

# ***MPAs IN THE MEDITERRANEAN SEA***

*Addressing opportunities to face the protection gap*

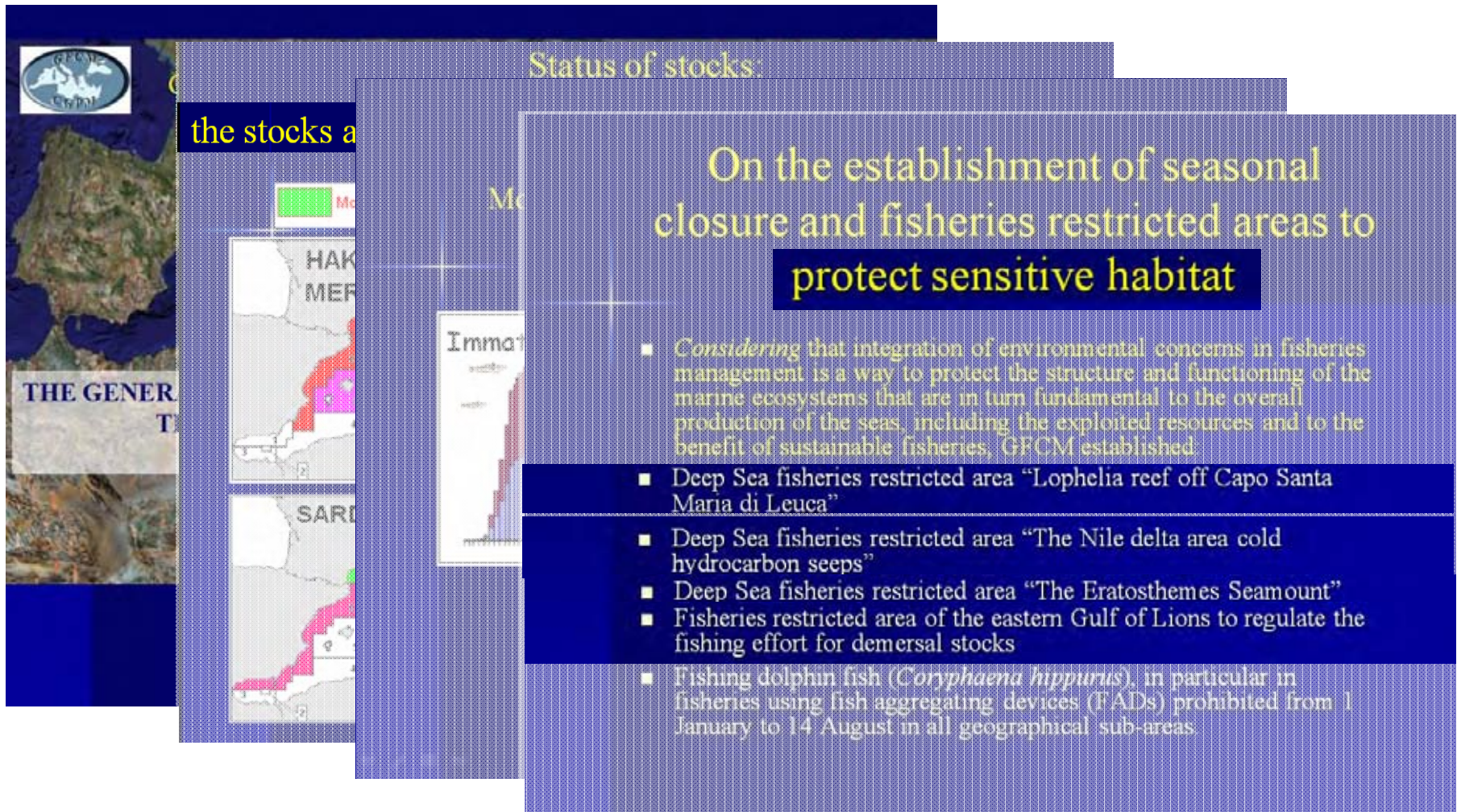


**First Working Group on MPAs  
SAC - SCMEE**

*Bar, Montenegro  
3 February 2014*

*A Fisheries perspective*





the stocks a

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### Status of stocks:

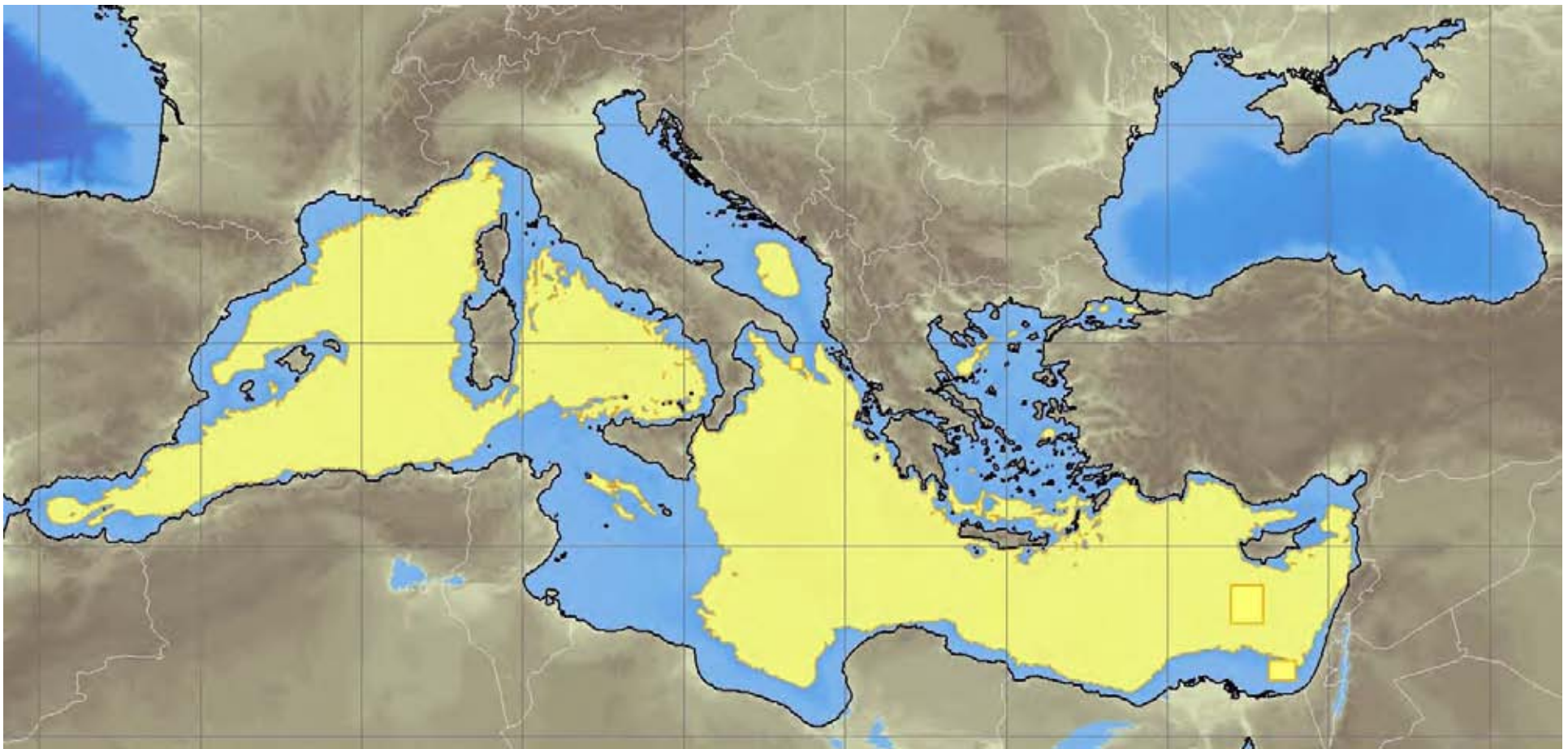
## On the establishment of seasonal closure and fisheries restricted areas to protect sensitive habitat

- *Considering that integration of environmental concerns in fisheries management is a way to protect the structure and functioning of the marine ecosystems that are in turn fundamental to the overall production of the seas, including the exploited resources and to the benefit of sustainable fisheries, GFCM established:*
- Deep Sea fisheries restricted area “Lophelia reef off Capo Santa Maria di Leuca”
- Deep Sea fisheries restricted area “The Nile delta area cold hydrocarbon seeps”
- Deep Sea fisheries restricted area “The Eratosthemes Seamount”
- Fisheries restricted area of the eastern Gulf of Lions to regulate the fishing effort for demersal stocks
- Fishing dolphin fish (*Coryphaena hippurus*), in particular in fisheries using fish aggregating devices (FADs) prohibited from 1 January to 14 August in all geographical sub-areas.

