



Important  
update of  
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See erratum p. 3

# THE 2016 STATUS OF MARINE PROTECTED AREAS IN THE MEDITERRANEAN **MAIN FINDINGS**

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# THE 2016 STATUS OF MARINE PROTECTED AREAS IN THE MEDITERRANEAN

## MAIN FINDINGS

The aim of this brochure is to present a highlight of the 2016 assessment of where we stand with Marine Protected Areas (MPAs) and Other Effective area-based Conservation Measures (OECMs) in the Mediterranean, what progress has been made since the 2012 assessment and especially what is left to do to reach international marine conservation objectives by 2020.

In its last section, this document also explains what the terms MPAs and OECMs cover and the complexity of the whole array of designations in the Mediterranean at national, regional and international levels.

MPA figures provided in this document come from the October 2016 release of MAPAMED, the database on Sites of interest for the conservation of the marine environment in the Mediterranean Sea, developed by MedPAN and UN Environment/MAP - SPA/RAC. The core data found in MAPAMED has been validated by UN Environment/MAP - SPA/RAC national focal points.

*Erratum: The 2016 status data have been corrected in this report (MAPAMED 2017 version) following the identification of errors in the 2016 dataset (MAPAMED 2016 version). These corrections concern the surface and number values of MPAs indicated in the previous versions of this brochure and the related poster. It is important to note that the 2016 official figures are now: a total MPA coverage of 6.81% of the Mediterranean and a total number of 1,215 MPAs (all designations combined).*

Surface of the  
Mediterranean Sea  
**2,516,900 km<sup>2</sup>**

**1,215**  
Total number of MPAs  
and OECMs. They  
cover **6.81% of the  
Mediterranean Sea**

**190**  
Sites designated  
nationally. They  
cover **1.27% of the  
Mediterranean Sea**

**0.04%**  
Surface covered by  
no-go, no-take  
or no- fishing zones  
**(76 sites have at least  
one such zone)**

#### LEGEND

-  National status MPAs
-  Marine Natura 2000 sites
-  Pelagos sanctuary for marine mammals
-  Particularly Sensitive Sea Area
-  Parc International Marin des Bouches de Bonifacio
-  SPAMIs
-  Fisheries Restricted Areas
-  Biosphere reserves
-  World heritage sites
-  Ramsar sites
-  Depth >1000m

**882**

Number of marine Natura 2000 sites  
(**2.50%**)

**16.73 %**

of the 0 to 50m depth zone is covered by MPAs and OECMs

At least **100 sites** are being considered to become MPAs or OECMs



MAPAMED, the Mediterranean Marine Protected Areas database, has been updated with a new dataset that enriches the data available in 2012, adding sites created prior to 2012 (but not reported then), adding sites created since 2012, and recording news designations that were not part of the 2012 assessment (Ramsar sites, World Heritage sites,...).

Dataset: **MPAs:** MAPAMED, the database on Sites of interest for the conservation of marine environment in the Mediterranean Sea. MedPAN, UN Environment - MPA - SPA/RAC. Nov 2017 release - **COUNTRIES:** Natural Earth. Admin 0 - Countries, 2016

Disclaimer: the mentions on this map do not necessarily reflect those of MedPAN, UN Environment - MAP - SPA/RAC or their partners..

# BACKGROUND & INTERNATIONAL OBJECTIVES

The Mediterranean Large Marine Ecosystem is recognised as a hotspot of marine biodiversity with soaring multiple pressures. It is also one of the 13 Regional Seas of the world for which UNEP has developed a specific programme following the 1972 Stockholm conference on the Human Environment in order to address the fast rate of degradation via a transboundary ecosystem-based approach.

## **The Mediterranean: a sea under pressure**

- The Mediterranean covers 0.7% of the world oceans
- 1/3 of the global maritime traffic passes through the basin and is forecasted to grow by 4% per year until 2025
- 1st tourist destination in the world with a growing number of annual arrivals (343 million in 2014 + 40% expected by 2025)
- The exploration and extraction of hydrocarbons at sea are booming
- Its resources are overexploited, particularly fish stocks 85% of which are overfished\*
- Land-based pollutions have profound effects on biodiversity and the quality of coastal waters
- The Mediterranean already shows drastic impacts linked to climate change
- More than 900 non-native marine species are found in the Mediterranean, with at least 40 invasive that are affecting local communities and marine habitats.

\* FAO. 2016. *The state of Mediterranean and Black Sea Fisheries*. General Fisheries Commission for the Mediterranean. Rome, Italy.

Sources: MedTrends project (WWF France), Blue Plan GFCM

## **The rush to meet targets**

While countries around the world race to declare marine areas under varying types of designations, it is however clear that the true challenge is the allocation of sufficient resources to implement the regulations within these areas and adequately manage the pressures inside and outside of these areas. Even if a 30% full-protection target (as advocated by many scientists) was reached, the other 70% would also require conservation attention and the sustainable management of economic activities.

The Mediterranean comprises 7 to 9% of the planet's marine species diversity but faces many challenges. Pollution, severe depletion of marine resources, climate change and impacts of non-indigenous species are further exacerbated by the semi-enclosed nature of this sea.

The Convention on Biological Diversity (CBD) acts as a safeguard to protect the natural realm with a 10% marine protection objective by 2020, known as the CBD Aichi target 11.

At the 2014 IUCN World Park Congress, a key recommendation of the Promise of Sydney, although non-binding, stated: «This network [...] should include at least 30% of each marine habitat. The ultimate aim is to create a fully sustainable ocean, at least 30% of which has no extractive activities». At the 2016 IUCN World Conservation Congress, members approved the target of 30% to be set aside in "highly protected MPAs and OECMs" by 2030.

The 2015 UN world Sustainable Development Summit recognised the pivotal role of marine conservation and with the Sustainable Development Goal (SDG) 14, reasserted the need to "Conserve and sustainably use the oceans, seas and marine resources for sustainable development".

