CoCoNet Project

Collaborative project

Theme: OCEAN.2011-4

Grant agreement no: 287844

CoCoNet

Towards COast to Coast NETworks of marine protected areas (from the shore to the high and deep sea), coupled with sea-based wind energy potential.

Review and Analysis of Legislation Relevant to the Establishment and Management of MPAs

Deliverable 6.3

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Date due: 31 July 2014
Date Delivered: 26 September 2014
Updated (full author list): December 2015

The research leading to these results has received funding from the European Community's Seventh Framework Programme (FP7/2007-2013) under Grant Agreement No. 287844 for the project "Towards COast to COastNETworks of marine protected areas (from the shore to the high and deep sea), coupled with sea-based wind energy potential" (COCONET).

Dissemination Level

PP Restricted to other programme participants (including the Commission Services)

Executive Summary

This report provides an overview of legislation relevant to establishing Marine Protected Areas (MPAs) in the Mediterranean and Black Sea.

Its primary goals are:

1. Identify current national, regional and international frameworks for establishing and managing MPAs

2. Identify opportunities and process that can be exploited to improve the current state-of-the art.

To achieve this report assess the current state-of-the-art relating to MPA legislation in Mediterranean, Black Sea, European and global communities.

State-by-state inventories of legislations are carried out to identify common themes, strengths and weaknesses.

Further analysis and discussions are held in relation to Marine Spatial Planning (Black Sea) and the legislative issues of the high seas (Mediterranean) to identify barriers and opportunities to developing MPA networks in these regions.

Contents

Chapter 1 – The Legal Implications of a Network of Marine Protected Areas in the Mediterranean and Black Sea

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1.1 The legal status of marine areas and resources in the Mediterranean

Due to the morphology of the Mediterranean, the legal status of marine areas concerned by the CoCoNet project can be placed in two categories:

1. Areas of territorial seas under the authority of coastal states. In these areas authorities can develop independent policies.

2. The high seas (lying beyond the territorial seas) which require permanent international cooperation. In principle, these areas have a regime of "freedom of the seas", especially in relation to navigation and marine fisheries. In the Mediterranean these areas are bound by international laws and rights of coastal states.

A third category can also be considered: Mediterranean coastal states which belong to the European Union[1]. These states have maritime, environmental and energy polices which are integrated and coordinated by supranational policies.

The CoCoNet project is investigating all of these areas and legal regimes for WP6.4.

Unique to the Mediterranean, is the area called "high seas". This is located immediately beyond the territorial sea of 12 nautical miles. This presents a number of issues:

- The establishment and development of industrial activities beyond the coastal zone (inc. off shore wind farms (OWFs))
- The limitations of conservation areas as a string of coastal MPAs
- The expansion of protected areas on the high seas

Depending on the category an area belongs to, the legal regime applicable to goods, people and activities is different. To implement marine protection and energy policies in different territorial seas it is necessary to mobilize enforcement powers and the intervention of coastal states, according to their cultures and legal constitutions.

In the high seas it is necessary to resort to international cooperation. In the Mediterranean, this may not always be limited to coastal states.

[1] Spain, France, Italy, Malta, Slovenia, Croatia, Greece, Cyprus south and marginally the United Kingdom because of the enclave of Gibraltar.

1.2 The legal principles applicable to marine areas

The national legal framework of the territorial seas

Space and marine resources are, in principle, a public law regime. Across both the Mediterranean basin and the Black Sea, "establishment of state control" of territorial seas can be observed.

The territorial sea: a border and strategic space

This geopolitical nature is particularly notable in the Mediterranean, where many disputed areas and armed conflicts occur. These include human migration routes across territorial seas. As a result, different territorial seas often have issues with:

- Access restrictions
- Territorial disputes
- Police enformcement
- Military installations
- Militarized zones

The public status of the coastline and seabed of the territorial sea

The public status of many marine areas and marine resources in Mediterranean implies that the governance of the activities cannot be resolved by private ownership and by normal market rules. This includes:

- Status of public ownership of seabed and coastal areas
- Public status of infrastructure and port areas
- Public status of marine resources
- Freedom of movement, freedom of use and public access
- Nationalization of space and activities (multiple administrative polices)
- Complexity of development procedures

The influence of international law on the regime of the territorial sea

Territorial seas are often considered a national commodity, similar to land areas. However, the influence of international law is considerably more important in the marine realm. This is due to:

- Obligations and international constraints related to commercial and military shipping (i.e. foreign vessels often have rights which exempt them from local laws)

- The international commitments of coastal states (although often at different levels and titles) to various substantive rights:
    - International Commercial Law and Business
    - Competition law
    - Maritime safety and security
    - Archaeological heritage protection
    - Environmental protection
    - Planning and landscape
    - Nuisance and pollution
    - Prevention of major risks

- Protection of nature in different dimensions (sites, sedentary or migratory species)
- Tourism and Consumer Rights

In these different areas, the coastal State implements international laws through its own national transpositions.