FRAs



**Rec. GFCM/33/2009/1 - Bottom trawling closure -1000m**



## EU Consultation on Fishing Opportunities for ... ..



EUROPEAN COMMISSION

Brussels, 25.5.2011  
COM(2011) 298 final

**2008**

COMMUNICATION FROM THE COMMISSION

The Commission will discuss the implementation of fisheries management measures in the Mediterranean Sea with stakeholders and Member States. Where *there is agreement that an early adoption of measures* would be beneficial

**2009**

In the Mediterranean Sea the only TAC at present is the one for Bluefin tuna. In 2008, work will focus on the implementation of the Mediterranean Regulation (1967/2006) especially concerning the establishment of long term management plans and the *designation of fisheries protected areas*. It is worrying that the Member States have accumulated considerable delays in implementing this Regulation. Serious shortcomings in compliance must be overcome urgently. The Commission will follow up these matters closely during 2008.

Scientific advice concerning stocks and fisheries assessments will be sought from STECF. This will help improve scientific capability, for example in the GFCM (General Fisheries Commission for the Mediterranean) context.

## EU Consultation on Fishing Opportunities for ... ..

### 2010

The Commission considers that the implementation of the Mediterranean regulation is still less than satisfactory, even in those parts eliciting a bottom-up approach like the national management plans and the provision of relevant information to establish a network of *fishing protected areas*.

Work will continue to prepare Community long term management plans and to promote this approach, together with other conservation actions and specific measures on monitoring and control within the General Fisheries Commission for the Mediterranean (GFCM).

### 2011

60% of *assessed stocks were outside of safe biological limits* and 54% were *overfished*.

NOTE: Assessments for only 16 out of 102 candidate species (not including the elasmobranchs, tunas and tunas like species) are available.

### 2012

82% of the *resources are overfished* and some are depleted to low levels. The percentage of overfished stocks is still too high and there can be no room for complacency: more efforts are needed to phase out overfishing.

## EU Consultation on Fishing Opportunities for ... ..



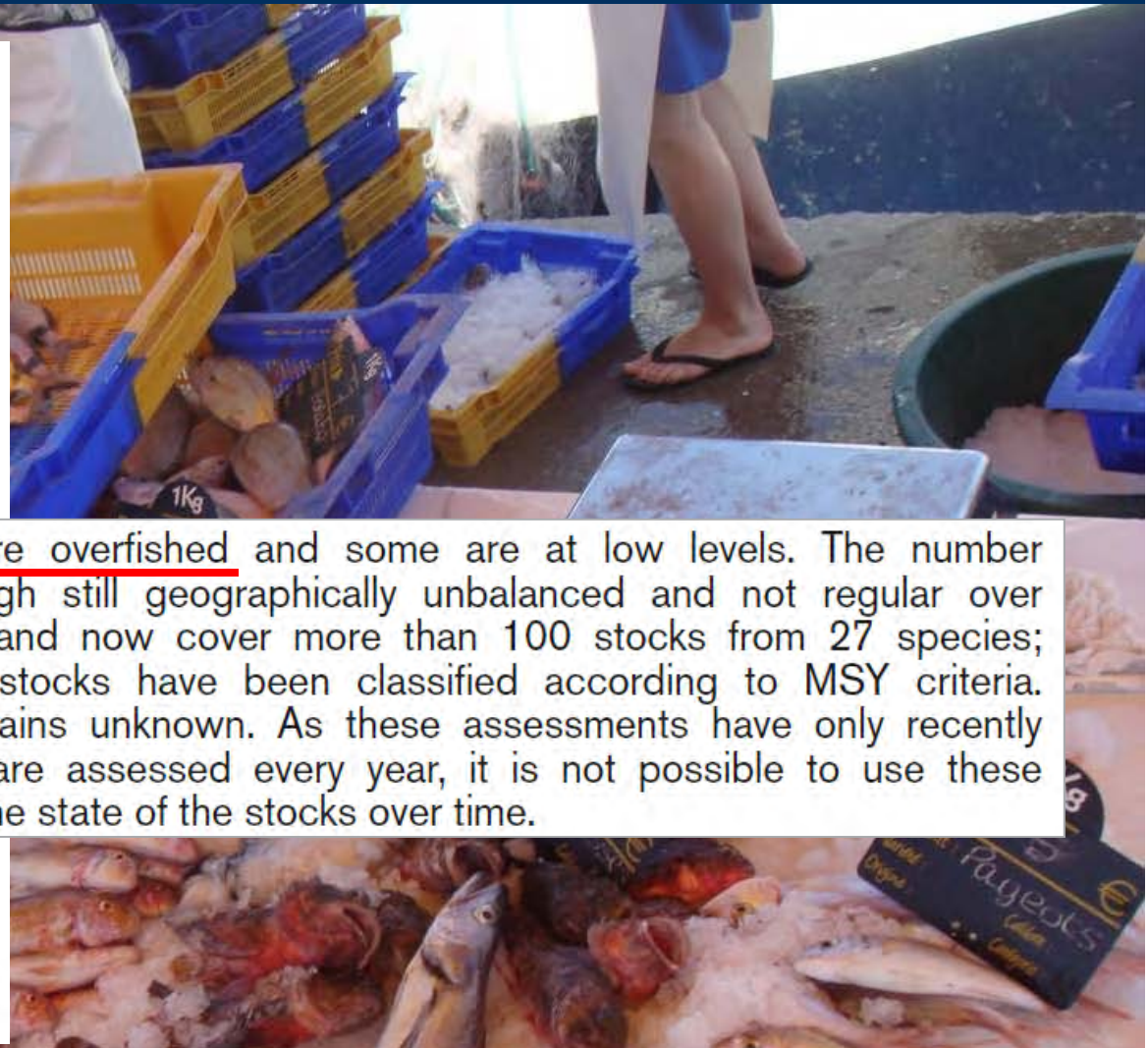
EUROPEAN COMMISSION

Brussels, 25.5.2011  
COM(2011) 298 final

COMMUNICATION FROM THE COMMISSION  
concerning a consultation on Fishing Opportunities

**2013**

80% of the resources studied are overfished and some are at low levels. The number and quality of assessments, though still geographically unbalanced and not regular over time have continued to increase, and now cover more than 100 stocks from 27 species; however only 63% of evaluated stocks have been classified according to MSY criteria. The status of 37% of stocks remains unknown. As these assessments have only recently begun and not all of the stocks are assessed every year, it is not possible to use these data to look at the development of the state of the stocks over time.





SAC

Rome, 2013

**92% of assessed stocks Overfished**

*“it should be **assumed** that the **current state** of the stocks arises from the application of **excessive fishing pressure** in previous years”*



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***A Conservation perspective***



