geographically and **ecologically isolated** as they were not established to serve a representativity and connectivity objective within a network, but as a scientific and political compromise. The distance between each of them is often too large to ensure their **ecological connectivity** and the viable functional maintenance of marine meta-populations.

All the MPAs created in the Mediterranean cannot be defined as being part of an **ecological network**, but are initial systems from which a consistent and coherent network must be established, particularly integrating some MPAs in the open sea.

Thus the **ecosystem-based approach and the gap analysis** will be reinforced for the selection and designation of future MPAs and their management.

An increasing amount of work on **MPA indicators and monitoring** has been carried out in the Mediterranean and worldwide in order to improve our knowledge on key marine biodiversity components. A major challenge for any network is to consolidate reliable monitoring measures.





Some countries have established **national agencies or put in place policies** which are specifically for MPAs.



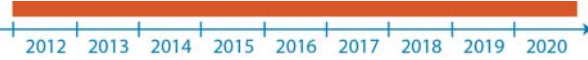
In this context, the development/strengthening of marine **Natura 2000** MPA sites especially on a network level represents a major challenge for the **Northern or European** part of the Mediterranean.





For **Southern and Eastern Mediterranean** countries, strengthening the network, the effective management of MPAs, and creating new ones on solid ecological criteria represent real challenges.



Expected Results:

- Coverage, quality and reliability of habitat and species inventories and quality mapping are strengthened to improve the representativity and connectivity and consolidate the monitoring of the Mediterranean MPA network.
- Standardized and quality measures are developed to improve on capitalization and monitoring (biological, socio-economical, governance).
- Under-represented ecosystems and other components of marine biodiversity in the existing MPA system (on a national and regional level) are identified and incorporated.
- National plans to achieve Aichi Target 11 of the CBD's Strategic Biological Diversity Plan 2011-2020 are elaborated.
- Representation of Mediterranean MPAs in the regionally and globally recognized protected areas networks is improved.
- Existing MPA governance systems are assessed with regards to their suitability for achieving Mediterranean MPA objectives.
- National and regional databases of MPA habitats and species are established and used as a tool for MPA planning and management.
- Maintaining the regional MPA database (MAPAMED) is guaranteed.

Actions on a local level	1.1	 <p>Assess, using the results of the activities conducted on a national level described in 1.3, the adequacy of the geographical and ecological coverage of MPAs with the view of proposing, where necessary, adjustments to their surface and/or zoning.</p> <p><i>Giving priority to habitats of special importance for threatened species and habitats that are essential for fishing resources (breeding grounds, nursery, etc.).</i></p>
	1.2	 <p>Ensure that monitoring systems comply with requirements</p> <p>referred to in activity 2.1 with the objective of reinforcing the representativity and connectivity of the network.</p>
Actions on a national level	1.3	 <p>Strengthen coverage, reputability and reliability of habitat and species inventories with the view of providing reliable information to improve the representativity and connectivity of the MPA network.</p> <p><i>Particular attention will be given to the development and capitalization on empirical knowledge and/or traditional users in the system based on the many existing methodologies and good governance in the field.</i></p>
	1.4	 <p>Undertake national gap analyses to identify the ecosystems and other components of marine biodiversity that are under-represented in the existing MPA system.</p> <p><i>The gap analyses will be based on methodological guidelines developed regionally and internationally. They should also be able to identify the necessary steps to ensure the connectivity between Mediterranean MPAs and therefore the actions to be undertaken to fill the gaps.</i></p>

	1.5	 <p>Establish and implement national plans to designate and/or extend MPAs to address the under-representation cases identified by the gap analyses, taking into account the Aichi target n°11.</p> <p><i>The gap analyses and the elaboration of the national plans should be conducted through a scientifically-based process that ensures the full and effective participation of stakeholders (local communities, sea users, scientists, etc.). Greater support must be given to research institutions in the marine field.</i></p>
	1.6	 <p>Regularly identify and propose candidate MPAs to be listed in regionally and globally recognized protected areas networks:</p> <p><i>SPAMI List, FRAs, Biosphere Reserves and World Heritage sites, Ramsar sites, IMO PSSAs. Also to continue efforts started in 2008 by UNEP/MAP, RAC/SPA and the European Commission to create SPAMIs taking into account open sea areas.</i></p>
	1.7	 <p>Carry out information and communication campaigns in order to promote environmental protection and associated biodiversity policies with decision makers, the general public and users of the marine environment to improve political commitments to meet the needs for consolidating the network.</p> <p><i>The MPAs role is not only a management tool for conservation, but also a tool for socio-economic development and to fight against poverty.</i></p>
<p>Actions on a Mediterranean level</p>	1.8	<p>Develop agreements to put in place harmonized methods to identify and then assess the representativity of the network, its connectivity and promote them nationally.</p> <p><i>We can build on methods developed for Natura 2000, for example, or those for MSFD.</i></p>