The international legal framework for the high seas
The legal regime of the high seas is based on very different principles from those of territorial seas. As a result, environmental and energy governance of these areas is profoundly affected

The principle of freedom of the seas
The freedom of the seas beyond 12 miles remains the guiding principle of the legal system of vessels and maritime activities. It means that:

- Vessels on the high seas obey the police and the laws of their countries
- The intervention of a ship belonging to another State on the high seas is considered an act of piracy

Towards a common law on the High Seas
On the high seas of the Mediterranean, international cooperation has increased the rules of safety, security and environmental protection. However, the implementation of these measures often depends on individual states. This includes:

- Maritime safety
- International fisheries management (under the "direction" of international fisheries organizations (ICATT GFCM, etc))
- Extension (often unilateral) of coastal states influences as “de facto EEZs”. This relates to activities such as fisheries, environmental protection, etc.

In all cases, the applicable law appears complicated and uncertain. It is often related to international relations and to the willingness of States, in a complicated game of influence and negotiation.

1.3 The difficulties of defining the legal status of MPAs

Political context
Marine Protected Areas (MPAs) have been recognized as an efficient tool for conservation and mitigating the effects of marine ecosystem declines.

The positive effects of MPAs, provided they include areas where damaging activities are prohibited, are well understood. The benefits include:

- Protection of habitats
- Prevention of biodiversity losses
- Protection of heritage species
- Restoration of degraded ecosystems
- Replenishment of degraded fisheries

The restoration of a species or habitat is a key aspect in the overall productivity and stability of an ecosystem. The boundaries of an MPA are a safe space which protects species and habitats from surrounding pressures[2].

Uncertainty of the legal definitions of MPAs

There are several definitions of MPAs. The most used international definitions are:

"*Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna and associated historical and cultural feature, reserved by law in order to protect part or all of the enclosed environment.*[3] '

"Any defined area within or adjacent to the marine environment and its overlying water and the flora, fauna and cultural and historical features associated with it, which have been preserved by law or by any other means force, including the use, with the effect that coastal biodiversity and / or sea level has of protection than its surroundings.[4] '

From conservation to multipurpose areas

In recent years the concept of Protected Areas (PAs) has evolved, including the ways MPAs are considered. Traditionally, PAs were established to protect emblematic species (e.g. cetaceans, turtles, etc.). By providing sanctuaries for species and marine resources (e.g. fisheries) it was generally considered the diversity of species would be protected. However, more recently anthropogenic activities have also been included.

In the Mediterranean, as well as globally, the type of protection afforded by an MPA differs from one area to another. This is often related to the political and cultural nuances for the state. However, for the most part, Mediterranean MPAs are considered 'multi-purpose areas'.

This approach seeks to balance the protection of biodiversity and the sustainable use of an area by taking into account local socio-economic needs. It recognizes the interaction between conservation, tourism, environmental education and traditional industries.

However, historically the establishment of MPAs in the Mediterranean is based on the presence of a specific species. And is often a matter of expediency rather than global ecological policy[5].

The legal diversity of MPAs

Overall, information on Mediterranean MPAs is scattered and inccessible. There is no reference list accepted by international organizations, NGOs, national institutions, experts, representatives of MPAs and users (Notarbartolo di Sciaria 2005). This is partly due to the lack of criteria listing the

[2] Ameer Abdulla, Marina Gomei, Elodie Maison et Catherine Piante (2008) *Statut des Aires Marines Protégées en Mer Méditerranée*. UICN, Malaga et WWF, France. 156 pp., p 28

[3] Resolution 17.38 of the IUCN General Assembly, in 1988, reaffirmed in Resolution 19.46, 1994

[4] Convention on Biological Diversity, 2003.

[5] Ameer Abdulla, Marina Gomei, Elodie Maison et Catherine Piante (2008) *Statut des Aires Marines Protégées en Mer Méditerranée*. UICN, Malaga et WWF, France. 156 pp., p 28

standardized geo-referenced MPAs in areas under national or international jurisdiction. However, strategy of the coastal states to give a positive image of their marine conservation policies is also a factor.