In the Mediterranean Sea, these commitments are taken up by the Barcelona Convention Contracting Parties. Regarding MPAs specifically, it is the Regional Activity Centre for Specially Protected Areas (UN Environment/MAP - SPA/RAC) through the Protocol on Specially Protected Areas and Biological Diversity (SPA/BD protocol) which follows up on the CBD objectives. A roadmap to reach targets by 2020 was adopted by Barcelona Convention Parties in 2016 and is currently under assessment. In parallel, the Blue Plan Activity Centre, along with other partners, addresses the SDGs by working namely on the transition of economic activities towards their sustainability, and on financing mechanisms to support conservation, via tourism for instance.

MedPAN and UN Environment/MAP - SPA/RAC, alongside all their international and national partners dealing with conservation and site management, are working actively towards reaching these international objectives.

## **CBD Target 11**

*"By 2020, at least [...] 10 per cent 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 landscape and seascape."*

# MPA COVERAGE IS MAKING PROGRESS IN THE MEDITERRANEAN

Since the 1950s, Parties to the Barcelona Convention have established different Marine Protected Areas (MPAs) and Other Effective area-based Conservation Measures (OECMs)<sup>1</sup> including countries that have not yet ratified the SPA/BD protocol.

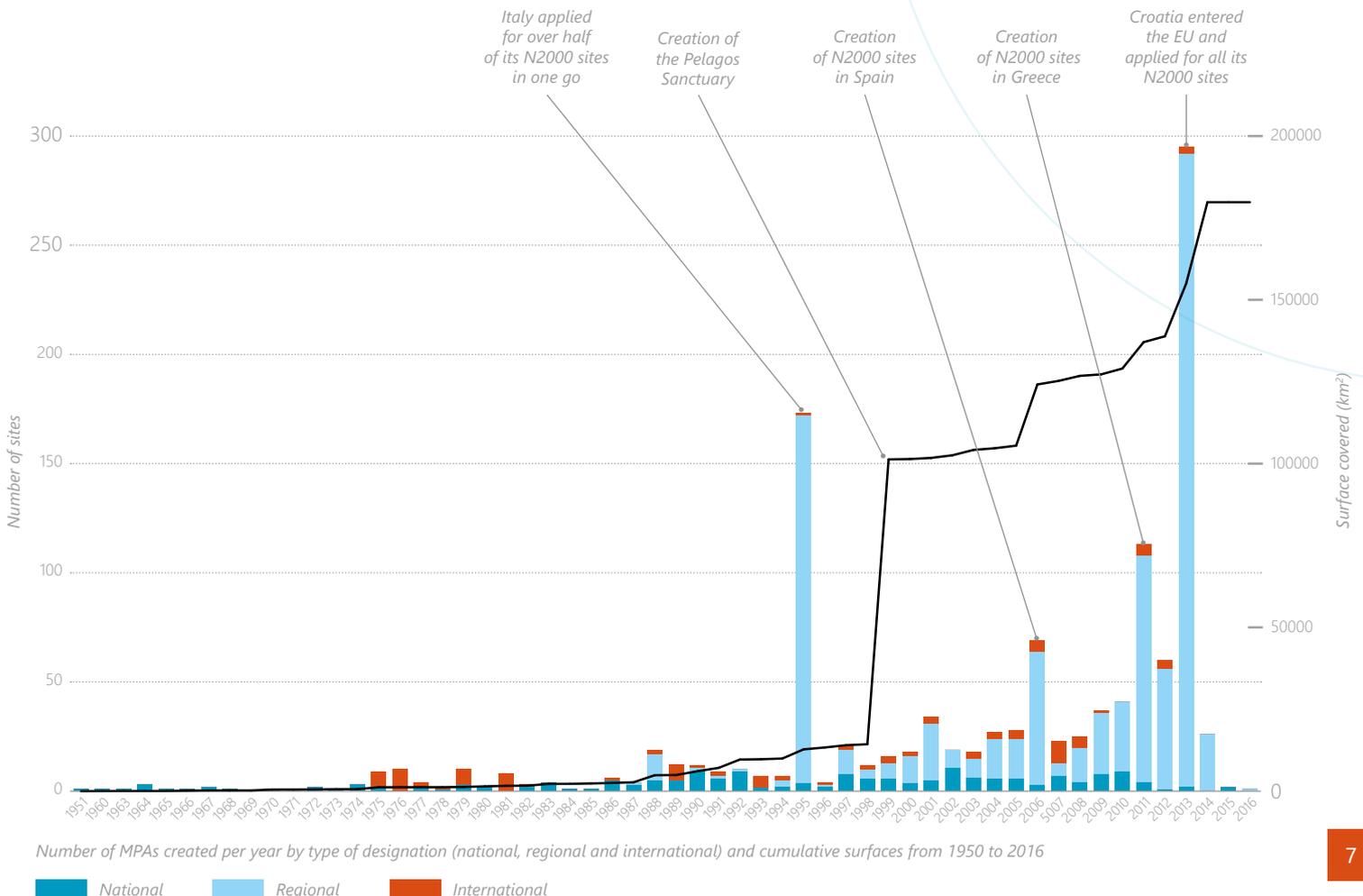
To date there are 1,215 MPAs and OECMs in the Mediterranean Sea, covering 171,362 km<sup>2</sup> which places a surface of 6.81% under a legal designation. For the majority of sites, little is known on whether management measures are implemented, and if they are, whether these measures are effective to reach the site's conservation targets.

These sites are established at national level, at regional level (European or Mediterranean scale) or at international level under a wide variety of designations. A special section at the end of this brochure sheds light on this designation complexity.

Regarding areas that are proposed to become MPAs or OECMs, over 100 sites have been identified or are in project in 12 countries.

*All coverage figures in this document take into account overlaps between the various MPA and OECM designations, meaning that areas where several designations overlap were counted only once in the calculations (unless specified).*

<sup>1</sup> For more information about what MPAs and OECMs are, please refer to pages 14-15.



## National designations

There are 190 sites designated at national level which cover 1.27% or 32,065 km<sup>2</sup> of the Mediterranean Sea.