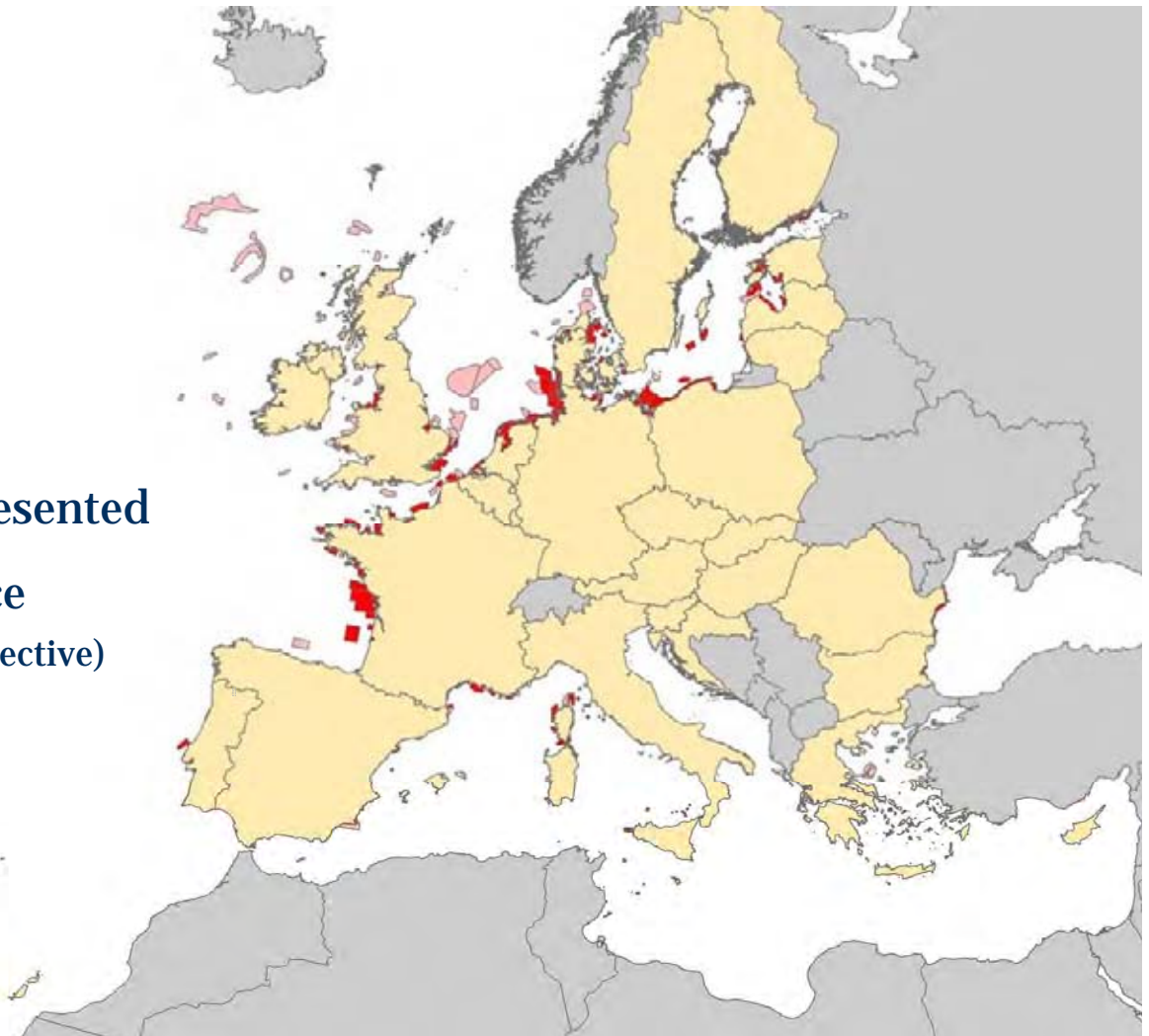
**OPEN SEA SPAMIS PROJECT (2008-2009 / 2010-2011 / 2012-2014)**



## EU MPAs – Marine Expert Group N2000 (November 2013)

### Mediterranean marine N2000 network

- Deficient coverage 2,4%
- Coastal network
- Deep-sea habitats under-represented
- Low management performance  
(massive infringement of Habitats Directive)



## THE CURRENT STATUS

**1.08%**

Surface under legal protection without the Pelagos Sanctuary

**2.7%**

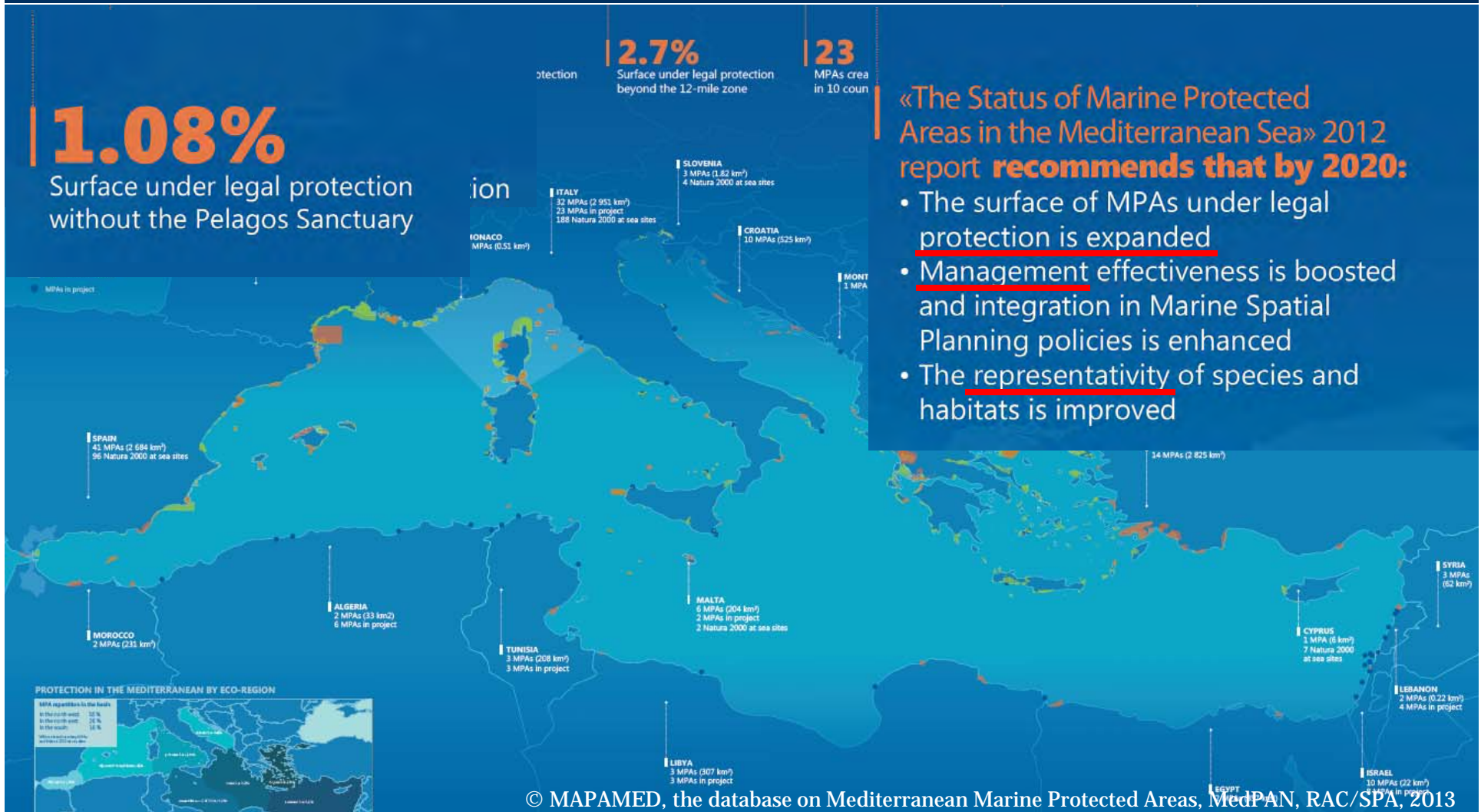
Surface under legal protection beyond the 12-mile zone

**23**

MPAs created in 10 countries

«The Status of Marine Protected Areas in the Mediterranean Sea» 2012 report **recommends that by 2020:**

- The surface of MPAs under legal protection is expanded
- Management effectiveness is boosted and integration in Marine Spatial Planning policies is enhanced
- The representativity of species and habitats is improved



## Oceana's work to contribute in increasing MPA coverage

- 
- The image shows the Oceana ship 'Pescador Los Océanos' at sea, with a yellow ROV in the foreground. The ship has the Oceana logo and name on its side. The ROV is white with red and yellow accents and has 'OCEANA' and 'instalSub' written on it.
- **Providing first-hand information (HD ROV)**
  - **Collaboration with institutions and national/international authorities**
  - **Developing new MPA proposals based on:**
    - ✓ *Scientific information gathered*
    - ✓ *Precautionary Approach implementation*
    - ✓ *International recommendations and legislation*

## Our targets

### CBD - Aichi Target 11 (2010)

#### 10% protected by 2020 through MPA networks

- *Ecologically coherent (habitats representativity)*
- *Well connected & Well-managed*