1.9	 <p>Compile existing data and encourage monitoring and harmonise protocols to establish habitat and species databases in support of the gap analysis on the representativity and connectivity of Mediterranean MPAs and as a tool for MPA planning and management.</p> <p><i>Strengthening the networks of taxonomists and promoting governance built on an effective and in depth research is preferred. Research on modelling habitat/species may be one of the avenues to be developed.</i></p>
1.10	 <p>Disseminate technical tools for MPA system planning and facilitate the exchanges of experience and good practices, providing assistance to national authorities.</p>
1.11	 <p>Offer assistance to national authorities and, where needed, facilitate the multilateral processes for the identification of potential MPA sites in areas beyond national jurisdictions taking into account the existing advances and constraints of countries' positioning, scientific work and international, transnational or multilateral agreements for open sea areas.</p>
1.12	 <p>Develop and maintain the MPAs national and regional (MAPAMED) databases and ensure that they are integrated into the IUCN and UNEP global protected area database (WDPA).</p> <p><i>Develop improvements based on the existing one, doing it in stages and on the basis of a progressive reliability of information. The databases should integrate:</i></p> <ul style="list-style-type: none"> ▪ <i>Standardized information and indicators on habitats and species.</i> ▪ <i>Information on MPA management, governance, financing, budgets and environmental services.</i> ▪ <i>International standards used for MPA data.</i>

	1.13	 <p>Develop institutional agreements for the protection of biodiversity and/or the management of MPAs in ABNJs in transnational pilot sites:</p> <ul style="list-style-type: none">▪ By integrating advances in governance and international agreements.▪ By developing innovative and well-grounded governance.▪ By offering innovative institutional frameworks reinforcing the integration of Fisheries and Conservation governance in these types of territories.
	1.14	 <p>Facilitate the establishment of monitoring-evaluation mechanisms for the actions mentioned in the roadmap and international and Mediterranean agreements in order to give regular information on the progress of policies and results.</p>

6.2 Strategic objective 2: Establish an effective, efficient and sustainable management as well as good governance in Mediterranean MPAs

MPAs **management effectiveness** requires a national political will which ensures the establishment of a clear institutional framework, proper planning as well as adequate human, technical and financial resources. Thus, good management requires developing integrated and coordinated policies, clarifying responsibilities, and legal, institutional and administrative frameworks (see Objective 3).

The most operational and effective mechanism of governance to manage natural resources and MPAs is co-management as it promotes stakeholders accountability and has useful adaptive management methods to manage complex systems such as ecosystems. It is essential that the different stakeholders and the communities are involved in the co-management processes.

Several mechanisms of governance and management exist like those developed by the populations. Contracting Parties to the CBD (decision XI/24) confirmed the importance of integrating a diversity of statuses and modes of governance in networks of MPAs. In addition, the implementation of management tools such as MPAs or reserves by artisanal fishermen are being developed and management measures already exist in several sectors. The conservation stakeholders, as those from other sectors, must recognize the existing measures which provide resource management and biodiversity to develop synergies rather than oppose them.

The effectiveness of MPAs is directly correlated to their status and its

associated rules. However, the protection status of Mediterranean MPAs is currently extremely variable if not complex and not only within MPAs (zoning often lacking), but also on a regional and national level.

In the Mediterranean, MPAs are not **managed effectively** and could be designated as being "paper parks". Indeed, only 50% of Mediterranean MPAs have a **management plan** and clear objectives.

Most of them have low quality monitoring which is not always done in and around the MPA. This is valid for biological monitoring, but even more so for socio-economic monitoring.