The surface covered by nationally designated sites has close to doubled since 2012, with the creation of 9 new sites, some of which being very large (more than 1,000 km<sup>2</sup>).

Of these nationally designated sites, 76 have at least one no-go, no-take or no-fishing zone that are known of.

These cover 0.04% of the Mediterranean Sea (976 km<sup>2</sup>)<sup>1</sup>.

To our knowledge, no-go, no-take or no-fishing zones are only found in nationally designated sites and at least 10 countries have designation(s) that allow the creation of such zones. Most no-go, no-take or no-fishing zones are smaller than 5 km<sup>2</sup>, only 18 MPAs have such zones covering over 10 km<sup>2</sup> and only 2 cover more than 100 km<sup>2</sup>.

Trends in the creation of MPAs that contain no-go, no-take or no-fishing zone(s) have slowed down since the late 1990s.

Little is known as to whether these no-go, no-take or no-fishing zones are implemented and effectively managed. Of those MPAs that are known to implement such zones, most show multiple positive benefits.

Fisheries regulations outside MPAs also bring ancillary conservation benefits. Among the national Fisheries Restricted Areas (nFRA) reported by the General Fisheries Commission for the Mediterranean (GFCM) Contracting Parties, 29 sites are closed all year round to fishing activities which represent approximately 594 km<sup>2</sup> of the Mediterranean (0.02%). 6 of these sites are larger than 10 km<sup>2</sup> of which 3 are larger than 100 km<sup>2</sup>. These regulations can clearly bring ancillary benefits to the conservation of biodiversity and so can other sectoral regulations such as those related to mooring and boating activities, maritime traffic or effluents.

<sup>1</sup>. This figure includes only no-go, no-take or no-fishing zones located within MPAs. Those located outside MPAs were not accounted for. "No-fishing" refers to the prohibition of all fishing gear and all types of fishing.

*PISCO: a new comprehensive review of the science of MPAs in the Mediterranean brings evidence of the benefits well-managed MPAs bring to marine ecosystems, human well-being and economic actors.*

\* PISCO & UNSA. 2016. *The science of Marine Protected Areas (3rd edition, Mediterranean)*. [www.piscoweb.org](http://www.piscoweb.org). 22 pages

**6.81%**

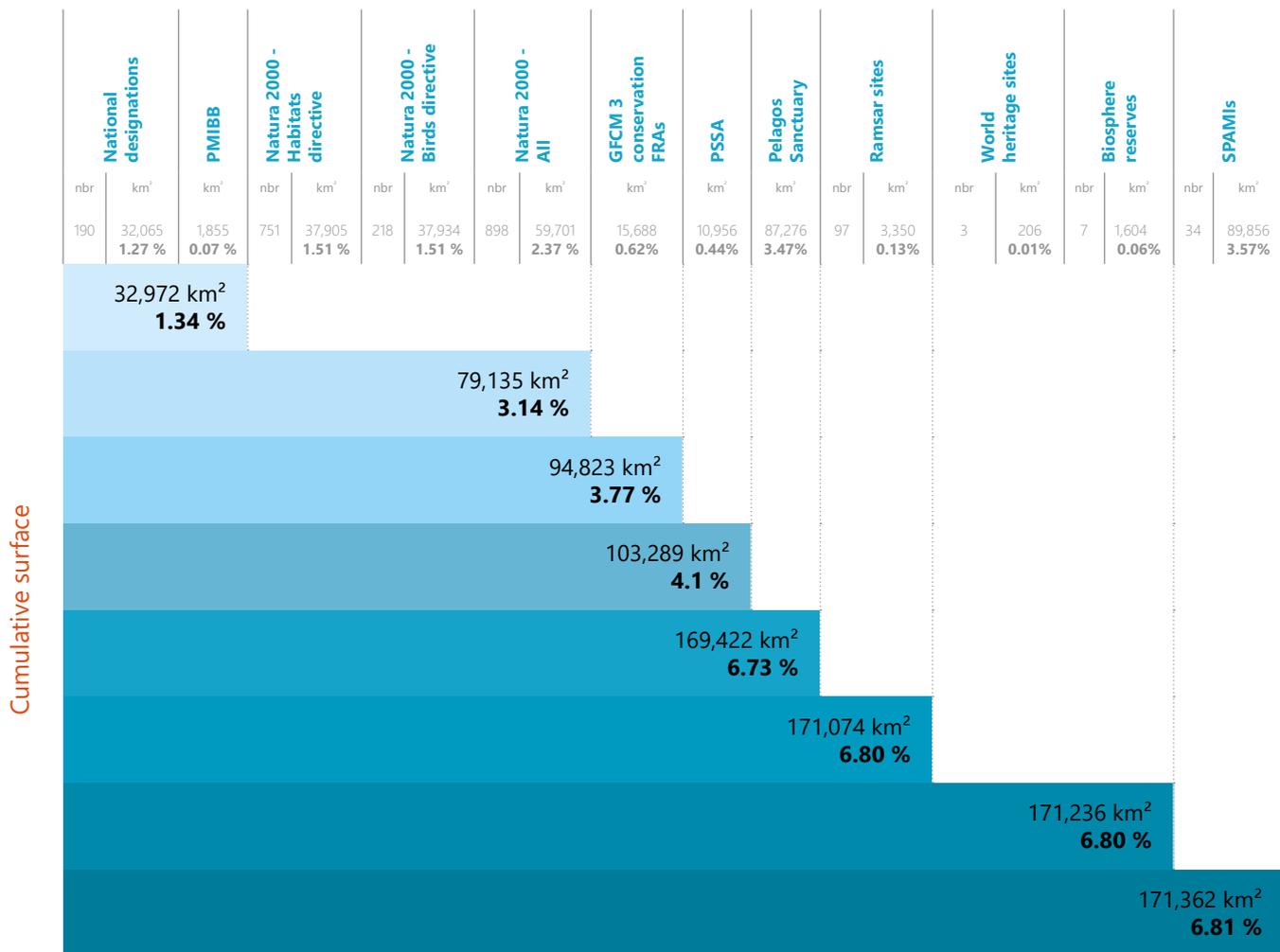
*of the Mediterranean is under a legal designation status*

**1.27%**

*of the Mediterranean is covered by nationally designated sites*

**0.04%**

*of the Mediterranean is covered by MPAs no-go, no-take or no-fishing zones*



MPAs and OECMs overview: number, coverage and percentages by designation type in the Mediterranean

## Regional or sub-regional designations

At regional level, the marine Natura 2000 network of European sites contributes vastly to the global figure of designated sites with 882 sites that cover 2.5% of the Mediterranean Sea or 63,000 km<sup>2</sup>. Since 2012, a large number of Natura 2000 sites have been designated (especially in Croatia) and the surface covered has greatly increased (especially in Spain).