## FAO

*VME conservation - International guidelines for the management of deep-sea fisheries in the High Seas (2009)*

### Good Environmental Status by 2020:

- *EcAp process (Mediterranean countries)*
- *MSFD (EU countries)*





CBD

## UNEP/CBD/EWS.MPA/1/2

Annex III



CONVENTION ON  
BIOLOGICAL  
DIVERSITY

Distr.  
GENE  
UNEP  
13 Nov  
ORIGI

### SCIENTIFIC CRITERIA AND GUIDANCE FOR SELECTING AREAS TO ESTABLISH A REPRESENTATIVE NETWORK OF MARINE PROTECTED AREAS, INCLUDING IN OPEN OCEAN WATERS AND DEEP-SEA HABITATS

EXPERT WORKSHOP ON ECOLOGICAL  
CRITERIA AND BIOGEOGRAPHIC  
CLASSIFICATION SYSTEMS FOR MARINE  
AREAS IN NEED OF PROTECTION  
Azores, Portugal, 2-4 October 2007

REPORT OF THE EXPERT WORKSHOP ON ECOLOGICAL  
BIOGEOGRAPHIC CLASSIFICATION SYSTEMS FOR MARINE  
PROTECTION

#### INTRODUCTION

1. At its eighth meeting, the Conference of the Parties to the Convention (CBD) requested the Executive Secretary to refine, consolidate and, with scientific and ecological criteria for the identification of marine area biogeographical and other ecological classification systems, drawing on national and regional scale. In this regard, the Conference of the Parties expert workshop requested the Executive Secretary to provide the Subsidiary Body on Scientific, Technical and Technological Advice prior to the Secretary-General of the United Nations for the purpose of informing the Assembly of the United Nations (decision VIII/24, para. 46).

2. In pursuance of paragraph 46 of decision VIII/24, the Executive Secretary, with financial support from the Government of Portugal, organized an Expert Workshop on Ecological and Biogeographic Classification Systems for Marine Areas in Need of Protection in Azores, Portugal. The Workshop was held at the Hotel Marina Miguel Island, Azores, Portugal.

3. The terms of reference of the Workshop were, as described in its mandate, to (i) refine and develop a consolidated set of scientific criteria for identifying significant marine areas in need of protection, in open ocean waters and deep-sea habitats; (ii) review existing sets of criteria used nationally, regionally and globally; (iii) ecological classification systems for delineating ocean regions and ecosystem classification systems, and including more detailed subregional classification systems; and (iv) compile a consolidated set of scientific criteria for representative networks of marine protected areas, including in open ocean waters and deep-sea habitats.

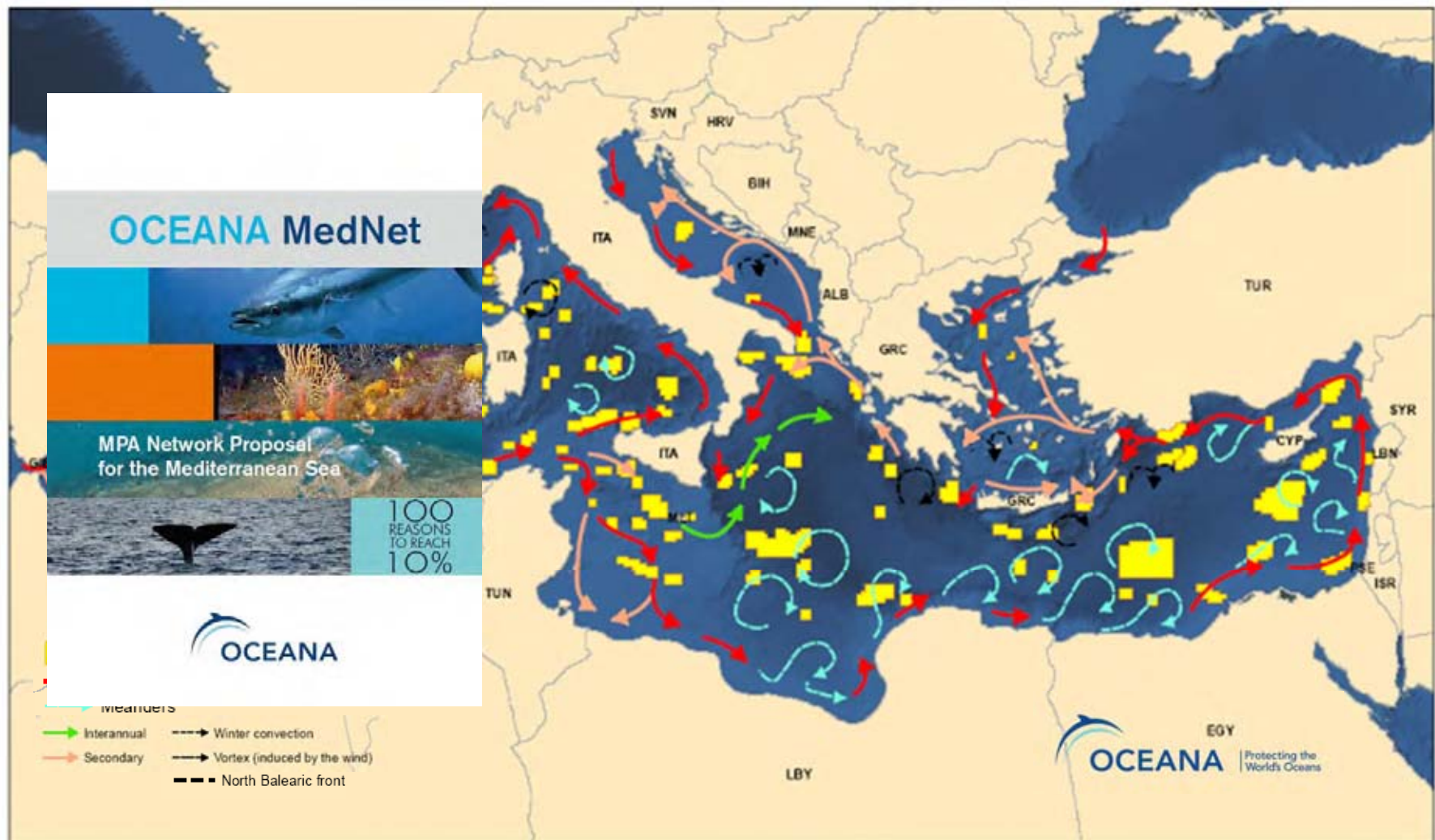
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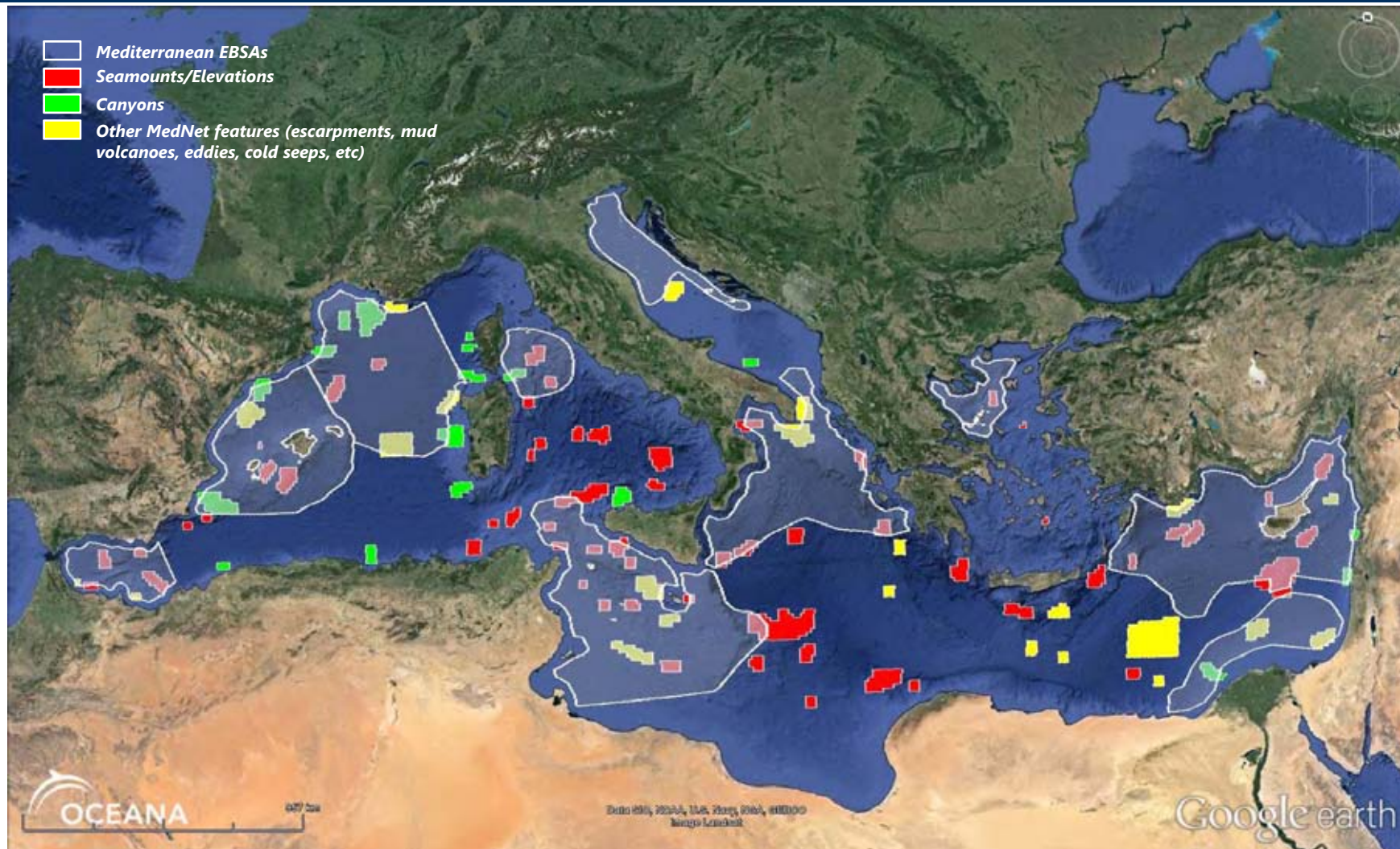
The Expert Workshop recommends that the following four initial steps be taken:

- **Scientific identification of an initial set of ecologically or biologically significant areas.** The criteria in annex II should be used, considering the best scientific information available, and applying the precautionary approach. This identification should focus on developing an initial set of sites already recognised for their ecological values, with the understanding that other sites could be added as new / better information comes available.
- **Develop / choose a biogeographic habitat and/or community classification system.** This system should reflect the scale of the application, and address the key ecological features within the area. Usually, this will entail a separation of at least two realms –pelagic and benthic.
- **Drawing upon steps 1 & 2 above, iteratively use qualitative and/or quantitative techniques to identify sites to include in a network.** Their selection for consideration of enhanced management should reflect their recognised ecological importance, vulnerability, and address the requirements of ecological coherence through:
  - representativity
  - connectivity
  - replication
- **Assess the adequacy and viability of the selected sites.** Consideration should be given to their size, shape, boundaries, buffering, and appropriateness of the site management regime.



# MedNet Proposal

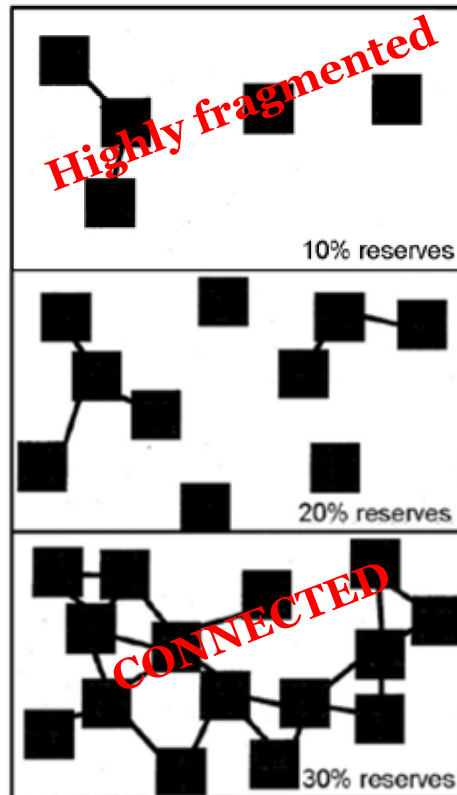






## Building up connectivity

*IUCN-WCPA, 2008*

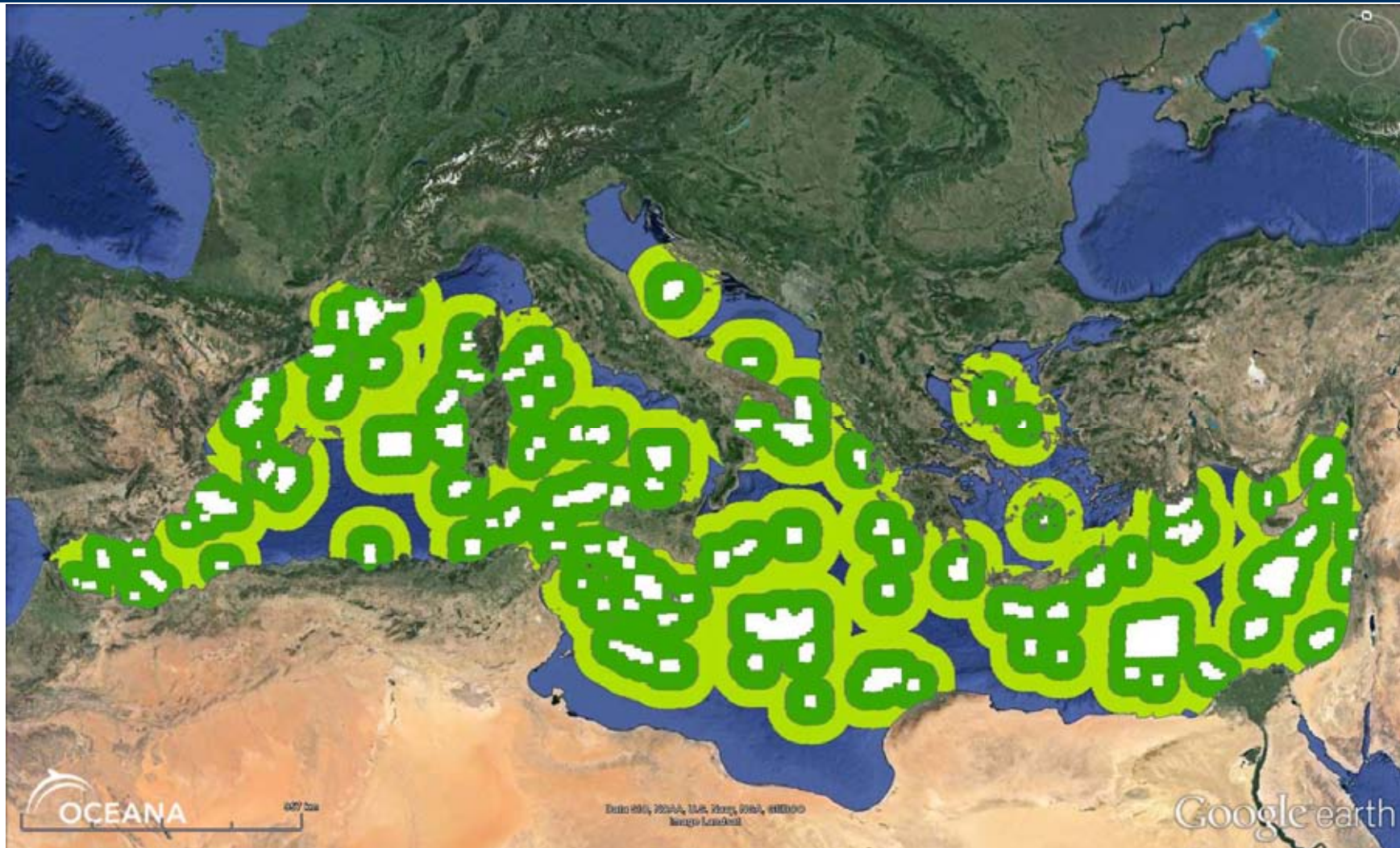


**Table 12. Studies on connectivity in MPA networks**

| AUTHOR (Year)                     | LARVAL DISPERSAL DISTANCE (km) | LOCATION         |
|-----------------------------------|--------------------------------|------------------|
| Rachor and Günther (2001)         | Up to 100                      | North Sea        |
| Treml <i>et al</i> (2008)         | 50-100                         | Pacific          |
| Planes, Jones and Thorrold (2009) | 35                             | Papua New Guinea |
| Christie <i>et al</i> (2010)      | 15-184                         | Hawaii           |