The key elements for developing a co-management process are a good knowledge on the usages and pressures found in MPAs and their surrounding areas, as well as anticipating the development of future activities or pressures in order to establish an initial state and elaborate and revise a management plan.

Thus, taking the **socio-economic aspects into consideration and improving the integration of the territory's stakeholders** is increasingly becoming a prerequisite for effective management in order to overcome the usual "MPA vs. users" opposition.

Resources, whether equipment, human or financial are often inadequate; Mediterranean MPA managers rarely have the necessary basic requirements in terms of qualifications and financial resources to put in place a proper management of the

sites they are in charge of (see also Objective 4).

Poor surveillance or a lack of laws and regulation enforcement is persistent and one of the MPAs great weaknesses in this region.

Although the involvement of managers in taking into account the ecosystem approach is important, one of the major challenges lies in consolidating control measures and surveillance, law enforcement and management funding. Without management and without control and effective law enforcement, trust is lost and MPAs cannot be managed.

Faced with anthropogenic pressures linked to the density of the local population, increasing demand from companies and more important climate changes than elsewhere, the stakeholders involved in the Mediterranean Sea are confronted by a major challenge: how to maintain the ability to secure goods and services which benefit the people and economic stakeholders?





Faced by these challenges, which are stronger in the Mediterranean region than in other regions of the world, this region must become a leader in long-term sustainable management of biodiversity, respecting its territories, populations and ecosystems.










Expected results :




- Mediterranean MPAs management and governance systems' effectiveness is assessed regularly (around every 4-5 years).
- The entire system of governance and management is reinforced by an integrated approach and by the implementation of actions under Objective 3 and 4 (integration of policies, stakeholders, territories, synergies and taking into account existing frameworks, funding synergies).
- Mediterranean MPAs have implemented management plans which are regularly updated and incorporate sustainable management tools developed by other sectorial plans.
- Involvement of stakeholders in the management of Mediterranean MPA is strengthened.
- Institutional frameworks governing Mediterranean MPAs are clarified and barriers to the proper institutional functioning of MPAs are identified and removed.
- Mediterranean MPA managers and national authorities' skills are improved for better governance and management.
- National business plans and one for each MPA are prepared, adapted to management needs and regularly updated.








Actions on a local level	2.1	 <p>Strengthen the active participation of local stakeholders in national and regional networking initiatives.</p> <p><i>Exchanges of experience, mutual technical/scientific assistance etc.</i></p>
	2.2	 <p>Strengthen the MPAs monitoring system and its capacities:</p> <ul style="list-style-type: none"> ▪ <i>By establishing a minimum of monitoring.</i> ▪ <i>Using harmonized international standards and by standardizing monitoring between MPAs, in support of management decisions and national and regional consolidations especially for representativity and connectivity monitoring.</i> ▪ <i>Covering all aspects of MPA governance, but also socio-economic and biological monitoring as well as any aspects linked to climate change and the arrival and evolution of invasive species in and around the MPA.</i> ▪ <i>Establishing reliable 'zero states'.</i> ▪ <i>The implementation of national agreements, dashboards and harmonized systems must support the local implementation of such monitoring which is useful for measuring the evolution of the network and decision making.</i>
	2.3	 <p>Assess MPAs staffing needs and develop short and medium term recruitment plans, so that all MPAs have competent management teams with adequate staffing.</p>
	2.4	 <p>Develop and regularly update MPA management plans and business plans according to management needs and management effectiveness objectives, in a format that can be integrated on a national level.</p> <ul style="list-style-type: none"> ▪ <i>In assessing in advance the needs of each MPA in terms of management and resources (competent staff, needs, appropriate equipment, etc.).</i> ▪ <i>These plans are useful for management monitoring and setting up funding and governance measures on a national and regional level (see Objective 3 and 4).</i>