There are currently 7 Fisheries Restricted Areas (FRAs) established by the GFCM in the high seas, 3 of which clearly contribute, on a permanent basis, to the conservation of unique sea bottom biodiversity features thanks to the implementation of a set of regulations that prohibit fishing with bottom trawlers. These 3 FRAs cover 0.62% of the Mediterranean Sea, corresponding to 15,688 km<sup>2</sup>. The 4 other FRAs, where there are also specific regulations that manage fishing activities, were essentially established to protect fish stocks and can also bring ancillary benefits. In addition, a wider FRA was established below the depth of 1,000 m prohibiting all activities using towed dredges and trawl nets at depths greater than 1,000 m in the whole region. It covers 1,468,190 km<sup>2</sup> or 58.33% of the Mediterranean.

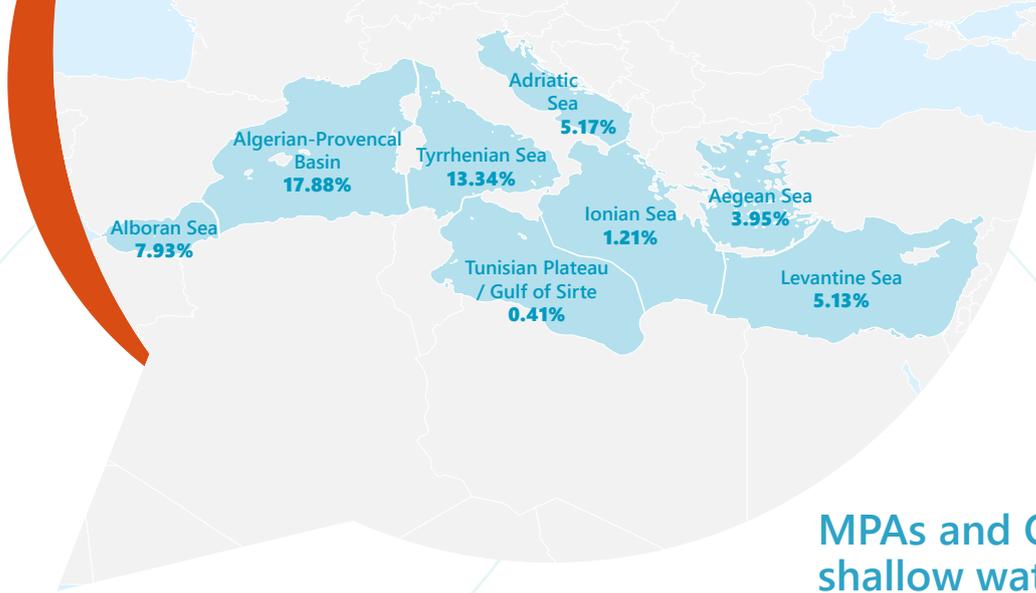
34 Specially Protected Areas of Mediterranean Importance (SPAMIs) proposed by 10 countries have been adopted by the Barcelona Convention since 2001, including 1 site of international designation (the Pelagos Sanctuary for marine mammals, a tripartite international agreement). SPAMIs confirm existing designations that cover about 3.57% (or 89,856 km<sup>2</sup>) of the Mediterranean. The SPAMI designation intends to secure the shared responsibility of all contracting parties to the Barcelona Convention to implement regulations in these areas.

The International Marine Park of the Strait of Bonifacio was created in 2012 as a European Grouping of Territorial Cooperation between France and Italy, covering 1,855 km<sup>2</sup> or 0.07% of the Mediterranean.

## International designations

The 2016 status now comprises more designations including Ramsar sites, UNESCO Man And Biosphere reserves and UNESCO World Heritage Sites that contain coastal lagoons permanently linked to the sea and marine waters. These sites covers respectively 0.13%, 0.06%, and 0.01%.

In addition, 1 Particularly Sensitive Sea Area (PSSA) was created by the International Maritime Organisation in the Strait of Bonifacio and covers an area of 10,956 km<sup>2</sup> (0.44% of the Mediterranean).