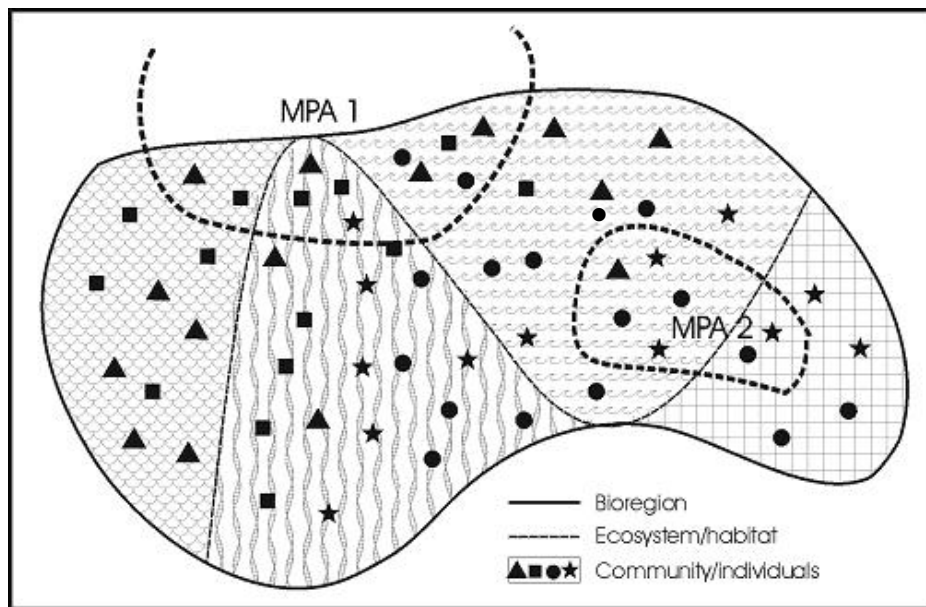
According to these authors, the effectiveness of the network is determined by the larval dispersal patterns and therefore by their connection to local oceanic or mesoscale currents.

*OCEANA, 2011*




## Representativeness

### MedNet varied Figures, Species and Habitats



- **Seamounts**
- **Submarine canyons**
- **Banks**
- **Scarpments**
- **Ridge**
- **Gyres**
- **Abysal plain**
- **Mud volcanoes**
- **Hydrothermal vents**
- **Carbonate mounds**
- **Etc...**
- Cold water corals
- Sponge aggregations
- Gorgonian gardens
- Cetaceans
- Turtles
- Monk seal
- Deep-sea sharks
- Commercial species (nurseries/spawning grounds):
  - ✓ Hake
  - ✓ Monkfish
  - ✓ Red mullet
  - ✓ BFT
  - ✓ Small pelagics


## Seamounts & Submarine canyons to follow international commitments



INTERNATIONAL GUIDELINES  
FOR THE MANAGEMENT OF DEEP-SEA FISHERIES  
IN THE HIGH SEAS

DIRECTIVES INTERNATIONALES  
SUR LA GESTION DE LA PÊCHE PROFONDE  
EN HAUTE MER

DIRECTRICES INTERNACIONALES  
PARA LA ORDENACIÓN DE LAS PESQUERÍAS  
DE AGUAS PROFUNDAS EN ALTA MAR



### FAO Guidelines

Examples of species groups, communities and habitat forming species that are documented or considered sensitive and potentially vulnerable to DSFs in the high-seas, and which may contribute to forming VMEs:

- i. certain coldwater corals and hydroids, e.g. reef builders and coral forest including: stony corals (Scleractinia), alcyonaceans and gorgonians (Octocorallia), black corals (Antipatharia) and hydrocorals (Stylasteridae);
- ii. some types of sponge dominated communities;
- iii. communities composed of dense emergent fauna where large sessile protozoans (xenophyophores) and invertebrates (e.g. hydroids and brvozoans) form an important structural component
  - o Examples of topographical, hydrophysical or geological features, including fragile geological structures, that potentially support the species groups or
- iv. s  
n communities, referred to above:
  - i. submerged edges and slopes (e.g. corals and sponges);
  - ii. summits and flanks of seamounts, guyots, banks, knolls, and hills (e.g. corals, sponges, xenophyphores);
  - iii. canyons and trenches (e.g. burrowed clay outcrops, corals);
  - iv. hydrothermal vents (e.g. microbial communities and endemic invertebrates); and
  - v. cold seeps (e.g. mud volcanoes for microbes, hard substrates for sessile invertebrates).

## Seamounts & Submarine canyons to follow international commitments



### EBSA criteria

*Appendix to Annex II*


EXAMPLES OF FEATURES THAT WOULD MEET THE SCIENTIFIC CRITERIA FOR IDENTIFYING ECOLOGICALLY OR BIOLOGICALLY SIGNIFICANT MARINE AREAS OR SPECIES 4/

#### *Benthic features*

- Seamount communities
- Cold water coral reefs
- Coral, sponge and bryozoan aggregations
- Hydrothermal vent ecosystems
- Gas hydrates
- Cold seeps
- Pseudo abyssal depressions (basin-like structure)
- Canyons
- Submerged atolls, bank and guyot communities
- Carbonate mounds
- Trenches



CBD

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**CONVENTION ON  
BIOLOGICAL  
DIVERSITY**

Distr.  
GENERAL

UNEP/CBD/EWS/MPA/1/2  
13 November 2007

ORIGINAL: ENGLISH

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3. The terms of reference of the Workshop were, as described in annex II of decision VIII/24, to: (i) refine and develop a consolidated set of scientific criteria for identifying ecologically or biologically significant marine areas in need of protection, in open ocean waters and deep sea habitats, building upon existing sets of criteria used nationally, regionally and globally; (ii) compile biogeographical and ecological classification systems for delineating ocean regions and ecosystems, building on existing broad classification systems, and including more detailed subregional classification systems where they exist in a nested approach, and initiate future development by making recommendations for further work to fill gaps; and (iii) compile a consolidated set of scientific criteria for representative networks of marine protected areas, including in open ocean waters and deep-sea habitats.