	<p>2.5</p>	 <p>Evaluate MPA management efficiency and enhance the visibility of measurable results and evolutions.</p> <p><i>Thus, supporting more effectively priority interventions and the prioritization of objectives which are still undeveloped.</i></p>
	<p>2.6</p>	 <p>Involving stakeholders by highlighting what already exists and local populations then establish formal consultation processes to involve them in the management planning and decision-making, so that they adhere to and participate in the formulation of the MPAs management objectives.</p>
	<p>2.7</p>	 <p>Strengthen the State's decentralized institutions and local authorities in their surveillance duties, regulation enforcement and local governance mechanisms in synergy with national resources and measures</p>
<p>Actions on a national level</p>	<p>2.8</p>	 <p>Assess management effectiveness and governance system for the whole network of existing MPAs:</p> <ul style="list-style-type: none"> ▪ <i>Using and further developing the set of management effectiveness indicators elaborated for Mediterranean MPAs, as well as management dashboard systems.</i> ▪ <i>By putting in place mechanisms to harmonize national indicators which are relevant to management and national observatories. Test and improve them in order to compare the situations of MPAs over time and support monitoring via a national system of successful MPAs. A peer review may also be put in place to back this system.</i> ▪ <i>The evaluations will be done taking into account the opinion of MPA managers, scientists, users of the marine environment and local communities.</i> ▪ <i>Including the potential associated with the SPA/BD Protocol for governance in open sea.</i>

2.9	 <p>Improve national policies and strategies relevant to the management of MPAs and ensure that each MPA has a management plan with clear objectives and based on the best available knowledge.</p> <ul style="list-style-type: none"> ▪ <i>In seeking clarification and simplification of the governance and administrative frameworks, including in terms of synergy and development of institutional bridges between different ministries (see Objective 3).</i> ▪ <i>In particular integrating local knowledge and governance through co-management and also giving a clear decentralization role.</i> ▪ <i>Ensuring that national authorities adhere to global and regional legal instruments on the development of MPAs.</i> ▪ <i>Testing innovative management approaches.</i>
2.10	 <p>Involve stakeholders in the planning and management of MPAs by enhancing participatory management, particularly by setting up consultation mechanisms on a national and local level and by increasing raising awareness actions and giving more information on the conservation of the marine environment.</p>
2.11	 <p>Develop and/or strengthen effective and ongoing national capacity building mechanisms for local or national authorities in charge of MPAs, MPA managers and the main stakeholders.</p> <p>It is important to include the exchanges of experience among stakeholders (<i>including the financial mechanisms, the management's effectiveness, fishing management tools, etc.</i>)</p>

	2.12	 <p>Review and, if necessary, amend the existing legal and national institutional systems applicable to MPAs.</p> <p><i>Particular attention will be paid to the following points:</i></p> <ul style="list-style-type: none"> ▪ <i>Identify and remove barriers which block the good functioning of institutions and other authorities responsible for the management of MPAs.</i> ▪ <i>Establish institutional arrangements that enhance and ensure surveillance, effective control and enforcement of legal measures.</i> ▪ <i>Test new partnerships to improve the effectiveness of pilot sites.</i> ▪ <i>Define the co-management bodies associated to the different levels and links between the co-management levels.</i> ▪ <i>Provide the right framework for the involvement of local communities and tools to develop community MPAs.</i>
	2.13	 <p>Develop additional communication campaigns to those undertaken in Objective 1, 3 and 4 and aimed at promoting good examples of management and results in order to stimulate the development of well-managed MPAs.</p>
<p>Actions on a Mediterranean level</p>	2.14	 <p>Develop and make available technical tools including guidelines, standards and indicators for the MPA management and MPA evaluation.</p> <p><i>The guidelines and other technical tools should be adapted to the Mediterranean context and, where necessary as appropriate, to sub-Mediterranean levels.</i></p>

2.15	 <p>Provide assistance to the relevant national authorities in conducting MPA management effectiveness evaluations:</p> <ul style="list-style-type: none"> ▪ <i>Based on existing methodologies for assessing MPAs effectiveness, evaluation of management plans, as well as the network's management (Natura 2000, other).</i> ▪ <i>Supporting the development and implementation of national harmonized measures associated to assess management (indicators, dashboards, ...).</i>
2.16	 <p>Compile and disseminate information on lessons learnt in the context of MPA management, including success and failure stories (capitalization, exchanges of experience,...).</p>
2.17	 <p>Develop exchanges of experience linked to the elaboration and/or the review of existing MPA management plans and business plans in existing MPAs.</p>
2.18	 <p>Establish a regional capacity building mechanism for MPA managers.</p> <ul style="list-style-type: none"> ▪ Using a wide range of training approaches (training courses, in the field training, on the job training, online training modules, exchange visits, study tours, training of trainers, exchanges of experience, etc.). ▪ The mechanism should also target other stakeholders and decision makers.