## MPAs and OECMs are largely coastal and European

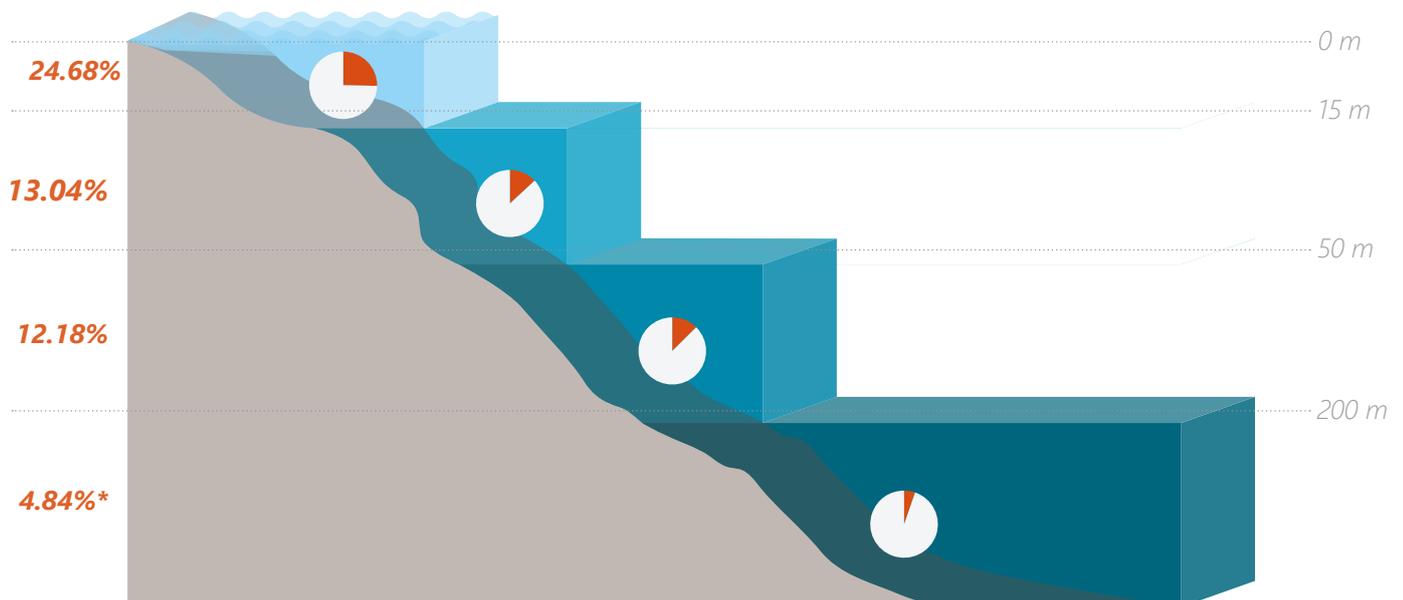
Compared with 2012, MPA & OECM designations still cover a wider surface of waters within the 12 nautical mile zone<sup>1</sup>, with 96,910 km<sup>2</sup> or 14.97%, compared to beyond (74,452 km<sup>2</sup> or 3.98%). Waters off the northern shores and within the western basin of the Mediterranean are also still better covered compared to other regions, largely due to EU Natura 2000 sites and the Pelagos Sanctuary for marine mammals. 9.79% of European waters (accounting only for areas falling within EU theoretical Exclusive Economic Zones<sup>2</sup>) are covered by MPAs and OECMs. 90.05% of the total surface covered by MPAs and OECMs are found in EU waters<sup>3</sup>.

1. Provided that national jurisdictions in the Mediterranean are not all clearly defined yet, or are subject to disputes between countries, a 12 nautical mile belt from the coast was used for all the Mediterranean Sea, regardless of national jurisdictions.  
 2. Flanders Marine Institute, World EEZ v8. The use of this dataset does not imply the expression of any opinion whatsoever on the part of the authors concerning the legal status of any country, territory or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.  
 3. EU waters represent 63.31 % of the total Mediterranean Sea surface area. For each country, parts of MPAs and OECMs falling beyond the theoretical EEZ were not accounted for.

## MPAs and OECMs mostly cover shallow waters

MPAs and OECMs currently cover 24.68% of close to shore shallow waters (0 to 15m depth). Assuming that the highest pressure from human activities occurs in this depth zone, all these designations, providing they implement adequate regulations, have the potential to afford fair conservation to the marine environment. When looking at the 0 to 50m depth zone where the majority of seagrass meadows (*Posidonia oceanica* in particular) and coralligenous habitats are found, and where anthropogenic pressure can be considered high, MPA and OECM designations cover 16.99% of this depth zone.

Between 50 to 200m depth where still much activity can occur in the water column and on the sea bed, all designations cover 13.18% of this depth zone. National and Natura 2000 sites contribute the most to covering these zones. Beyond 200m depth, the most part is covered by the Pelagos Sanctuary for marine mammals, Natura 2000 sites and conservation FRAs. 4.84% of the area deeper than 200 m is covered by MPAs and OECMs. In addition, the large FRA established by GFCM, which prohibits the use of towed dredges and trawl nets at depths greater than 1,000 m, brings in a precautionary decision relevant both to the management of deep-sea bottom fisheries and the protection of deep-sea benthic ecosystems and covers 58.33% of the Mediterranean. Complementary regulations would be beneficial.

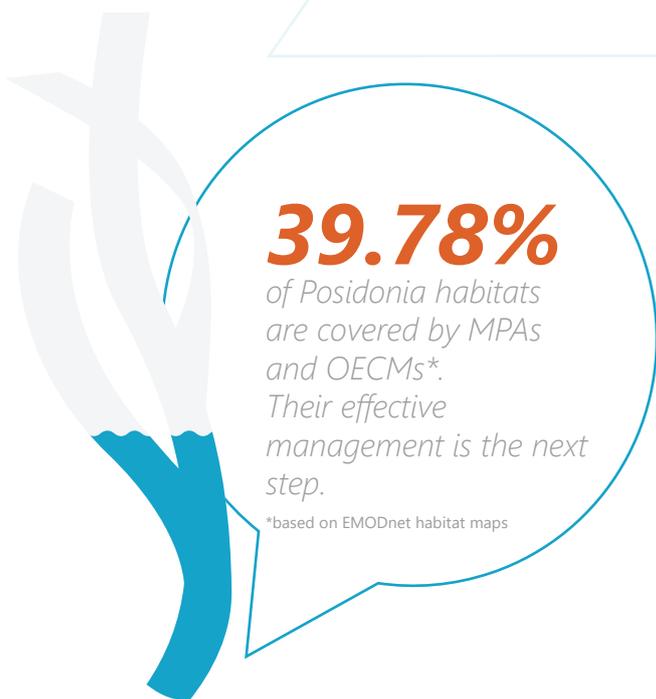


\* The precautionary GFCM FRA below the depth of 1000 m which prohibits all activities using towed dredges and trawl nets covers 58.33% of the Mediterranean.



