





## Convention on Biological Diversity

Distr. GENERAL

UNEP/CBD/SBSTTA/16/INF/8 23 April 2012\*\*

**ENGLISH ONLY** 

SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE Sixteenth meeting Montreal, 30 April-5 May 2012 Item 6.1 of the provisional agenda\*

## SYNTHESIS REPORT ON THE WORK CARRIED OUT REGARDING DESCRIPTION OF EBSAs IN THE MEDITERRANEAN

*Information note by the Executive Secretary* 

- 1. In paragraph 36 of its decision X/29, the Conference of the Parties requested the Executive Secretary to work with Parties and other Governments, as well as competent organizations and regional initiatives, such as the Food and Agriculture Organization of the United Nations (FAO), regional seas conventions and action plans, and, where appropriate, regional fisheries management organizations (RFMOs), with regards to fisheries management, to organize, including the setting of terms of references, a series of regional workshops, before a future meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) prior to the eleventh meeting of the Conference of the Parties to the Convention, with a primary objective to facilitate the description of ecologically or biologically significant marine areas (EBSAs) through application of scientific criteria in annex I to decision IX/20 as well as other relevant compatible and complementary nationally and intergovernmentally agreed scientific criteria, as well as the scientific guidance on the identification of marine areas beyond national jurisdiction, which meet the scientific criteria in annex I to decision IX/20.
- 2. Pursuant to this request, a synthesis report was prepared by the Coordinating Unit for the Mediterranean Action Plan of the United Nations Environment Programme (UNEP/MAP) in collaboration with the Secretariat of the Convention on Biological Diversity to present the work carried out regarding the description of ecologically or biologically significant marine areas in the Mediterranean.
- 3. The synthesis report is circulated, together with the cover letter signed by the Executive Secretary and Coordinator of UNEP/MAP, in the form and language in which it was received by the Secretariat of the Convention on Biological Diversity.

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<sup>\*\*</sup> Reposted to include the following footnote: "The designations employed and the presentation of material in this note do not imply the expression of any opinion whatsoever on the part of the Secretariat concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries."

<sup>\*</sup> UNEP/CBD/SBSTTA/16/1.



## United Nations Environment Programme

## Coordinating Unit For The Mediterranean Action Plan



Programme des Nations Unies pour l'environnement Unité de Coordination du Plan d'action pour la Méditerranée

Reference: MLS/dp

02 March 2012

Dear Mr. de Souza Dias,

During their 17<sup>th</sup> Ordinary Meeting (Paris, France, 8-10 February 2012), the Contracting Parties to the Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols adopted a Decision IG.20/7 regarding the conservation of sites of particular interest in the Mediterranean and requested the Secretariat of the Barcelona Convention to contact the Secretariat of the Convention on Biological Diversity in order to present the work carried out regarding the identification of Ecologically or biologically significant marine areas in the Mediterranean.

With a view towards the sixteenth meeting of the CBD Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA 16) to be held from 30 April to 5 May 2012 during which the question of EBSAs will be considered, I am pleased to send you a "Synthesis Report on the Work Carried out Regarding EBSAs Identification in the Mediterranean".

The purpose of this report is to synthesize the work presented to the Focal Points for Specially Protected Areas in May 2010, as appears in the following documents:

- ❖ UNEP(DEPI)/MED WG.348/3 rev1 Identification of potential sites in open seas including the deep sea that may satisfy SPAMI criteria
- UNEP(DEPI)/MED WG.348/Inf.3 Overview of scientific findings and criteria relevant to identifying SPAMIs in the Mediterranean open seas, including the deep sea.
- ❖ UNEP(DEPI)/MED WG.348/Inf.4 Fisheries conservation and vulnerable ecosystems in the Mediterranean open seas, including the deep seas.
- ❖ UNEP(DEPI)/MED WG.348/Inf.5 Report presenting a georeferenced compilation on bird important areas in the Mediterranean open seas.
- ❖ UNEP(DEPI)/MED WG.348/Inf.6 Technical report on the geographical information system developed for Mediterranean open seas.

Mr. Braulio de Souza Dias Executive Secretary Secretariat of the Convention on Biological Diversity United Nations Environment Programme 413 Saint-Jacques Street, Suite 800 Montreal, Quebec, Canada H2Y 1N9

Cc: Jihvun Leen, Environment Affairs Officer

Looking forward to further cooperation between our respective organizations, I remain at your disposal for any further information.

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Maria Luisa Silva-Mejias
Executive Secretary and Coordinator
UNEP/MAP

Best regards,



**Regional Activity Centre for Specially Protected Areas** 

# Synthesis report on the work carried out regarding EBSAs identification in the Mediterranean

## **Contents**

Background	1
Process followed	4
1 Identifying sub-regions in the Mediterranean	4
2 Identifying EBSA in the Mediterranean	5
2.1 Methods for EBSA identification	5
2.2 Details of polygons that led to the EBSA identification	6
2.3 Complementary work	23
Conclusion	25
Appendix	27

## SYNTHESIS REPORT ON THE WORK CARRIED OUT REGARDING EBSA IDENTIFICATION IN THE MEDITERRANEAN

#### **Background**

The Mediterranean region enjoys, through the Mediterranean Action Plan (MAP) and the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols (Barcelona Convention), a legal and institutional framework that is particularly favorable to the fulfillment of the CBD objectives related to the conservation of marine biodiversity and to the setting-up of a comprehensive and coherent Mediterranean network of marine protected areas, including on the high seas, in accordance with the relevant international legal framework and the objectives of the World Summit on Sustainable Development.

In particular, the Protocol on Specially Protected Areas and Biological Diversity (SPA/BD Protocol) and the Strategic Action Plan for Biological Diversity (SAP-BIO) are the main tools the Contracting Parties to the Barcelona Convention possess for implementing the Convention on Biological Diversity.

The SPA/BD Protocol, adopted in 1995 by the Contracting Parties to the Barcelona Convention, provides for the establishment of a List of Specially Protected areas of Mediterranean Importance (SPAMI List) in order to promote the conservation of natural areas and protection of threatened species and their habitats, taking into consideration that the SPAMIs can be established both in marine and coastal areas under sovereignty or jurisdiction of the Parties and in areas situated partly or wholly on the high seas.

Based on the provisions of the SPA/BD Protocol, the Regional Activity Centre for Specially Protected Areas (MAP-RAC/SPA) implements a project aiming to support the Contracting Parties to the Barcelona Convention to promote, through the Specially Protected Areas of Mediterranean Importance (SPAMI) system, the setting-up of a representative network of marine protected areas in the Mediterranean open seas, including the deep seas. The project is financially supported by the European Commission and the Mediterranean Trust Funds (MFT).

The overall objective of this project is to enhance the conservation of the Mediterranean marine habitats and their resources in the pelagic, bathyal and abyssal fields.

The identification of EBSAs in the Mediterranean was carried out during the first phase of the project, as a step of the process for identifying priority conservation areas located in open seas, including the deep seas.