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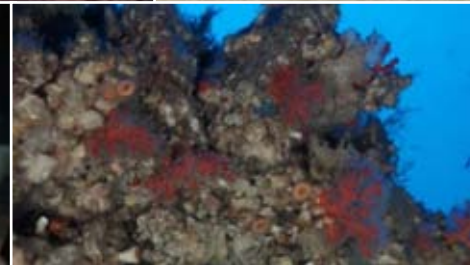
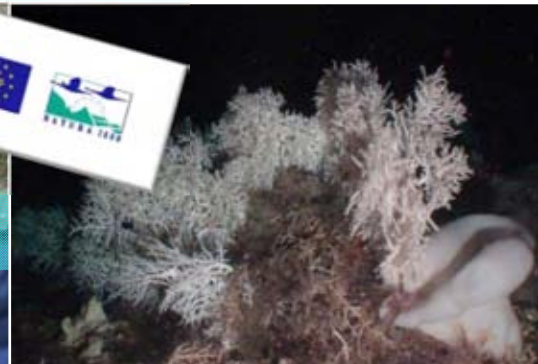
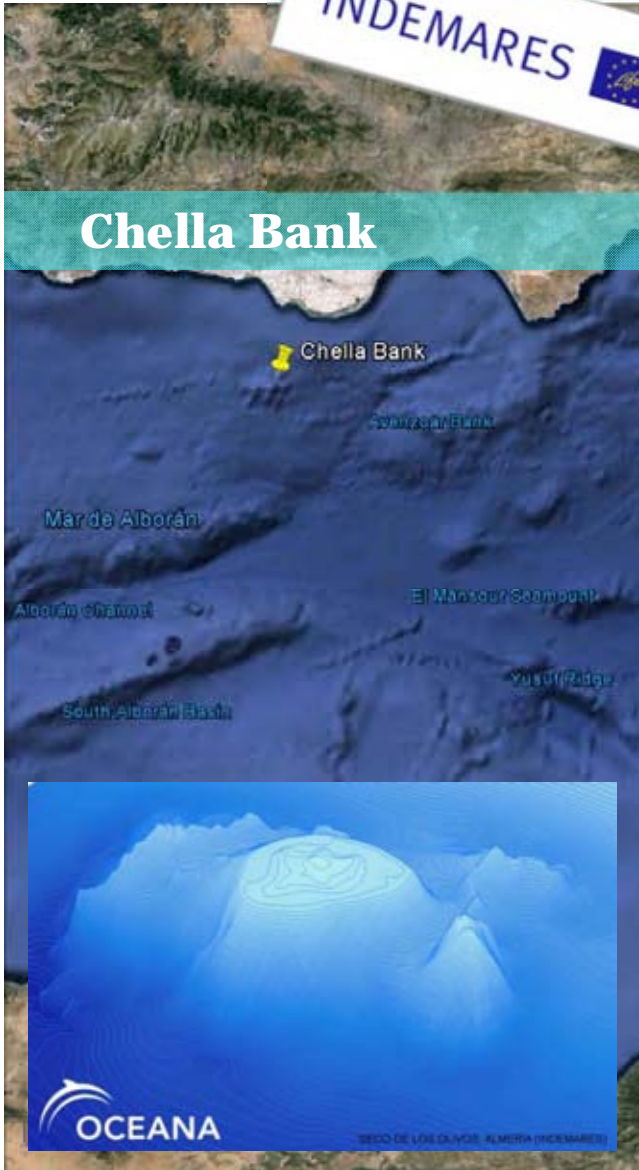




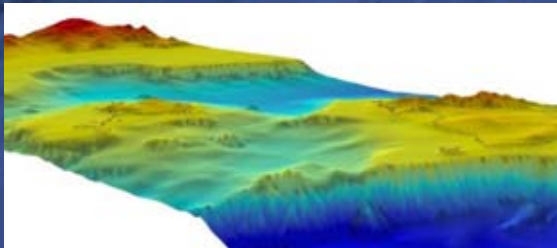
INDEMARES



## Chella Bank

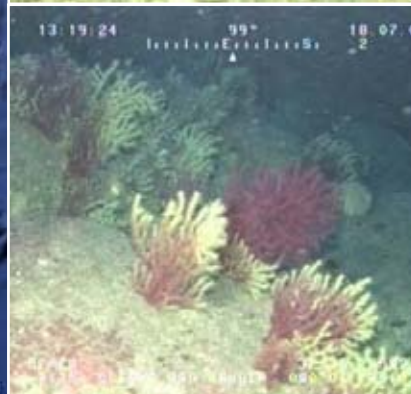
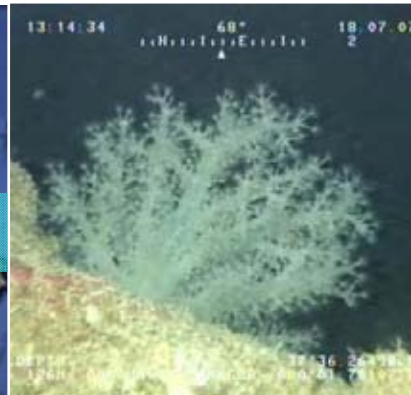