## MPAs and OECMs include an encouraging coverage of 2 sensitive habitats

12.96% of Posidonia beds (EUNIS class A5.535<sup>1</sup>) as mapped during the 2016 EMODnet seabed habitats project are covered by national designations and 31.38% by Natura 2000 designations. It is one of the objectives of the Natura 2000 network to target the posidonia habitat. Together, all MPAs and OECMs cover 39.78% of this habitat. Although these figures are encouraging, they greatly depend on the quality and comprehensiveness of input data.



12.96% of Mediterranean coralligenous communities (EUNIS classes A4.26 or A4.32) are covered by national designations while 31.38% is covered by Natura 2000 sites. 39.78% of this habitat is covered by all MPAs and OECMs. Finer scale research is needed to assess the conservation benefits of these figures.

## MPAs within EBSAs

15 Mediterranean Ecologically or Biologically Significant Marine Areas (EBSAs) were described jointly by the CBD and UNEP/MAP<sup>2</sup>, to identify zones where appropriate conservation measures and sustainable use practices should be adopted by the countries. Of these 15 EBSAs, the ones best covered by nationally designated MPAs are the North Western Mediterranean Benthic Ecosystem (7) (with just over 7% of its surface), the Akamas and Chrysochou Bay (14) and the North Aegean (17), while the highest coverage by Natura 2000 sites occurs in the Akamas and Chrysochou Bay (14), 88.15%, and in the North Western Mediterranean Benthic Ecosystem (7), 47.79% .

## Of age, size and adequacy...

Age and size can play a role in the effectiveness of MPAs and OECMs.

While a small MPA with strict regulations can be efficient at protecting a species that is localised and only needs a small spatial range to maintain a healthy population, other ones, regardless of the strength of regulations, may fail to protect a given habitat or species that has a complex life cycle involving areas beyond the boundary of the designated site. For the former, adequacy can usually be assessed at the level of a single MPA while for the latter, an ecological network approach is essential.

Over half (65.05%) of MPAs of national designations have a marine surface of less than 50 km<sup>2</sup> (77.17% of all MPAs and OECMs), 69 nationally designated sites have a marine area smaller than 10 km<sup>2</sup> and 46 are larger than 100 km<sup>2</sup>.

The vast majority (78%) of nationally designated MPAs are over 10 years old, which is considered the minimum age for an MPA to reach a certain maturity (even though the time required for an MPA to be effective varies greatly from one area to another) and 46 sites are over 20 years old.

As for all MPAs and OECMs, 48% are older than 10 years old, which shows that regional designations are generally newer than national ones.

Of the 76 nationally designated sites that contain at least one no-go, no-take or no-fishing zone, regardless of whether they are enforced, 86.84% have been designated over 10 years ago. For many of these that have been studied, a whole range of benefits have been demonstrated.

1. EUNIS is a comprehensive pan-European habitat classification system to facilitate the harmonised description and collection of data.

2. 15 out of 17 EBSA descriptions were accepted at the 18th meeting of the CBD Subsidiary Body on Scientific, Technical and Technological Advice (June 2014), and the twelfth meeting of the Conference of the Parties to the CBD (October 2014).

# MANAGEMENT: 73 MPA MANAGERS SHARE THEIR VIEWPOINT

In order to assess whether MPAs are actually managed and begin assessing whether management measures are effective at protecting the features for which they have been designated, a questionnaire was sent to 180 management entities that were identifiable. Of these, 80 answers were received from 18 countries. **These results cannot be generalised to the whole system of MPAs and OECMs so statistics were not drawn as they fail to reflect current trends in the Mediterranean.**

73 answers could be analysed, representing 73 designations. 72 of these concerned nationally designated MPAs while 4 answers concerned Natura 2000 sites as well or solely. 59 answers were from EU member countries (81% of the sample).

## **Management of threats in relation to the adequacy and effectiveness of MPAs**

*A new regulation-based classification of MPAs was applied to a sample of 13 multiple-use nationally designated MPAs. The level of protection of each sub-zone of each site was assessed in relation to existing anthropogenic threats to assess the effectiveness of regulations. This new and promising approach will be further developed by the scientific community in collaboration with managers.*

## **Most MPAs experience “fuzziness” in the legislation**

Of the 73 answers, 64 respondents reported that the boundaries and zoning of their MPA was either ‘clearly defined’ in the legislation or ‘partially with a need for clarification’. 61 said that the associated uses and regulations were either ‘clearly’ (44) or ‘partially’ (17) ‘defined in the legislation’. As for the governance of the site, 55 reported that it was ‘clearly’ (41) or ‘partially’ (14) ‘defined in the legislation’ while for enforcement procedures, 54 reported that these were ‘clearly’ (28) or ‘partially’ (26) ‘defined in the legislation’.

## **Governance needs to be improved**

Of the 73 answers, 62 respondents specified who the management entity of their MPA was and 3 stated that no-one managed the site. 55 respondents declared that stakeholders were involved to some extent in management discussions or decisions (48 of which said the cooperation was fair to good). 27 sites are fully recognised by local planning authorities and taken into account in planning policies.

## **Management plans are not pervasive**

Out of the 73 MPAs, 20 report having a management plan which takes the marine part into consideration and which is being implemented while 14 other managers only partially implement such a plan due to funding constraints or other problems. Of these, 21 management plans have been reviewed and adapted or are less than 10 years old. 31 MPAs either don't have a management plan or don't implement it.

## **More permanent staff are needed**

30 of the 73 respondents report having at least 1 permanent or regular staff with a contract of at least one year, often supplemented by seasonal or casual staff. But only 6 MPA managers report having enough staff numbers to meet the management requirements of the MPA.