This work was supervised by the project's Steering Committee consisted of representatives of international and regional organizations:

- UNEP's Division for Environmental Policy Implementation Regional Seas Programme (UNEP/DEPI) and Division for Environmental Law and Conventions (UNEP/DELC)
- Coordinating Unit for the Mediterranean Action Plan (MEDU, UNEP/MAP)
- European Commission
- Food and Agriculture Organization of the United Nations (UN-FAO)
- General Fisheries Commission for the Mediterranean (GFCM)
- Secretariat of the OSPAR Convention
- International Maritime Organization (IMO)
- Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC)
- Secretariat of the Agreement on the Conservation of Cetaceans of the Black Sea, the Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS)
- Secretariat of the Pelagos Sanctuary
- International Union for the Conservation of Nature's Centre for Mediterranean Cooperation (IUCN Med)
- Mediterranean Science Commission (CIESM)
- World Wide Fund for Nature's Mediterranean Programme Office (WWF MedPO).

The Project Steering Committee has met twice for reviewing the work:

- First Meeting of the Steering Committee, Tunis, Tunisia, 17 March 2009
- Second Meeting of the Steering Committee, Genoa, 18-19 November 2009

The work validated by the Steering Committee was presented to the Focal Points for SPAs at their Extraordinary Meeting held in Istanbul (Turkey) on 1<sup>st</sup> June 2010.

Then, at their 17<sup>th</sup> Ordinary Meeting (Paris, France, 8-10 February 2012), the Contracting Parties to the Barcelona Convention requested in Decision IG.20/7 the Barcelona Convention Secretariat to contact the CBD Secretariat and present the work carried out regarding EBSAs identification in the Mediterranean, as appears in documents UNEP(DEPI)/MED WG.348/3rev.1 supported by WG.348/Inf.3 to Inf.6

presented to the SPA/RAC Focal Points, and without prejudice to the competence of the Contracting Parties over marine areas that are or could be under their sovereignty or jurisdiction in accordance with international law as reflected in UNCLOS, to adopt possible management and conservation measures.

The purpose of this report is then to present the synthesis of the work carried out regarding EBSA identification in the Mediterranean, as appears in the documents presented to the SPA/RAC Focal Points in 2010:

- UNEP-MAP-RAC/SPA. 2010. Identification of potential sites in open seas including the deep sea that may satisfy SPAMI criteria (UNEP(DEPI)/MED WG.348/3 rev1)
- UNEP-MAP-RAC/SPA. 2010. Overview of scientific findings and criteria relevant to identifying SPAMIs in the Mediterranean open seas, including the deep sea. By Notarbartolo di Sciara, G. and Agardy, T. Ed. RAC/SPA, Tunis: 71pp. (UNEP(DEPI)/MED WG.348/Inf.3)
- ❖ UNEP-MAP-RAC/SPA. 2010. Fisheries conservation and vulnerable ecosystems in the Mediterranean open seas, including the deep seas. By de Juan, S. and Lleonart, J. Ed. RAC/SPA, Tunis: 103pp. (UNEP(DEPI)/MED WG.348/Inf.4)
- UNEP-MAP-RAC/SPA. 2010. Report presenting a georeferenced compilation on bird important areas in the Mediterranean open seas. By Requena, S. and Carboneras, C. Ed. RAC/SPA, Tunis: 39pp. (UNEP(DEPI)/MED WG.348/Inf.5)
- ❖ UNEP-MAP-RAC/SPA. 2010. Technical report on the geographical information system developed for Mediterranean open seas. By Requena, S. Ed. RAC/SPA, Tunis: 50pp. (UNEP(DEPI)/MED WG.348/Inf.6)

### **Process followed**

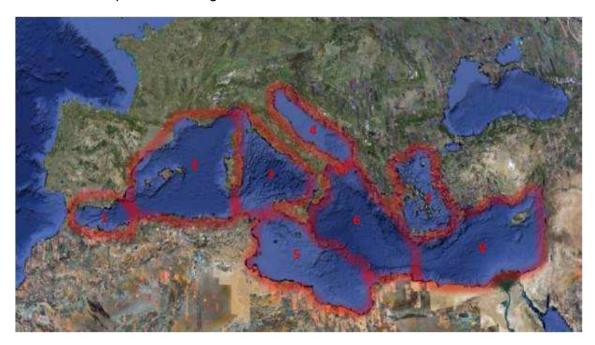
The Regional Work Programme for Mediterranean Marine and Coastal Protected Areas adopted in 2009 by the Contracting Parties to the Barcelona Convention recommends to adopt a biogeographical classification approach for designing representative networks of MPAs in the Mediterranean.

As presented in document UNEP(DEPI)/MED WG.348/Inf.3, the first stage of the process consisted in defining large-scale ecological units based on the Mediterranean sub-regions.

### 1 Identifying sub-regions in the Mediterranean

In their attempt at developing a detailed, comprehensive biogeographic system to classify the oceans, Spalding et al. (2007) proposed to subdivide the Mediterranean Sea Province, part of the Temperate North Atlantic Realm, into seven ecoregions: Alborán Sea, Western Mediterranean, Adriatic Sea, Ionian Sea, Tunisian Plateau/Gulf of Sidra, Aegean Sea, and Levantine Sea.

In order to fit more closely the region's existing geomorphological and biogeographic diversity, the Spalding et al.'s (2007) work was slightly modified and the Mediterranean basin was first subdivided into eight distinct geographical regions, determined by biological, ecological and physical features that were sufficiently different or unique in their neighbourhood on the scale considered.



**Figure 1**: Subdivision of the Mediterranean into eight sub-regions (1 – Sea of Alboran; 2 – Algerian-Provençal basin; 3 – Tyrrhenian Sea; 4 – Adriatic Sea; 5 – Tunisian Plateau/Gulf of Sirte; 7 – Aegean Sea; 8 – Levantine Sea)

#### 2 Identifying EBSA in the Mediterranean

At the next scale, and following the criteria defined by the CBD and the SPA/BD Protocol, the study started to identify Ecologically or Biologically Significant Areas in need of protection in open-sea waters and deep-sea habitats. This led to the defining of 10 EBSAs for the Mediterranean, based on currently available information, represented in Figure 2. The Ligurian Sea, located between areas 3 and 4 is already protected as SPAMI.

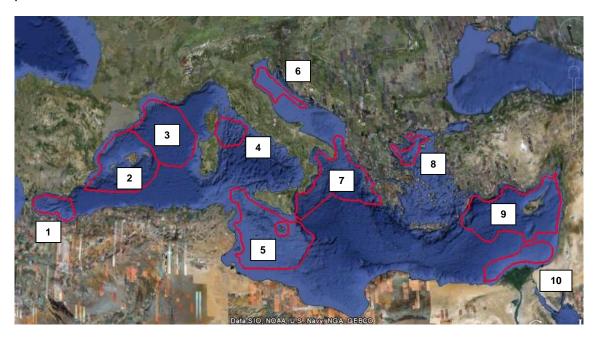


Figure 2: Marine Ecologically or Biologically Significant Areas in the Mediterranean (1 – Alboran Sea; 2 – Balearic Islands area; 3 – Gulf of Lions area; 4 – Tyrrhenian Sea; 5 – Tunisian Plateau; 6 - Adriatic Sea; 7 - Ionian Sea; 8 – Aegean Sea; 9 - Levantine Sea; 10 - Nile Delta sea area) - The Ligurian Sea, located between areas 3 and 4 is already protected as SPAMI.