	2.19	 <p>Facilitate the elaboration of:</p> <ul style="list-style-type: none">▪ A common categorization system for Mediterranean MPAs based on their main objectives and methods of management and regulation taking into account the need to harmonize this kind of system with those used internationally (IUCN categories, etc.).▪ Common approaches for the management of MPAs. <p><i>This will promote harmonization and complementarities between MPAs on a regional level and will allow the outcome of comparable elements between countries for regional assessments.</i></p>
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6.3 Strategic Objective 3: Develop governance of Mediterranean MPAs which is integrated on a territorial level and with the other sectors while promoting the sharing of environmental and socio-economic benefits

The preservation of biodiversity contributes significantly to the sustainable development of territories and economic activities. In addition to their central role in the conservation of marine biodiversity, MPAs are increasingly called upon to **play a role in the economic and social development** on a regional, national and local level as well as for the sustainable management of living marine resources and developing sustainable tourism and other **rational uses** of the marine environment. In fact, MPAs provide goods and services that are essential for many resident or passing communities.

However, managers should improve the integration of their MPA in its surrounding territory and its **territorial governance** by ensuring that there is a broad vision of the role of the MPA among the other local governance bodies. This will provide the right conditions for a stronger commitment from key stakeholders and local representatives so that there is less conflict and an instigation of shared management (co-management). In the coming years, one of the challenges of a co-management approach for Mediterranean MPAs will be to improve their **integration into their social and economic context**, in order to understand better and unite the different economic stakeholders in the MPA's co-management and not be perceived as an obstacle to socio-economic development.

The involvement of key stakeholders in areas located beyond the MPAs boundaries will reinforce the MPAs





position in **marine spatial planning processes** and facilitate the implementation of **ecosystem based approaches**.






Certain policies and subsidies can have adverse effects on MPAs and ecosystems; and can generate negative socio-economic effects over the long-term for local and national communities (fisheries, tourism, land use, etc.).






Understanding the multiple values of ecosystems and biodiversity for man's well-being, the economy and local communities can inspire countries to launch actions and policies needed to achieve social and environmental objectives.





Expected results :

- National policy frameworks on shared management (co-management) principles, MPA zoning based policies and various key principles relevant to European and Mediterranean policies are clarified and improved.
- MPAs and biodiversity are better integrated into sectorial policies.
- The interaction between MPAs and other sectors, as well as co-management are improved.
- Institutional agreements between fisheries and MPA institutions on all geographical levels allowing synergies and/or shared responsibilities are clarified.
- MPA management plans and fishery policies meet territorial integration and EBM (ecosystem-based management) objectives.
- The work developed by the fishing sector regarding EBM and creation of fisheries reserves is integrated into regional assessments.
- Integration of MPAs in a broader coastal and marine spatial planning, in national policies and in national and regional databases is improved.
- Wetlands, the areas and stakeholders around the MPA, the land-sea links are better understood in the MPA's governance and in integrating the MPA to its territory.
- Sustainable activities within and around MPAs which give socio-economical benefits to local communities and respect the MPAs status, objectives and specificities are developed.
- The MPA ecosystem's services and function and the services provided by the MPA are regularly evaluated and promoted on a local, national and regional level; the data is integrated into national statistics, regional databases and is taken into account in creating national policies.
- National harmful subsidies for the marine and coastal environment are identified and progressively replaced.
- Investment programmes and innovative public procurement procedures and/or innovative "green" incentives are developed.

<p>Actions on a local level</p>	<p>3.1</p>	 <p>Establish adequate MPA zoning through consultation processes to conciliate habitat conservation requirements and the need for maintaining and/or developing human activities, provided they can be controlled and maintained while remaining within the MPA management plan's objectives.</p> <p><i>Develop zoning in MPAs which is linked to multi-usages, but where non-extractive zones are also included and which are defined with the stakeholders.</i></p>
	<p>3.2</p>	 <p>To understand and integrate better the sustainable socio-economic activities (fishing, recreational, tourism) within the MPA, taking into account conservation objectives and good "green" practices, as well as cultural and sustainable sectorial practices.</p>
	<p>3.3</p>	 <p>Improve MPA staff skills, particularly in:</p> <ul style="list-style-type: none"> ▪ Managing fishery (including recreational fishing) and tourism activities. ▪ Dealing with evolving territories. ▪ Liaising with stakeholders and establishing conditions for shared management. ▪ Integrating monitoring measures on biological, socio-economic and governance aspects. ▪ Evaluating the management's effectiveness and adaptive management. ▪ Developing innovative tools for self-funding management.
	<p>3.4</p>	 <p>Promote the development of new sustainable income generating opportunities for local populations taking into account MPA objectives and zoning agreements, including through the use of ICT and other relevant innovative technologies.</p>