## **The 1st assessment of MPA financing needs in the Mediterranean was conducted in 2015.**

*It aimed at identifying gaps for reaching effective management in existing MPAs in order to contribute to the qualitative part of the 10% Aichi Target. Data from a representative sample of 20 MPAs and National data on resource mobilisation (including cooperation) for MPAs in 17 countries were used. From the sample, 86% of local managers considered that their needs are not covered to effectively manage their MPA (more marked outside the EU). This first assessment points to the important financing efforts that are needed to reach the Aichi target that could come from national, regional and international sources, as well as levies from sustainable activities inside and around sites.*

*Source: Sustainable financing of Marine Protected Areas in the Mediterranean: a financial analysis. Vertigo Lab, MedPAN, UNEP/MAP - RAC/SPA, WWF.*

### **Funds are insufficient and insecure for proper management**

25 respondents indicate that the budget allocated to management is acceptable or sufficient but 22 of these require more to fully achieve management effectiveness and 5 have a secure budget. 29 of the others clearly don't have sufficient financial resources, with 13 having none at all. Out of the 73 MPAs, 32 receive funding from public authorities, 13 from various incomes (entry fees, taxes, fines, etc.), 8 from international donors and/or other organisations and 5 from the private sector. The remaining MPAs receive funding in a variety of other ways.

### **Scientifically-based indicators are essential for all MPAs**

29 MPAs report having clearly defined scientifically-based indicators (either in the management plan or not) to assess MPA management effectiveness. 20 say they have a complete habitats baseline data and 18 a full ecological reference data. Just 10 of the MPA managers say that an assessment of the economic benefits brought by the MPA to the local community was conducted.

### **Regulations and surveillance have to be reinforced**

To the question, are appropriate regulations in place to control uses and activities on the marine/intertidal part of the MPA (e.g. fishing, diving...), 31 of the 73 respondents report either that regulations for controlling uses and activities in the MPA exist and provide an excellent basis for management although 14 of these point that there are some weaknesses or gaps. 15 have the means to patrol the MPA regularly for surveillance and 25 more sporadically, namely with the support of other players such as coast guards. The number of surveillance hours varies widely. Out of 42 MPAs who have responded to whether they had sworn staff (who can conduct the duty of a police-officer), 27 answered negatively while 15 said at least part of the staff were indeed.

# SHEDDING LIGHT ON THE 54 DIFFERENT MPA AND

*The overlap of designations does not necessarily mean that a site is better protected than when there is only one designation. It all depends on what management measures are actually implemented on site.*

In the Mediterranean Sea, the generic term "Marine Protected Area" is understood as any marine and/or coastal area (including lagoons that are permanently linked to the sea) that has been put under protection generally by legal means for the conservation of natural habitats, species or specific natural features as its prime purpose. It thus includes a wide range of areas, established under various designations, at various levels (sub-national, national, regional or even international), and providing various degrees of protection.

As for the term Other Effective area-based Conservation Measures (OECMs), it originates from the CBD to also indicate protection designations, although there is no clear international guidance as to how it applies. Until the criteria are defined, the present analysis makes a sketchy use of it to refer to regional and international designations that seem to afford a lesser degree of protection.

Each designation has its own conservation objectives. So in effect, there is a whole array of differing statuses of MPAs and OECMs in the Mediterranean Sea. This is why providing a single figure for surface coverage is not only difficult but can be misleading as to indicating what these MPAs can actually do in terms of protection.

In addition, designations may spatially overlap:

- in part, or
- fully with exactly matching perimeters, or
- fully where one larger designation encompasses another smaller one, thereby stretching beyond the boundaries of the latter.

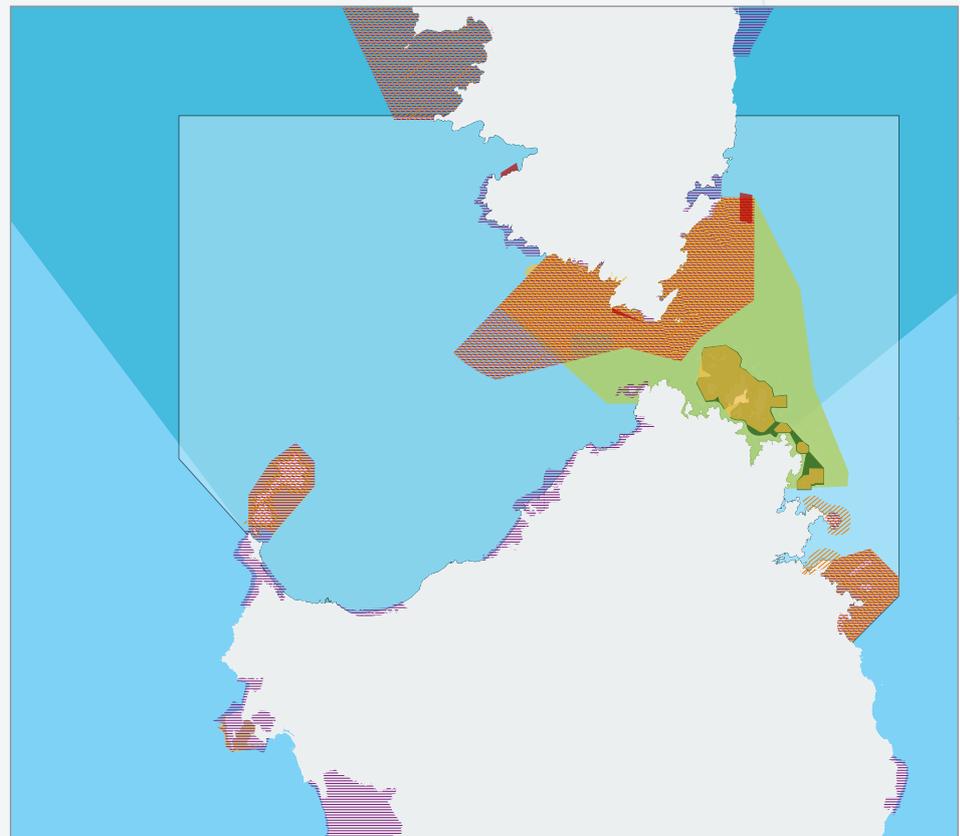
Moreover, all of these designations have different names with differing attached meanings, a fact which is magnified by the sheer number of spoken languages around the Mediterranean.

## Regulations and zoning

Any MPA, or management zone within a larger MPA, can be characterised by the strength of protection it provides, which is directly related to the regulations that apply.