#### 2.1 Methods for EBSA identification

As presented in document UNEP(DEPI)/MED WG.348/Inf.3, considering that large portions of the Mediterranean Sea are very data-poor, the existing regional databases were supplemented with locally derived indicators (e.g., geomorphological features of the sea floor, areas of high primary productivity) as proxies of marine biodiversity hotspots, and expert opinion.

A survey was started by contacting via email a selection of experts of Mediterranean marine ecology, biodiversity, oceanography, and geomorphology, providing them a standard survey form. Numerous experts from countries have contributed by filling in the survey form and providing their expert advice.

Information being obtained include data on physical oceanography of the Mediterranean Sea, modelling to pinpoint areas of importance for select species and ecological integrity, and more detailed information on the distribution and abundance of key marine species.

Their inputs consist of a number of polygons presented hereafter, which have been combined with other similar inputs deriving from organisations with a relevant role in the Mediterranean Sea (e.g., ACCOBAMS, GFCM). Experts have also provided scores for a selection of polygons, based on the stated criteria.

Each polygon was assessed taking into consideration CBD criteria for EBSA identification and criteria provided by the SPA/BD Protocol (see Appended table).

#### 2.2 Details of polygons that led to the EBSA identification

The metadata that were provided by experts is shown as overlapping polygons. Details within the databases, including the number and name of each polygon, the ecoregion where it lies, the name of the expert recommending the polygon, the criteria scores, and notes, are contained in the Appended table.

Polygons were recommended on the basis of:

- Locations of seamounts, canyons, and other significant seafloor geomorphological features;
- Areas of known high primary productivity, either permanent or seasonal;
- Marine areas containing important habitat for marine birds (including IBAs), cetaceans, monk seals, marine turtles, sharks, bluefin tuna;
- Known locations of deep-sea coral reefs (Lophelia and Madrepora).

The polygons used for identifying each EBSA are detailed in the next pages.

#### ❖ Alboran Sea



Figure 3: Alborán Sea. Outer limits of the Alborán Sea EBSA

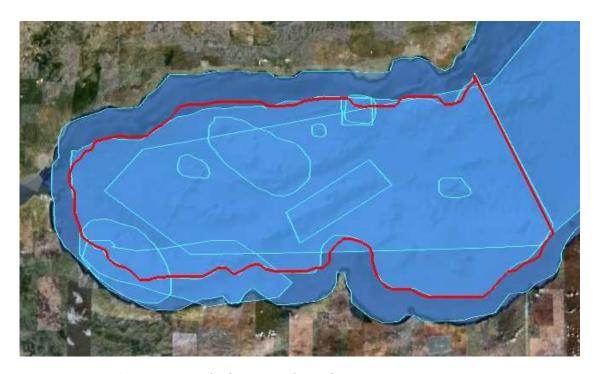
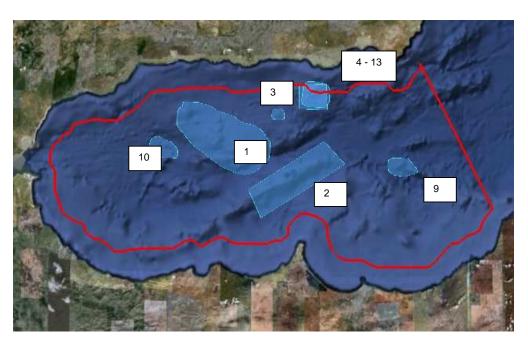
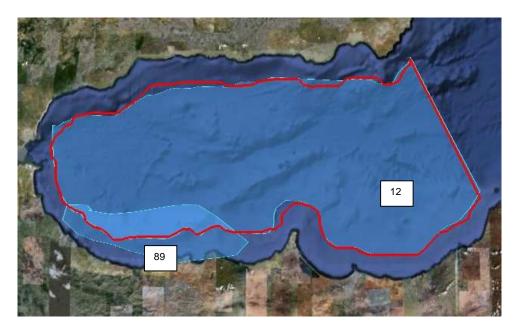


Figure 4: Alborán Sea. Alborán EBSA, all polygons combined



**Figure 5:** Alborán Sea. Geomorphological features: 1: Djibouti Seamount; 2: Alborán Crest; 3: Motril Seamount; 4-13: Seco de los Olivos Seamount; 9: Al-Mansour Seamount; 10: Torrox Seamount (S. Tudela, X. Pastor).



**Figure 6:** Alborán Sea. High productivity areas: 12: Important feeding area for locally-breeding bird populations (C. Carboneras); 89: Important suitable habitat for small pelagics (V. Agostini)



**Figure 7:** Alborán Sea. Important habitat for significant species: 14: Loggerhead turtles (P. Casale); 15: Scyliorhinus canicula nursery area (F. Serena); 16: Common dolphins, striped dolphins, bottlenose dolphins, Cuvier's beaked whales, pilot whales (A. Cañadas and R. Sagarminaga, ACCOBAMS).

## ❖ Balearic Islands area



Figure 8: Balearic Sea. Outer limits of Balearic Sea EBSA

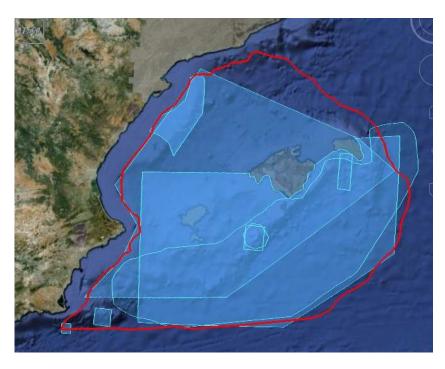
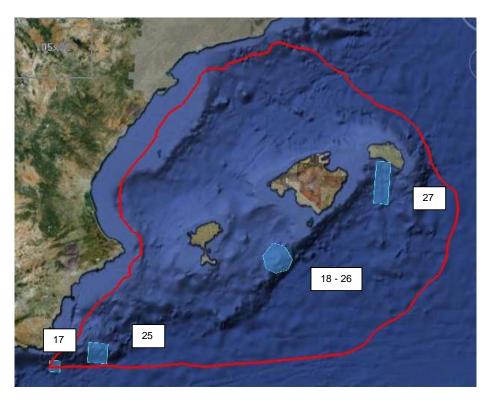


Figure 9: Balearic Sea. All polygons combined.



**Figure 10:** Balearic Sea. Geomorphological features: 17: Aguilas Seamount; 18-26: Emile Baudot Seamount; 25: Palos Seamount; 27: Menorca Canyon (S. Tudela, X. Pastor).



**Figure 11:** Balearic Sea. High productivity areas: 23: Ebro River System (C. Carboneras).

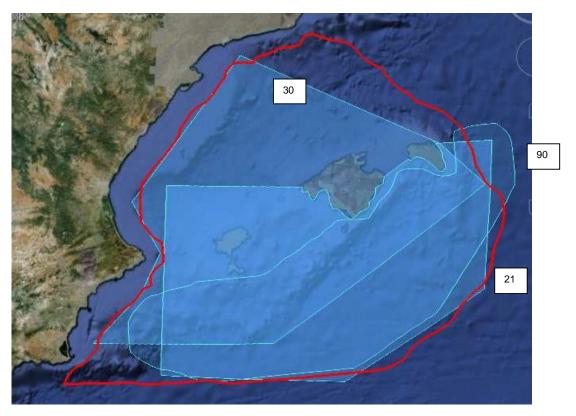


Figure 12: Balearic Sea. Important habitat for significant species: 21: Bluefin tuna spawning grounds (S. Tudela; WWF 2008); 30: Important loggerhead turtle (P. Casale) and various odontocete (Rendell and Cañadas 2005) habitats; 90: Important sperm whale habitat (Rendell and Cañadas 2005).