	3.5	 <p>Highlight the natural and cultural heritage, including sustainable traditional practices and local knowledge.</p>
	3.6	 <p>Develop communication and raising awareness activities targeting the local population, visitors, schools, fishermen, decision makers, donors, etc.</p> <p><i>Particularly to highlight the MPA's values, functions and potential to contribute to the social and economic development, with the view of gaining stakeholders' support and getting a wide range of allies.</i></p>
	3.7	 <p>Develop innovative policies on the local authorities' initiative which integrate biodiversity and give support to MPAs and their management in coastal territories.</p>
<p>Actions on a national level</p>	3.8	 <p>Establish adequate zoning systems for MPA, through consultation processes, to improve the conciliation between habitat conservation requirements and the need for maintaining and/or developing human activities.</p> <p><i>It is important that all the activities can be controlled and maintained while remaining within the MPA management plan's objectives.</i></p>
	3.9	 <p>Integrate policies, build institutional bridges and clarify governance frameworks between sectorial policies and policies relevant to MPAs on every geographic level.</p> <p><i>This action is particularly for synergies and to develop agreements with the fishing industry, but also tourism, surveillance, taxation, finance sectors, reinforcing the legal side and territorial development policies.</i></p>

3.10	 <p>Take into account the issues of representativity and connectivity of MPAs and the MPA network in an ecosystem based approach, associated with the marine spatial planning process.</p>
3.11	 <p>Where possible and appropriate encourage the equitable sharing of social and economic benefits derived from MPAs, <i>including for poverty alleviation and improving the standard of living of local populations based on rigorous evaluations of various cost-benefits associated with MPAs.</i></p>
3.12	 <p>Develop evaluations on ecosystem services and values using TEEB (The Economics of Ecosystems and Biodiversity) approaches on coastal and marine issues and promote a better understanding of the local and national economic services provided by marine ecosystems.</p> <p><i>This work could be developed in conjunction with monitoring, but also be integrated into national statistics, national and regional databases and supply the mapping of ecosystem services linked to marine biodiversity and human activities.</i></p> <p><i>Case studies of economic evaluation of Mediterranean MPAs have shown that the prospective side can incorporate uncertainty in the scenarios. They stressed the importance of qualitative assessment and recommended an evaluation approach directed more towards the relationship between MPAs and territorial development.</i></p>
3.13	 <p>Annually review national subsidies and progressively phase out harmful elements linked to marine and coastal habitats degradation (including those corresponding to activities and territories where the quality of the marine environment is important such as watershed). Also promote financial incentives for conservation and sustainable use of marine resources.</p>
3.14	 <p>Develop “green” public procurement procedures around marine and coastal issues and linked to the development of the "Blue Economy" which respects biodiversity.</p>

	3.15	 <p>Promote the role of MPAs as laboratories and/or showcases for environmental best practices and territorial governance.</p>
Actions on a Mediterranean level	3.16	 <p>Promote the implementation and development of tools, better policies, guidelines and exchanges of experience and information linked to the integration of policies, improved co-management at local, national and transnational levels (associated with MSP, EBFM and ICZM)</p> <p><i>Particularly through promoting the setting up of alliances and synergies between "fisheries" and "MPA" governance systems, ecosystem management, integration of MPAs in spatial planning policies, clarification of legal and institutional frameworks, etc.</i></p>
	3.17	 <p>Facilitate stakeholder networking to promote alternative and/or innovative economic activities.</p>
	3.18	 <p>Coordinate case studies and pilot actions for the evaluation of MPA services and prospects for a blue economy which respect biodiversity.</p>

6.4 Strategic Objective 4: Increase the allocation of financial resources to establish and maintain an ecological network of effectively managed MPAs

The development of funding mechanisms for MPA management is particularly important in the current economic crisis context where budgets have been reduced, especially for ministries of the Environment and major funding bodies.