To resolve this, MedPan used three criteria to identify MPAs in its 2005 inventory. They identified that MPAs must contain the following elements:

- A legal basis-law (decree, decree or law)
- Specific regulation of major uses at sea (fishing professional or recreational spearfishing, diving, anchoring, navigation, scientific research and bathing)
- A designated management organization (this can take many forms: public institutions, national, regional or local association, consortium management, etc.).[6]"

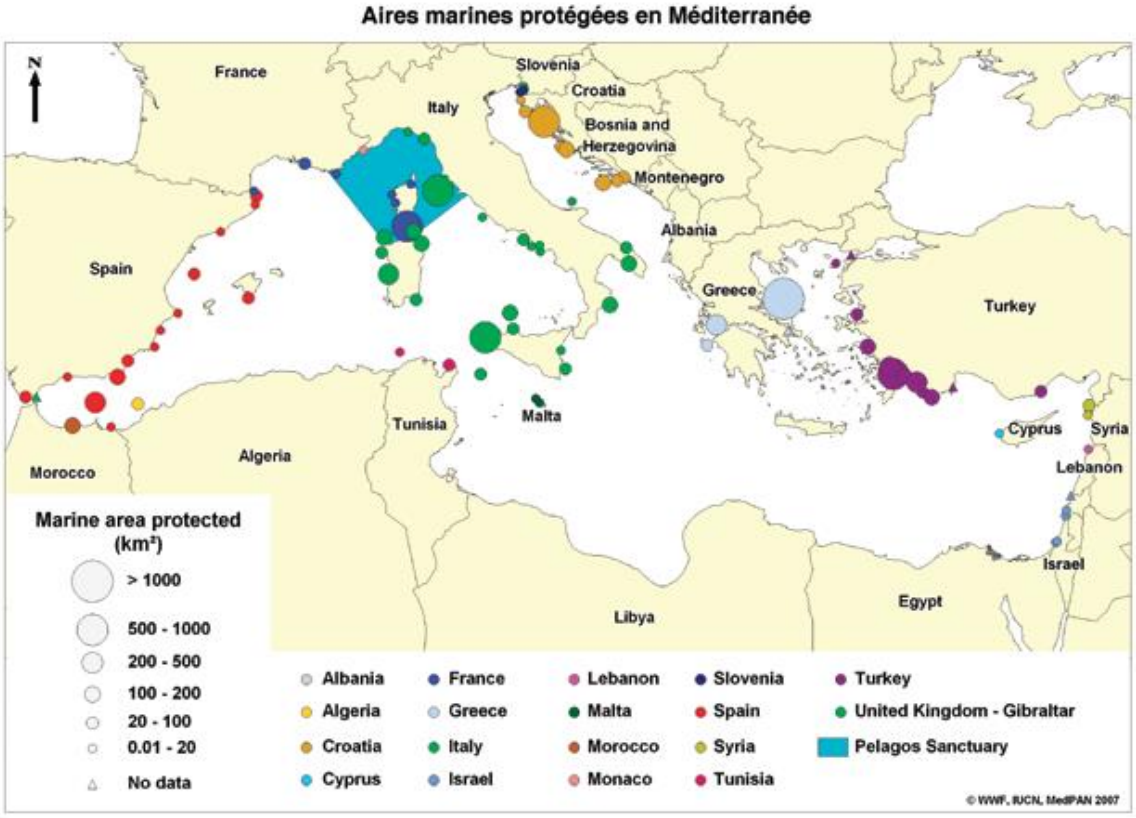

Figure 1: Distribution of Mediterranean MPAs. The relative size of each MPA is indicated by different size classes. Countries are represented by different colours**. IUCN, 2008, p.41**

In a legal sense, the regime for establishing and managing MPAs differs depending on their area of jurisdiction (See **Figure 1**):

[6] Mabile S. et Piante C. (2005). Répertoire global des aires marines protégées en Méditerranée. Fondation WWF-France. Paris, France xii + 132 pp

"*MPAs can be located in different marine jurisdictional zones (marine internal waters, territorial sea, contiguous archaeological zone, zone exclusive economic fishing zone, ecological zone, plate continental sea, seabed beyond the limits of national jurisdiction).*

(...) The legal regime applicable to MPAs may be determined by national legislation (the most common case) or directly by an international treaty.