## ❖ Gulf of Lions area



Figure 13: Gulf of Lion. Outer limits of Gulf of Lion EBSA.

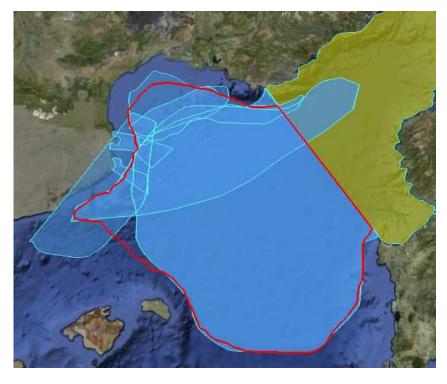
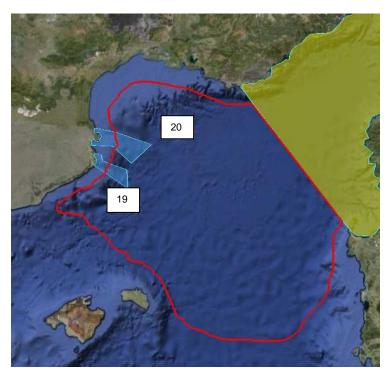
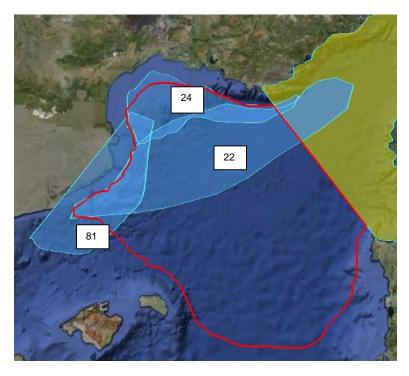


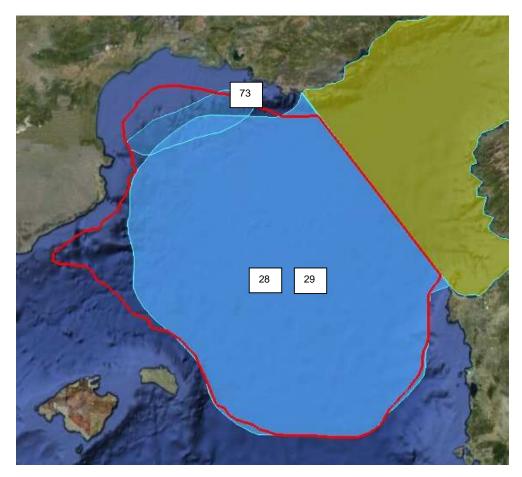
Figure 14: Gulf of Lion. All polygons combined.



**Figure 15:** Gulf of Lion. Geomorphological features: 19: Palamos Canyon; 20: Cap de Creus Canyon (S. Tudela).



**Figure 16:** Gulf of Lion. High productivity areas: 22: High primary productivity of pelagic waters (V. Barale); 24: High productivity area, important for globally-threatened and other seabird populations (C. Carboneras); 81: Important suitable habitat for small pelagics (V. Agostini).



**Figure 17**: Gulf of Lion. Important habitat for significant species: 28: fin whales (S. Panigada); 29: striped dolphins, Risso's dolphins, sperm whales (ACCOBAMS); 73: Madrepora reefs in Lacaze-Duthiers and Cassidaigne Canyons, and possibly beyond (Freiwald et al. 2009).

## \* Tyrrhenian Sea

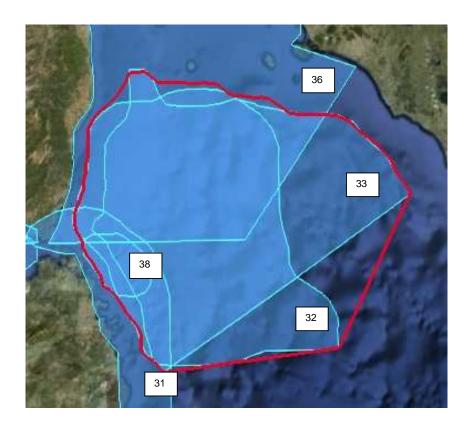


Figure 18: Central Tyrrhenian Sea. 31: Galeus melastomus nursery area (F. Serena); 32: High primary productivity of pelagic waters (V. Barale); 33: Important area for feeding of endemic and other seabird species of conservation concern that concentrate for breeding in Corsica-Sardinia-Tuscan archipelagos (C. Carboneras); 36: Scyliorhinus canicula, Raja clavata, R. asterias, Carcharhinus brachyurus, Galeus melastomus, Etmopterus spinax nursery area (F. Serena); 38: Scyliorhinus canicula nursery area (F. Serena).

## ❖ Tunisian Plateau

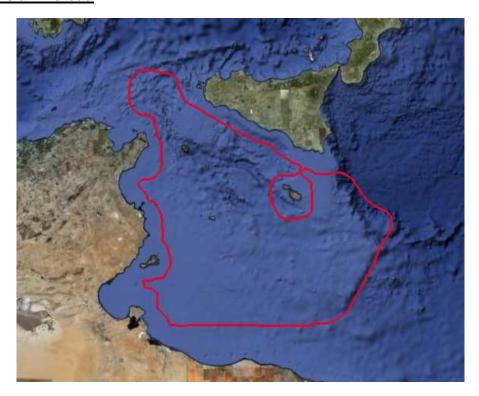


Figure 19: Tunsian Plateau. Outer limits of the Tunisian Plateau EBSA.

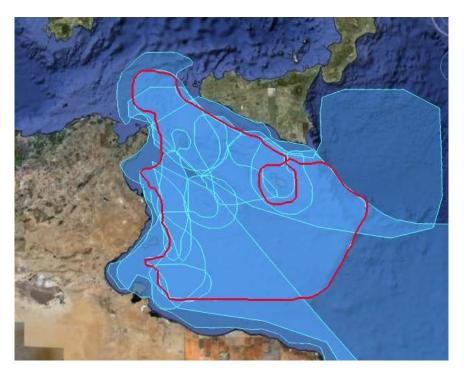
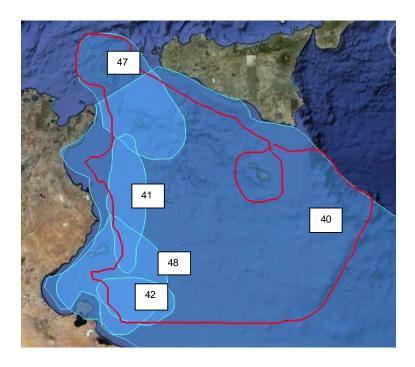


Figure 20: Tunisian Plateau EBSA, all polygons combined.



**Figure 21:** Tunisian Plateau. Fish breeding areas: 40: Bluefin tuna breeding area (S. Tudela); 41: White shark nursery area (M.N. Bradai); 42: Several batoid species and white shark nursery area (M.N. Bradai); 47: White shark probable nursery area (F. Serena); 48: White shark probable nursery area (F. Serena).