It has become vital to support and develop local or national initiatives to elaborate and manage national and local funding mechanisms in order to ensure an effective management for MPAs.

In addition to public funding, other options need to be investigated and assessed.

In this context, applying a “polluter/payer” principle and the use of “users/contributors” and “payment for ecosystem services” concepts may provide significant resources for MPAs.



Raising additional and diversified financial sources for MPAs on both national and local levels are recognized as some of the best ways to reduce the risk of inadequate funding and to improve MPA management effectiveness through:




- Government budget allocations,
 - Special taxes that are legally earmarked to support protected areas,
 - Sea user fees and fines that are earmarked to directly support protected areas and/or where an important part is returned to the local territory,
 - Debt-for-nature measures in exchange for actions in favour of nature.
- Private contributions and corporate sponsorships,




Different national policies and financing mechanisms for protected areas have been developed throughout the world (*including the establishment of legally independent foundations and trust funds for protected areas*) opening great opportunities for developing similar mechanisms in the Mediterranean countries.



Expected Results:




- Systematic "business plans" for MPAs, but also for national MPA systems are elaborated and improved following a gap analysis of the MPAs national funding system. They rely on a reasonable management which is based on efficiency, transparency and monitoring by an adequate reporting system.
- Institutional frameworks on financing mechanisms are evaluated then improved in order to mobilize self-financing and financial sources for national MPA systems and on an individual MPA level.
- New financial mechanisms on a local, national and regional level in support of MPA management efficiency improvements and MPA network sustainability are developed or consolidated.
- The status of funding mechanisms for MPAs is periodically evaluated and is one of the indicators used in assessing the status of Mediterranean MPAs.
- Donors help to finance conservation or MPA management in the Mediterranean, and new donors are mobilized.

<p>Actions on a local level</p>	<p>4.1</p>	 <p>Endeavour to apply more sound financial management giving more importance to cost effectiveness, transparency and adequate financial reporting.</p> <p><i>The development, implementation and systematic evaluation of business plans on a local, national or regional level can help assess the financial management situation, its needs and optimize the support for MPAs.</i></p>
	<p>4.2</p>	 <p>Identify and test opportunities for the diversification of funding sources on a local level based on known, innovative or potential principles and mechanisms.</p> <ul style="list-style-type: none"> ▪ <i>Conduct a gap analysis which will support the definition of sustainable financing strategies.</i> ▪ <i>Some of these actions may be part of those mentioned in the MPAs management plans/business plans.</i> ▪ <i>Focus on mechanisms which reduce transaction costs.</i> ▪ <i>Strengthen the implementation of long-term funding mechanisms dedicated to MPAs and provide direct local feedback.</i> ▪ <i>Develop pilot projects, testing on an MPA level and/or local communities (payment for services, taxes, sponsor, donation systems, trust funds, ...) which will be capitalized on.</i> ▪ <i>Funding mechanisms associated with tourism activities must be compatible with the site capacity within each MPA and its management plan's objectives.</i>

<p>Actions on a national level</p>	<p>4.3</p>	 <p>Train the key stakeholders on a local, national level and influential institutions on a national level on sustainable financing systems for MPAs and links between business plans and management performance, including training on the implementation of existing financial or known systems.</p> <p><i>The capacity building tools will be as varied as the training of managers (exchanges of experience between countries and managers, developing tools, methods, capitalization, training-action ...)</i></p>
	<p>4.4</p>	 <p>Review national finance mechanisms, clarify the legal framework, investigate and test options for national long-term financing mechanism for MPAs.</p> <ul style="list-style-type: none"> ▪ <i>With the view of securing and diversifying the sources of funding for MPAs, through innovative funding approaches for national and local MPA systems and through new financial sources, including mechanisms supported by local territorial institutions as well as investment or special assignment funds.</i> ▪ <i>Funds supplied by revenue from tourism or recreational activities in MPAs could help diversify sources of funding. However, it is important to consider each MPA capacity and put in place appropriate legal and institutional frameworks for such funds.</i> ▪ <i>Gap analyses on existing information help to produce national strategies for sustainable funding directed towards the long-term financing of MPAs and the national system of MPAs, on developing national initiatives to fill in the gaps.</i>
	<p>4.5</p>	 <p>Establish national experiments for innovative financing mechanisms which will contribute to funding the national system of MPAs and/or financing individual MPAs.</p> <ul style="list-style-type: none"> ▪ <i>Focus on mechanisms which reduce transaction costs and provide long-term local funding mechanisms for MPAs with a direct local feedback.</i> ▪ <i>Innovations in polluter/payer contributions integrating the land-sea link would dedicate funding to restoration and marine conservation actions.</i>