The strongest regulation is when all activities whether extractive or not are forbidden (sometimes referred to as no-go zones or Integral Reserves).

Next are no-take zones, where all extractive activities (fishing, collecting, mining, dredging...) are prohibited, but where human access, and even some potentially harmful uses are allowed. Areas where the prohibition targets fishing activities specifically are commonly called no-fishing zones. An MPA can have one or several of the above mentioned zones within its boundaries and in some cases, such zones can cover the full surface of the MPA. No fishing zones and no-take zones are known to be highly efficient when placed where the fishing pressure is high. It is even more efficient when other softer regulations are implemented in the surrounding area. Setting a no-go, no-take or no-fishing zone can be preventive or curative. It can cover a single part or several parts of an MPA or the full MPA.



Overlap of different designations in the Bonifacio Strait

- |                                 |                        |
|---------------------------------|------------------------|
| ● Natura 2000 SCI               | ● Cantonnements peche  |
| ● Natura 2000 SPA               | ● National designation |
| ● Natura 2000, both SPA and SCI | ● PSSA                 |
| ● PMIBB                         | ● Pelagos              |

## At national level

Each of the 20 countries that have so far established national MPAs since the 1950s have done so giving them different designation names. For example, Albania has 9 nationally designated marine/coastal sites of 4 different designations (Managed Nature Reserve, National Marine Park, National Park and Protected Landscape) and Italy has 32 nationally designated marine/coastal sites of 4 different designations (Marine Protected Area, National Park, Regional Nature Reserve and Underwater Park).

Nationally designated MPAs in the Mediterranean often have an internal zoning in order to implement different management measures aimed at regulating given threats to natural and sometimes cultural features in given locations within the boundaries of the site.

## At regional level

With a view to harmonise both approaches to conservation and designations' terminology and push for a coherent network of MPAs in the Mediterranean Sea, several regional initiatives have incepted new statuses of MPAs.

For instance since 1992, the European Union (EU) has called for the creation of a network of sites called Natura 2000. These integrate sites previously designated under the Birds Directive since 1979. There are thus of two types and may overlap with one another and with other designations:

- Special Protection Areas (SPAs) under the EU Birds Directive (1979).
- Sites of Community Importance (SCI) under the Habitats Directive which are eventually designated nationally as Special Areas of Conservation (SACs).

Similarly, the 1995 SPA/BD protocol of the Barcelona Convention calls for the creation of Specially Protected Areas of Mediterranean Importance (SPAMIs). These systematically overlap with a national designation or other legal status and aim to confirm the existence of management and to provide visibility for international recognition as a network. Beyond the role of SPAMIs as 'validation labels', the purpose of this status is to strengthen the joint responsibility among all contracting parties in protecting the whole array of these sites.

OECMs that could be considered as Regional MPAs in the Mediterranean include the 3 of the 8 Fisheries Restricted Areas (FRAs) of the General Fisheries Commission in the Mediterranean (GFCM) for which the prime objective is clearly to conserve natural significant features (ie. not exploitable resources) and the European Grouping of Territorial Cooperation (EGTC) for the transboundary MPA of the Strait of Bonifacio between Corsica and Sardinia.

## At international level

International designations comprise Ramsar sites and the two UNESCO designations: Man And Biosphere (MAB) Reserves and World Heritage Sites.

Under the International Maritime Organisation, there is also a PSSA in the Strait of Bonifacio (Particularly Sensitive Sea Areas), and finally an International Agreement: the Pelagos Sanctuary for marine mammals (between France, Italy and Monaco) which is also a SPAMI.

All in all, there are 46 different names for MPAs and OECMs in the Mediterranean with highly variable strengths of protection. To this, 4 scientific labels, which are neither conservation designations nor legally binding, comprise the following geographically defined areas:

- EBSAs (Ecologically and Biologically significant Areas) described by the CBD,
- CCH (Critical Cetacean Habitats) described by ACCOBAMS,
- IBAs (Important Bird Areas) described by Bird Life International,
- IMMAs (Important Marine Mammals Areas) identified by the IUCN Task Force on Marine Mammal protected areas.

These labels are scientific descriptions of areas which can guide what protection measures should be put in place to conserve some key species, habitats and specific features. The measures and regulations that can be envisaged in these areas can either be spatially-based and / or specific to activity sectors.

*When 2 countries call a designated site with the same name, "Nature Reserve" for instance, this does not necessarily mean that they have the same set-up or strength of protection. Governance can be very different and so can the conservation objectives and management measures in place. The strength of protection of a given designation is thus country specific and site specific.*

Finally, other spatial sector-specific management measures exist and while their prime objective is not the conservation of natural features, they can however bring de-facto conservation benefits to species, habitats or other features. This is the case with national fisheries reserves where fishing is either forbidden or highly regulated for instance.

# CONCLUSION

There has been progress since 2012.

The 1,215 MPAs and OECMs now cover 6.81 % of the Mediterranean through a large variety of conservation designations, with national designations accounting for only 1.27% and no-go, no-take or no-fishing zones for 0.04%. Over 72.77% of the surface covered is located in the Western Mediterranean. Designations cover 9.79% of European waters mostly due to the Natura 2000 at sea network which rarely affords strict restrictive measures. **To reach the 10% quantitative part of the Aichi Target, an additional 71,900 km<sup>2</sup> (2.86 % of the Mediterranean) would need to be placed under strong protection designations that also target currently under-represented features.**

Since 2012, 391 Natura 2000 sites were designated but just 6 MPAs of national status were established.

Looking at the qualitative aspects of the current system of MPAs and OECMs, **many sites are not actually implemented and there are no regulations in place to curb existing pressures or enough means to enforce them.** Little is also known about the management measures in place and if they are effective at maintaining or restoring the biodiversity they aim to protect. It appears that the human and financial means allocated to management are much too low thereby compromising successful conservation.

**Considering the high pressures exerted on the Mediterranean marine environment with growing trends, it is crystal clear that willingness to invest in marine conservation needs to be boosted up.**