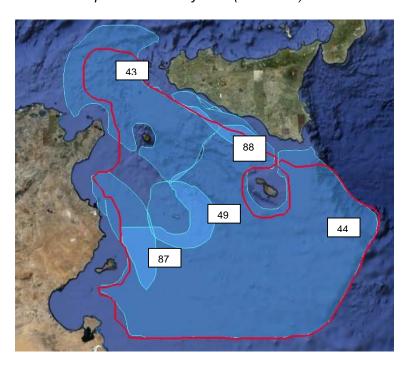
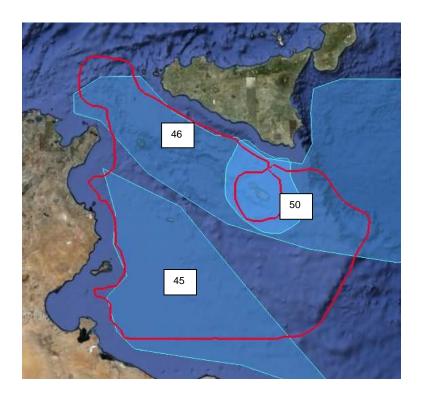
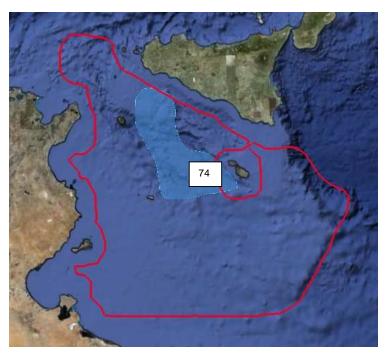


Figure 22: Tunisian Plateau. High productivity areas: 43: Important feeding area for Procellariiforms (C. Carboneras); 44: Important feeding area for endemic marine birds (C. Carboneras); 49: Winter feeding grounds for fin whales (Canese et al. 2006; note: limits may be much wider); 87: Potential important suitable habitat for small pelagics (V. Agostini); 88: Important suitable habitat for small pelagics (V. Agostini).



**Figure 23:** Tunisian Plateau. Important habitat for threatened species: 45: Loggerhead turtles (P. Casale); 46: Loggerhead turtles (P. Casale); 50: Short-beaked common dolphins (ACCOBAMS - Note: area may be much wider than that).



**Figure 24:** Tunisian Plateau. Lophelia and Madrepora reefs: 74: Urania Bank, Linosa Trough, off Malta (Freiwald et al. 2009; note: important area may be spread much wider, and extend to other banks and abundant seamounts).

## ❖ Adriatic Sea

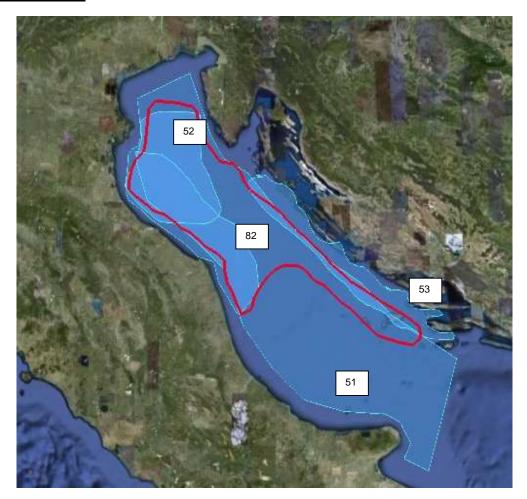
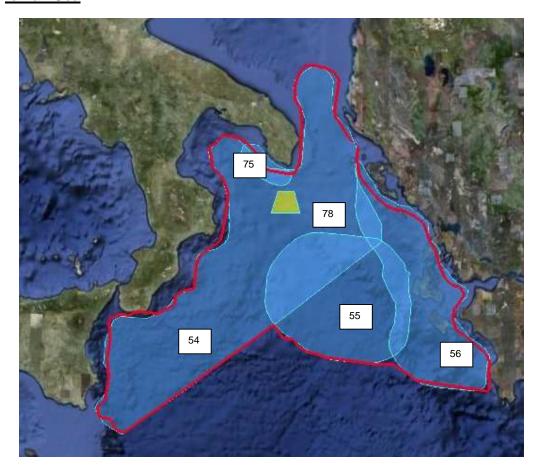


Figure 25: Northern Adriatic Sea. 51: Loggerhead turtle feeding habitat (P. Casale); 52: Squalus acanthias, Prionace glauca nursery area (F. Serena); 53: Scyliorhinus canicula nursery area (F. Serena); 82: Important suitable habitat for small pelagics (sardines and/or anchovies) (V. Agostini).

## ❖ Ionian Sea



**Figure 26:** Northern Ionian Sea. 54: Loggerhead turtle feeding habitat (P. Casale); 55: Raja clavata nursery area (F. Serena); 56: Common dolphin, bottlenose dolphin, beaked whale, fin whale, sperm whale habitat (ACCOBAMS); 75: Lophelia and Madrepora reefs (Freiwald et al. 2009); 78: Lophelia reefs (GFCM).



Figure 27: Northern Aegean Sea. 59: Common and bottlenose dolphins, harbour porpoise, beaked whale, monk seal habitats (ACCOBAMS, MOm); 77: Lophelia and Madrepora reefs off Thasos (Freiwald et al. 2009); 83: Important suitable habitat for small pelagics (V. Agostini); 84: Important suitable habitat for small pelagics (V. Agostini; see also: Agostini and Bakun 2002).

## ❖ Levantine Sea

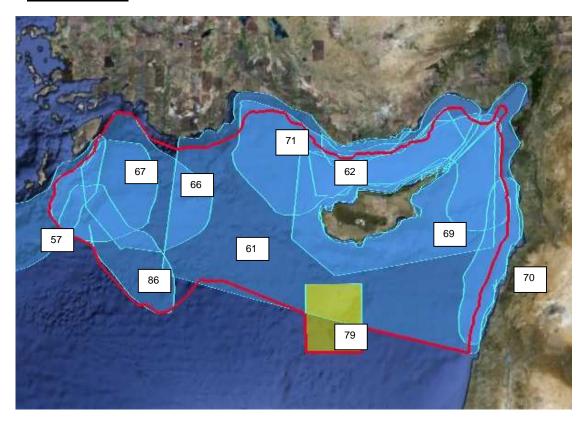
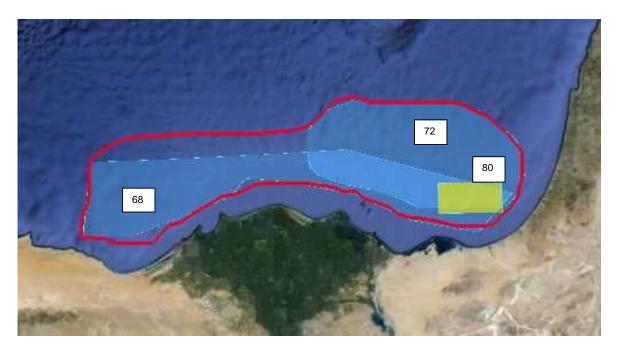


Figure 28: Northern Levantine Sea. 57: Hellenic Trench sperm whale and beaked whale habitat (ACCOBAMS); 61: Bluefin tuna spawning ground (S. Tudela); 62: Bluefin tuna spawning ground (A. Gücü, Heinisch et al. 2008); 66: Significant oceanographic feature driven by strong upwelling, rich in cephalopods, clupeid and scombriform eggs and larvae, possibly cetaceans (A. Gücü), 67: High primary productivity of pelagic waters (V. Barale); 69: Loggerhead and green turtle habitat (P. Casale); 70: Rhinobatos spp. nursery area (F. Serena); 71: Beaked whale (ACCOBAMS), monk seal (A. Gücü) habitat; 79: Eratosthenes Seamount (GFCM; Galil and Zibrowius 1998); 86: High primary productivity of pelagic waters (V. Agostini).