<p>Actions on a Mediterranean level</p>	<p>4.6</p>	 <p>Improve spatial jurisdictions (delimitation of marine areas) and its impact on the States financial actions/skills.</p> <ul style="list-style-type: none"> ▪ <i>Encourage negotiated EEZs settlement processes in order to extend to national jurisdictions and their funding mechanisms beyond territorial waters.</i> ▪ <i>Identify possible funding mechanisms associated with open sea sites, including in terms of compensation and recognition of ecosystem services (exploitation of the seabed, wind, bluefin tuna, etc.).</i>
	<p>4.7</p>	 <p>Support the dissemination of information, exchanges of experience and capacity building on financing mechanisms and diversification of financial sources for MPAs on a national and local level, as well as planning national and local activities.</p>
	<p>4.8</p>	 <p>Undertake a regional consolidation on the gap analysis of national systems based on existing information and support the development of regional and national plans to address these gaps and focus on a long-term funding to help the sustainable financing of MPAs.</p>

<p>4.9</p>	 <p>Undertake a feasibility assessment and set up a Mediterranean fund to finance the improvement of the network of Mediterranean MPAs and reinforce the existing MPAs management.</p> <p><i>This could be done through an investment fund or a special trust fund which has an institutional base with one or more regional organizations. This would help to develop regional actions which give support to reinforcing the network of MPAs, a development of national funds for MPAs taking into account each country's specificities and promote activities linked to the creation and management of MPAs in Mediterranean zones beyond national jurisdictions. It will be able to rely on institutional funding, but also benefit from innovative mechanisms associated with the following actions:</i></p> <ul style="list-style-type: none"> ▪ <i>Develop financial incentives-conditions for the industrial exploitation sector of land or underwater mineral resources in the Mediterranean.</i> ▪ <i>Define legal mechanisms allowing to apply model sanctions which would contribute to national and regional biodiversity funds when offshore accidents (oil platforms, gas, boats) occur.</i> ▪ <i>Develop new taxation/contributive mechanisms associated with the maritime transport and cruise sectors, recognizing the services rendered by the Mediterranean ecosystems.</i> ▪ <i>Define a contribution from the sector associated with the bluefin tuna industry and large pelagics in general, recognizing the services rendered by the Mediterranean (to be promoted within ICCAT) with a support for MPAs.</i>
<p>4.10</p>	 <p>Develop sustainable and innovative financing mechanisms in support of regional networking activities dedicated to strengthening knowledge, capacity and policies on a local and national level on MPA issues (regional taxes, payment for environmental services, private contributions, and compensation measures).</p>

<p>4.11</p>	 <p>Regularly capitalize on innovative experiences and assess the status of national, regional and local financial mechanisms initiatives</p> <ul style="list-style-type: none"> ▪ <i>Indicators linked to the evaluation of innovative and sustainable financial measures and the level of funding for MPAs can complement the management effectiveness evaluation and contribute to MAPAMED regional database's consolidation.</i> ▪ <i>Periodically providing the status of funding mechanisms and MPA funding will allow to develop measures put in place by governments, donors and MPA managers.</i>
<p>4.12</p>	 <p>Improve the coordination of funding policies between donors and suitable measures for complex processes (what is the sustainability, what funding is available after projects, how to manage transitional periods?).</p> <p><i>These coordinated funding mechanisms are likely to reduce competition between agencies, dissipation and the effects of income or recurrent funding without results when linked with effective management, good governance and political will.</i></p>
<p>4.13</p>	 <p>Encourage the creation of income-generating activities based on ICT (such as mobile technology to inform and guide the public) through pilot actions linked to MPAs.</p>