Balearic Seamounts

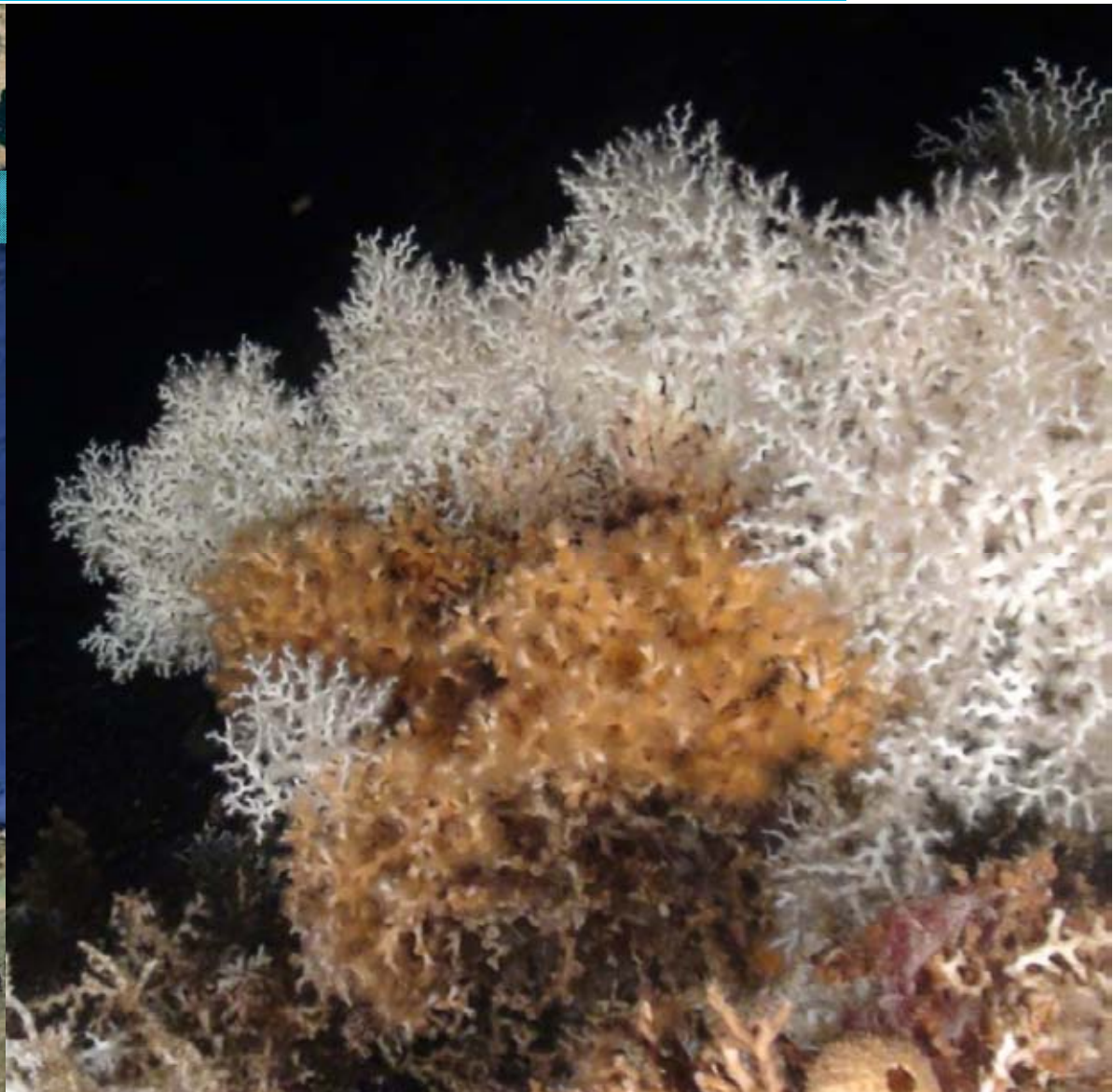




## Seco de Palos Bank

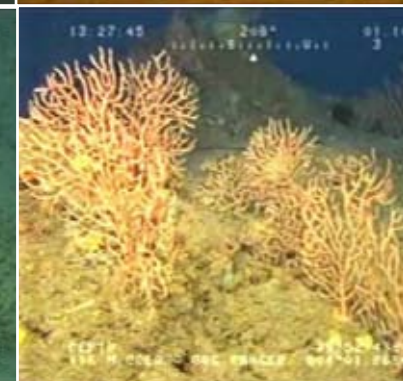
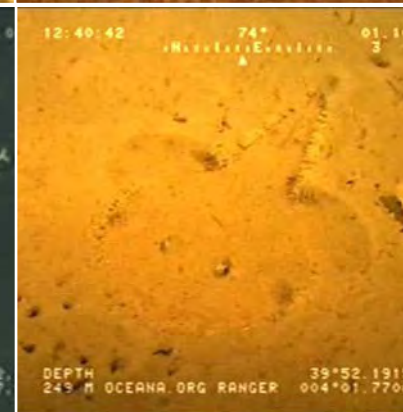
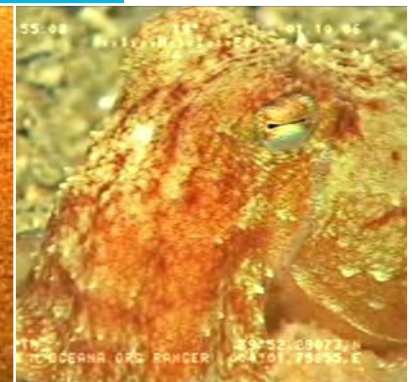
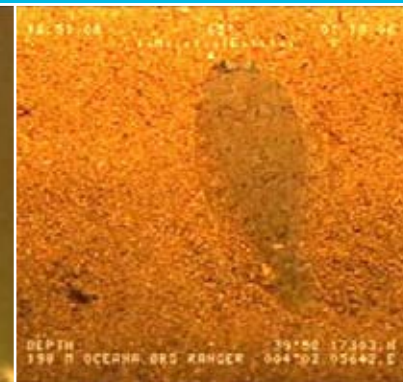


CABLIERS BANK





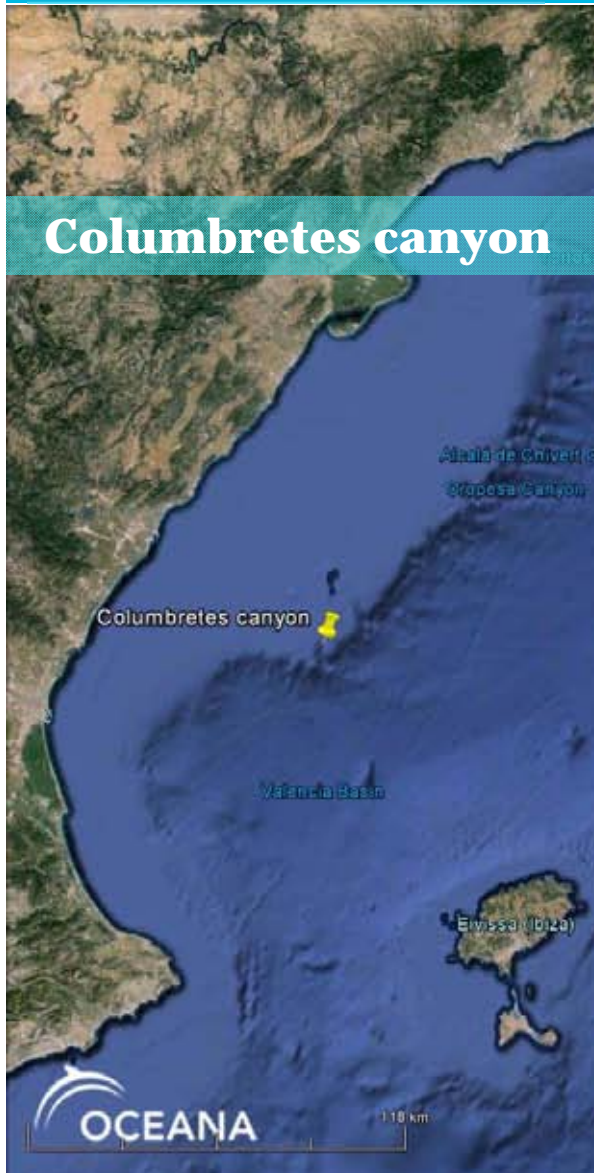
## Minorca canyon



Cabrera canyon



Columbretes canyon

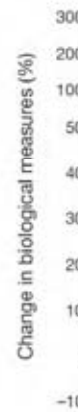


**MPA benefits (Roberts, 2012)**

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**Evi**



Source:

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**Can Fish Stock Recovery Areas benefit mobile and migratory species?**

- To do so, mobile species must spend part of their time in Fish Stock Recovery Areas
- Protection of nursery areas can increase fishery yields by reducing premature capture of young animals
- Protection of spawning aggregations can reduce overfishing of mature animals and enhance population replenishment
- Recovery of habitats and prey animals can increase time spent in Fish Stock Recovery Areas and enhance feeding opportunities





**First Working Group on MPAs  
SAC - SCMEE**

*Bar, Montenegro  
3 February 2014*



*Opportunities*



## THE WAY FORWARD – GFCM tools



### 37th meeting of GFCM

Resolution GFCM/37/2013/1  
on area based management of fisheries, including through the establishment of  
Fisheries Restricted Areas (FRAs) in the GFCM convention area and coordination  
with the UNEP-MAP initiatives on the establishment of SPAMIs

#### PROGRAMME OF WORK FOR THE INTERSESSIONAL PERIOD 2013-2014

##### Programme of work of the Scientific Advisory Committee

112. The Commission endorsed the programme of work proposed by SAC as follows:

##### Sub-Committee on Marine Environment and Ecosystems (SCMEE)

- Develop mid-term research programmes to identify conservation measures and to promote sustainable use of deep-sea habitats (seamounts, canyons and deep coral populations) and related fishing stocks;
- Collect environmental and biological information on marine seamounts.

## THE WAY FORWARD – UNEP-MAP tools



### 19th COP meeting UNEP-MAP

#### Decision IG.21/4

Action Plans under the Specially Protected Areas and Biological Diversity Protocol including Monk Seal, Marine Turtles, Birds, Cartilaginous Fishes, and **Dark Habitats**

**Requests** the Contracting Parties to take the necessary measures for the implementation of the updated Work Programme and Implementation Timetables, the Regional Strategy for the conservation of Monk Seals in the Mediterranean and the Dark Habitats Action Plan and report on their implementation according to the cycle and format of the MAP reporting system;

**Requests** SPA/RAC to undertake the necessary actions to assist the Contracting Parties, at their request to fulfill their obligations pertaining to the implementation of the updated Work Programme and Implementation Timetables the Mediterranean Strategy for the conservation of Monk Seals and the Dark Habitats Action Plan by supporting and/or coordinating actions where necessary and to further apply the ecosystem approach, in collaboration with the relevant organisations.

#### Annex V

Action Plan for the conservation of habitats and species associated with seamounts, underwater caves and canyons, aphotic hard beds and chemo-synthetic phenomena in the Mediterranean Sea  
(Dark Habitats Action Plan)

## THE WAY FORWARD – UNEP-MAP tools



### 19th COP meeting UNEP-MAP

#### Decision IG.21/5

#### Identification and Conservation of sites of particular ecological interest in the Mediterranean

**Encourage** all Parties to accelerate efforts in taking necessary measures to develop a coherent and well-managed network of coastal and marine protected areas in the Mediterranean while increasing the number of those areas in the SPAMI list;

**Request** the Secretariat with the assistance of SPA/RAC to cooperate with the CBD Secretariat in organizing during 2014 a regional workshop in the Mediterranean on EBSAs, in time for its report to be considered by the 18<sup>th</sup> meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (June 2014) prior to the twelfth meeting of the CBD Conference of the Parties.

#### Decision IG.21/6

#### Amendments of the Annexes II and III to the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean

*Antipathella subpinnata* (Ellis & Solander, 1786)  
*Antipathes dichotoma* Pallas, 1766  
*Antipathes fragilis* Gravier, 1918  
*Leiopathes glaberrima* (Esper, 1792)  
*Parantipathes larix* (Esper, 1790)  
*Callogorgia verticillata* (Pallas, 1766)  
*Cladocora caespitosa* (Linnaeus, 1767)  
*Cladocora debilis* Milne Edwards & Haime, 1849  
*Ellisella paraplexauroides* (Stiasny, 1936)  
*Lophelia pertusa* (Linnaeus, 1758)  
*Madrepora oculata* Linnaeus, 1758

## What do we have?



**Scientific knowledge & data, evidences**

**Institutional and legal mechanisms**

**Funding opportunities – Mediterranean  
Trust Fund**

**Proven cost-effectiveness and sectorial  
value**

What we need...



The political WILL

invest in yourself.  
come in today.





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*PILAR MARIN*  
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