#### ❖ Nile Delta sea area



**Figure 29:** Nile Delta sea area. 68: Egyptian shelf loggerhead and green turtle habitat (P. Casale); 72: Possible common dolphin habitat (ACCOBAMS); 80: Cold seeps (GFCM).

#### 2.3 Complementary work

Complementary thematic studies were conducted to complete this assessment for EBSA identification:

- deep-sea fauna and locations important for fisheries were addressed in document UNEP(DEPI)/MED WG.348/Inf.5
- bird important areas were mapped in document UNEP(DEPI)/MED WG.348/Inf.6

The 'Fisheries conservation management and vulnerable ecosystems in the Mediterranean open seas, including deep seas' study (UNEP(DEPI)/MED WG.348/Inf.5) enabled areas that contain vulnerable ecosystems to be identified on the basis of data relative to fisheries and their impact on ecosystems and species, according to:

- the geological features of the seabed (mud volcanoes, seamounts, dries, canyons, hydrothermal vents; these areas have a high rate of endemism)
- oceanographic features such as upwellings (characterised by high productivity)

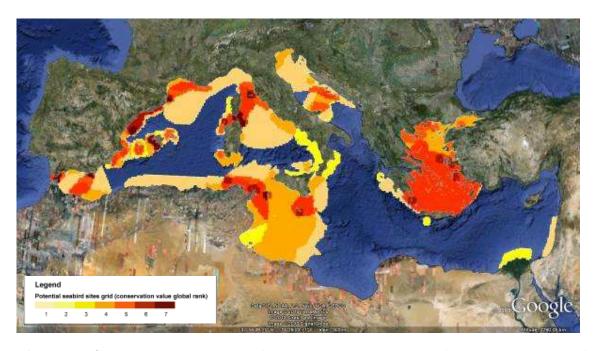
- the ecological features of certain habitats (coralligenous facies, white coral communities)
- the biogeographic features of commercial pelagic species and species subject to incidental capture or by-catch (spawning and nursery areas).

Considering the impacts of fisheries in the Mediterranean, 12 priority conservation sites were identified, represented in Figure 3.



**Figure 30**: Priority conservation areas considering the impacts of fisheries in the open seas, including the deep sea (the green polygons represent pelagic areas and the white ones demersal areas)

Also, the 'Georeferenced compilation on bird important areas in the Mediterranean Open Seas' study (UNEP(DEPI)/MED WG.348/Inf.6) enabled the mapping of the distribution of threatened or endangered pelagic marine bird species. This study was based on seven out of the fifteen bird species listed in Annex II to the SPA/BD Protocol, these seven species being found far out from the coast and being more representative of the pelagic habitats.



**Figure 31**: Geographical distribution of priority conservation areas for the conservation of sea birds. The degree of priority for conservation is represented on a scale from 1 (the lightest shade) to 7 (the darkest)

To facilitate the cross analysis of all this data, the different layers from the different studies was compiled in a Geographical Information System (UNEP(DEPI)/MED WG.348/Inf.7).

## **Conclusion and follow-up**

This work carried out regarding EBSAs identification in the Mediterranean can be considered as a contribution to the CBD process. The continuation of the wok in the Mediterranean will be conducted in close cooperation with the Mediterranean countries and relevant organizations.

The 17<sup>th</sup> Meeting of the Contracting Parties to the Barcelona Convention,

Considering that the Ninth Conference of the Parties to the Convention on Biological Diversity (CBD) adopted in 2008, in decision IX/20, scientific criteria for identifying Ecologically or Biologically Significant Areas (EBSAs) in need of protection in openocean waters and deep sea habitats as well as scientific guidance for selecting areas to establish a representative network of marine protected areas,

Recognizing that the open seas waters and deep-sea habitats in the Mediterranean include features that are essential for the conservation of the Mediterranean marine biodiversity and the sustainable use of the marine living resources,

Having considered the work carried out by the Secretariat and the SPA/RAC to identify EBSAs in the Mediterranean following the CBD scientific and ecological criteria and initially examined at the Extraordinary Meeting of the Focal Points for Specially Protected Areas held in Istanbul in 2010 and at the Tenth Meeting of the Focal Points for SPAs held in Marseille in 2011,

Requests the Barcelona Convention Secretariat to contact the CBD Secretariat and present the work carried out regarding EBSAs identification in the Mediterranean, as appears in documents UNEP(DEPI)/MED WG.348/3rev.1 supported by WG.348/Inf.3 to Inf.6 presented to the SPA/RAC Focal Points, and without prejudice to the competence of the Contracting Parties over marine areas that are or could be under their sovereignty or jurisdiction in accordance with international law as reflected in UNCLOS, to adopt possible management and conservation measures.

## <u>Appendix</u>

## Source information for the datasets used to identify Mediterranean EBSAs

n.	name of polygon	sub-region	referent	Туре	crit 1	crit 2	crit 3	crit 4	crit 5	crit 6	crit 7	Crit 8	notes
1	Djibouti Seamount	Alborán	S. Tudela	MPA	4	3	4	4	4	4	3	0	
2	Alborán Crest	Alborán	S. Tudela	MPA	4	3	4	4	4	4	3	0	
3	Motril Seamount	Alborán	S. Tudela	MPA	4	3	4	4	4	4	3	0	
4	Seco de los Olivos Seamount	Alborán	S. Tudela	MPA	4	3	4	4	4	4	3	0	
5	E Malaga coast	Alborán	C. Carboneras	IBA	2	3	3	2	3	3	2	0	not ABNJ: Important foraging ground for seabirds within the Alborán context.
6	Bay of Almeria	Alborán	C. Carboneras	IBA	3	3	3	3	3	3	3	0	not ABNJ: important breeding colonies of gulls and terns that use the adjacent sea to forage
7	Alborán island	Alborán	C. Carboneras	IBA	3	3	3	3	2	2	4	0	holds one of the most important colonies of Audouin's gull in the world
8	Chafarinas Islands	Alborán	C. Carboneras	IBA	3	4	4	4	3	3	4	0	not ABNJ: holds the second most important colony of Audouin's gull at global level
9	Al-Mansour Seamount	Alborán	S. Tudela	MPA									
10	Torrox Seamount	Alborán	S. Tudela	MPA									
11	Gibraltar Strait	Alborán	C. Carboneras	EBSA	4	3	3	2	3	4	1	0	Unique location is key for long-term survival of seabird populations that move between Mediterranean Sea and Atlantic Ocean
12	Alborán Sea	Alborán	C. Carboneras	EBSA	3	3	3	2	3	3	2	0	Area of high (primary) productivity: acts as feeding area for locally-breeding bird populations, as winter area and most importantly for migration/passage
13	Seco de los Olivos Seamount	Alborán	X. Pastor	EBSA	3	3	4	4	3	4	2	0	presence of black corals, red coral, sponges, gorgonian gardens, coralligenous, maerl, marine turtles, cetaceans and commercial species.
14	Alborán and Algerian	Alborán, W Medit	P. Casale	EBSA	0	2	3	1	2	1	2	0	loggerhead turtle habitat
15	Polygon 4	Alborán	F. Serena	EBSA		3							Scyliorhinus canicula nursery area
16	Alborán Sea	Alborán	ACCOBAMS	EBSA	2	4	4	3	4	3	1	0	Common dolphin, striped dolphin, bottlenose dolphin, Cuvier's beaked whale, pilot whale
89	SW Alborán	Alborán	V. Agostini	EBSA	2	3	0	0	3	2	0	0	important suitable habitat for small pelagics (sardines and/or anchovies)
17	Aguilas Seamount	W Medit	S. Tudela	MPA									
18	Emile Baudot Seamount	W Medit	S. Tudela	MPA									
19	Palamos Canyon	W Medit	S. Tudela	MPA									
20	Cap de Creus Canyon	W Medit	S. Tudela	MPA	4	3	4	4	2	4	3	0	Lophelia, Madrepora, 218 m, ROV, submersible (Orejas et al. 2008)
21	Balearic Sea	W Medit	S. Tudela	EBSA	3	4	4	4	4	4	3	0	Bluefin tuna spawning ground, sperm whale habitat
22	Gulf of Lion	W Medit	V. Barale	EBSA	3	3	3		4				High primary productivity of pelagic waters

23	Ebro River system	W Medit	C. Carboneras	EBSA	3	3	3	3	3	3	2	0	Key area for feeding of globally-threatened and other seabird species of conservation concern that concentrate for breeding in Ebro Delta (gulls, terns) and in Balearic Is (shearwaters)
24	Gulf of Lion - Hyères Islands	W Medit	C. Carboneras	EBSA	2	3	3	3	3	3	2	0	High-productivity area; important for feeding of globally-threatened and other seabird species of conservation concern: Procellariiforms from Hyères, Corsica & Balearics, gulls & terns from Camargue, wintering seabirds from Atlantic
25	Palos Seamount	W Medit	X. Pastor	EBSA	4	3	4	4	4	3	3	0	corals, gorgonian gardens, sponges, marine turtles, cetaceans, elasmobranchs and commercial species.
26	Emile Baudot Seamount	W Medit	X. Pastor	EBSA	3	3	4	3	2	4	3	0	coralligenous, maërl, gorgonian gardens, corals (included some black corals), bryozoans, marine turtles, cetaceans and commercial species.
27	Menorca Canyon	W Medit	X. Pastor	EBSA	3	3	3	3	4	4	2	0	gorgonian gardens, corals, sponges, coralligenous, maërl, sharks and commercial species.
28	Gulf of Lion - fin whale habitat	W Medit	S. Panigada	EBSA	3	4	1	2	4	4	0	0	
29	Gulf of Lion - striped dolphin habitat	W Medit	S. Panigada	EBSA	2	2	1	2	2	4	0	0	
30	Spanish shelf + Balearic	W Medit	P. Casale	EBSA	0	2	3	2	2	2	2	0	loggerhead turtle habitat
31	Polygon 5	W Medit	F. Serena	EBSA		3							Galeus melastomus nursery area
73	Gulf of Lion canyons	W Medit	Freiwald et al 2009	literature									Lacaze-Duthiers Canyon, <i>Madrepora</i> , at 300 m, submersible, dredges (Zibrowius 2003), Cassidaigne Canyon, <i>Madrepora</i> , 210-510 m, submersible (Bourcier & Zibrowius 1973)
81	Catalan coast	W Medit	V. Agostini	EBSA	1	3	0	0	3	2	0	0	important suitable habitat for small pelagics (sardines and/or anchovies)
90	Balearic Sea	W Medit	A. Cañadas	EBSA									important habitat for sperm whales
	N Tyrrhenian	Tvrrenian	V. Barale	EBSA	2	1			2				High primary productivity of pelagic waters
33	Corsica - Sardinia - Tuscan	Tyrrenian	C. Carboneras	EBSA	1	2	3	2	2	2	2	0	Important area for feeding of endemic and other seabird species of conservation concern that concentrate for breeding in Corsica-Sardinia-Tuscan archipelagos
34	Aceste Seamount	Tyrrenian	X. Pastor	EBSA	2	3	3	2	4	3	3	0	corals, elasmobranchs (specially high quantity of sharks) and commercial species.
35	Enareta Seamount	Tyrrenian	X. Pastor	EBSA	2	3	2	3	3	3	2	0	corals, sponges and sharks.
36	Polygon 10	Tyrrenian	F. Serena	EBSA		3	3	3	3	3		0	Scyliorhinus canicula, Raja clavata, R. asterias, Carcharinus brachyurus, Galeus melastomus, Etmopterus spinax nursery area
37	Polygon 11	Tyrrenian	F. Serena	EBSA		3							Squatina oculata probable nursery area
38	Polygon 5 bis	Tyrrenian	F. Serena	EBSA		3							Scyliorhinus canicula nursery area
39	Waters around Ischia	Tyrrenian	ACCOBAMS	EBSA	2	3	4	3	2	2	1	0	Common dolphin, striped dolphin, Risso's dolphin, sperm whale
40	Bluefin tuna breeding area	Tunisia Plateau	S. Tudela	EBSA	3	4	4	4	1	3	3	0	
41	Tunisia Plateau area 1	Tunisia Plateau	M. Bradai	EBSA		2	3			3			Carcharodon carcharias nursery area
42	Tunisia Plateau area 2	Tunisia Plateau	M. Bradai	EBSA		2	3			3			Several batoids and white shark nursery, loggerhead turtle feeding and wintering area, Maerl beds
43	Strait of Sicily	Tunisia Plateau	C. Carboneras	EBSA	3	3	3	3	3	2	2	0	High-productivity area: important for feeding of Procellariiforms nesting in Tunisia (Zembra is), Sicily (Egadi is) and Pantelleria
44	Malta - Outer Gabés	Tunisia Plateau	C. Carboneras	EBSA	2	3	3	3	3	2	3	0	New data from BirdLife Malta LIFE Yelkouan Shearwater Project show importance of the extensive area SE of Malta for feeding of this

													Mediterranean endemic species.
45	Tunisian - Inner Gabés	Tunisia Plateau	P. Casale	EBSA	0	3	3	3	3	3	3	0	loggerhead turtle habitat
46	Strait of Sigily Jonian	Tunisia	P. Casale	EBSA	0	2	3	1	2	1	2		laggarhand turtla habitat
46 47	Strait of Sicily, Ionian Polygon 8	Plateau, Ionian Tunisia Plateau	F. Serena	EBSA	U	3	3	ı		1		U	loggerhead turtle habitat  Carcharodon carcharias probable nursery area
	Polygon 9		F. Serena	EBSA		3				3			
	,,,	Tunisia Plateau			_	3	0					_	Carcharodon carcharias probable nursery area
49	Waters around Lampedusa	Tunisia Plateau	ACCOBAMS	EBSA	2	4	3	3	4	2	2		Fin whale winter feeding grounds
	Waters around Malta  Lophelia, Madrepora in Strait of Sicily	Tunisia Plateau  Tunisia Plateau	Freiwald et al 2009	EBSA	1	4	3	3	2	1	2	0	Common dolphin  Urania Bank, Lophelia, Madrepora, 509-613 m, ROV (this study), Linosa Trough, Lophelia, Madrepora, 669-679 m, ROV (this study), off Malta, Lophelia, Madrepora, 453-612 m, ROV (this study), off Malta, Lophelia, Madrepora, 392-617 m, demersal trawl (Schembri et al. 2007)
87	Inner Tunisian Plateau, N part	Tunisia Plateau	V. Agostini	EBSA		2							
88	SW Sicily	Tunisia Plateau	V. Agostini	EBSA	2	3	0	0	3	2	0	0	important suitable habitat for small pelagics (sardines and/or anchovies)
51	Northern and central Adriatic	Adriatic	P. Casale	EBSA	0	3	3	3	3	3	2	0	loggerhead turtle habitat
52	Polygon 1	Adriatic	F. Serena	EBSA		2	2	2					Squalus acanthias nursery area
53	Polygon 2	Adriatic	F. Serena	EBSA		3							Scyliorhinus canicula nursery area
76	Lophelia and Madrepora in S Adriatic of Puglia	Adriatic	Freiwald et al 2009	literature									Bari Canyon, Lophelia, Madrepora, 306-640 m, ROV (this study), Gondola Slide, Lophelia, Madrepora, 674-714 m, ROV (this study)
82	Central western Adriatic	Adriatic	V. Agostini	EBSA	1	3	0	0	3	2	0	0	important suitable habitat for small pelagics (sardines and/or anchovies)
54	Ionian	Ionian	P. Casale	EBSA	0	2	3	1	2	1	2	0	loggerhead turtle habitat
55	Polygon 6	Ionian	F. Serena	EBSA		3						0	Raja clavata nursery area
56	Eastern Ionian Sea	Ionian	ACCOBAMS	EBSA	1	4	4	3	3	2	2	0	Common dolphins, bottlenose dolphins, Cuvier's beaked whales, fin whales, sperm whales
57	Hellenic Trench	Ionian, Levantine	ACCOBAMS	EBSA	2	4	4	3	4	3	2	0	Sperm whales, Cuvier's beaked whales
75	Lophelia and Madrepora in Gulf of Taranto	Ionian	Freiwald et al 2009	literature									Santa Maria di Leuca, <i>Lophelia, Madrepora,</i> 300-1100 m, dredges, ROV (Taviani et al. 2005a, this study), off Gallipoli, <i>Lophelia, Madrepora,</i> 603-744 m, ROV (this study)
78	Lophelia reefs	Ionian	GFCM										
58	Polygon 3	Aegean	F. Serena	EBSA		3							Carcharinus plumbeus breeding area
59	Northern Aegean Sea	Aegean	ACCOBAMS	EBSA	2	4	4	3	3	2	2	0	Common dolphin, harbour porpoise, monk seal, beaked whale
60	Eastern Aegean Sea	Aegean	ACCOBAMS	EBSA	2	4	4	3	3	2	2	0	Common dolphin, monk seal, beaked whale
77	Lophelia and Madrepora reefs off Thasos	Aegean	Freiwald et al 2009	literature									off Thasos, Lophelia, Madrepora, 300-350 m, dredging (Vafidis et al. 1997)
83	N West Aegean	Aegean	V. Agostini	EBSA	2	3	0	0	3	2	0	0	important suitable habitat for small pelagics (sardines and/or anchovies)
84	N Aegean	Aegean	V. Agostini	EBSA	2	3	0	0	3	2	0	0	important suitable habitat for small pelagics (sardines and/or anchovies)
85	SW Aegean	Aegean	V. Agostini	EBSA	3								
61	Bluefin tuna breeding area	Levantine	S. Tudela	EBSA	3	4	4	4	1	3	3	0	

													Importance: One of the 3 spawning grounds of Blue Fin Tuna (Thunnus
62	Bluefin tuna breeding area	Levantine	A. Gucu	EBSA	3	4	3	1	0	0	0	0	
													not ABNJ. Importance: The largest and the only viable monk seal colony
63	Monk seal 1	Levantine	A. Gucu	MPA	4	4	4	2	0	0	2	0	along the Turkish coast
													not ABNJ. Importance: Very pristine area, intact Cystoseira and Posidonia
0.4				1454		_			_	_	_	•	meadows; important (breeding) habitat for seal, breeding site for Audouin's
64	Monk seal 2	Levantine	A. Gucu	MPA	4	3	3	4	2	2	3	0	Gull (Larus audouini).
G.E.	Koldog	Loventine	A C.1011	MDA	4	2	3	4	2	2	4	0	not ABNJ. Importance: May be the last spot representing intact rocky
	Keldag	Levantine	A. Gucu	MPA	4	3		4	2		4	<u> </u>	Levantine coast. Also holds a small breeding monk seal colony  Very significant oceanographic feature driven by strong upwelling. Biological importance is not well known however we have sampled significant amount of egg and larvae (Clupeid and Swordfish) on the periphery of the upwelling region. The region is rich in Cephalopods. Therefore the region may also be important for Cetaceans. (the largest number of whale stranding from Turkish
66	Rhodes Gyre	Levantine	A. Gucu	EBSA	4	3	2	1	4	2	0	0	fishermen are reported there).
67	Rhodes Gyre	Levantine	V. Barale	EBSA	3	2			4			0	High primary productivity of pelagic waters
68	Egyptian shelf	Levantine	P. Casale	EBSA	0	3	3	3	3	3	2	0	loggerhead and green turtle habitat
69	Cyprus - Turkey - Syria	Levantine	P. Casale	EBSA	0	3	3	3	3	3	3	0	loggerhead and green turtle habitat
70	Polygon 7	Levantine	F. Serena	EBSA		3							Rhinobatos rhinobatos nursery area
71	Off S Turkey, Syria	Levantine	ACCOBAMS	EBSA	1	4	4	3	4	2	2	0	beaked whales, monk seal
72	Off Nile Delta, S Israel	Levantine	ACCOBAMS	EBSA	2	3	3	3	3	2	1	0	Common dolphin
79	Eratosthenes Seamount	Levantine	GFCM								·		
80	Cold seeps	Levantine	GFCM									-	
86	Rhodes Gyre	Levantine	V. Agostini	EBSA	3								

Explanation of scores: how important is the polygon for the criterion?

4 = completely

3 = a lot

2 = somewhat

1 = a little

0 = not at all

Criteria 1 – Uniqueness or rarity

Criteria 2 – Special importance for life history stages of species
Criteria 3 – Importance for threatened, endangered or declining species and/or habitats

Criteria 4 – Vulnerability, Fragility, Sensitivity, or Slow recovery

Criteria 5 – Biological productivity

Criteria 6 – Biological diversity

Criteria 7 – Naturalness

Criteria 8 - Cultural representativeness