From the point of view of international law, the legal system of MPAs depends on the extent of the powers that the State concerned may have on the marine area in which they are established. The further an MPA is from the coast, the more it is necessary to take into account the issues of international law of the sea and to ensure cooperation and an international agreement."[7]

However, it should be noted that industrial, urban or commercial shipping port activities[8] are not included in the 2005 MedPan definition. As a result, the MPA network is polarized on tourism and fishery management. As a result MPAs lack a legal protection against "major economic policies," such as:

- International trade
- Infrastructure development
- Urban development
- Energy production
- Exploitation of mineral resources

In addition, new technologies such as OWFs, now need to be considered in the context of MPAs.

1.4 MPAs beyond offshore jurisdictions

MPAs in the Mediterranean currently sit in a puzzle of heterogeneous and complex statutes. The Mediterranean is a semi-enclosed sea, surrounded by some twenty coastal States[9], in which the entanglement of economic zones is intractable from territorial disputes.

The Black Sea is surrounded by six countries, three of which are in Europe and three in Asia. Turkey has areas of coastline in both the Mediterranean and Black Sea. Moreover, at the political level, the countries on the north-east and south-east coasts were formed from the breakup of the Soviet Union. As a result, many of these states have fragile national institutions and political cohesion is virtually nonexistent.[10].

Since the Montego Bay conference, a *modus vivendi* has prevailed so that coastal States do not exercise their rights to extend economic jurisdiction in the waters of the Mediterranean[11]. States

[7] Shine et Scovazzi, 2007, in *Statut des Aires Marines Protégées en Mer Méditerranée*, UICN 2008,
[8] Map in the annex 5
[9] IUCN (2010) and Politic map in the annex 3
[10] **Juan Luis Suarez de Vivero, «** *Etude : Eaux territoriales en Méditerranée et en Mer Noire, 2010* », pour la commission de la pêche Parlement Européen. Direction générale des politiques internes de l'Union- département thématique B : politiques structurelles et de cohésion
[11] Shine et Scovazzi, 2007, in *Statut des Aires Marines Protégées en Mer Méditerranée*, UICN 2008, op. cit.,p.

have extended their territorial waters to 12 miles and argue their right to an adjacent area, but few have claimed an exclusive economic zone (EEZ), a fishing area and / or area of pollution prevention extending beyond these waters. As a result, the high sea area[12] in the Mediterranean is immediately adjacent to the territorial waters, and it is much closer to the coast than in other marine areas. The existence of a large area of high sea near the coast, benefiting from the principle of freedom of the seas, has deprived most marine areas of the Mediterranean of the discipline of adjacent States.

The situation in the Black Sea differs somewhat as all waters of the Black Sea are under the jurisdiction of coastal states.[13]

Therefore, the use of these areas requires a high level of cooperation among user States to ensure sustainable exploitation of fisheries, resources and the conservation of marine biodiversity[14].

However, since the 1990s, some coastal states have assumed the legal principle of EEZs by defining areas of jurisdiction inspired by the rights of the EEZ[15]. These zone definitions have been unilaterally declared by some coastal states and their legal enforceability is not yet recognized by the Conference on the Law of the Sea. Despite the fact that most states do not claim EEZ rights, the basis for their claims is based on the principles of Montego Bay[16]. In which the coastal state has a special responsibility towards the marine areas adjacent to its territorial sea, and that he has sovereign rights to exercise.

It is interesting to note that the declaration of rights is often done so "in the name of science" or "in the name of environmental protection."

As a result, the number of fragmented maritime zones that have been established has been growing in the Mediterranean.[17] These include:

- Fishing protection zones
- Exclusive fishing zones
- Preserved fishing zones
- Ecological Protection zones

The Mediterranean Sea is now marked by active spatial right claims[18]. Of the 21 coastal states, 14 have now established areas of jurisdiction beyond their territorial seas[19], thus covering two thirds of the basin; it is a proportion comparable to the situation in other seas worldwide. [20]

[12] Map in the annex 4

[13] Juan Luis Suarez de Vivero**, «** *Etude : Eaux territoriales en Méditerranée et en Mer Noire, 2010* », pour la commission de la pêche Parlement Européen. Direction générale des politiques internes de l'Union- département thématique B : politiques structurelles et de cohésion.

[14] The basic principles and rules which are governing the establishment of maritime zones are set out in the UN Convention for the Law of the Sea (UNCLOS), which follows the legal status of Mediterranean waters

[15] José Manuel Sobrino Hérédia, « L'approche nationale en matière des zones maritimes en méditerranée. », AFDUDC, 13, 2009, 753-771., p.756

[16] Annex 1 and 2

[17] José Manuel Sobrino Hérédia, « L'approche nationale en matière des zones maritimes en méditerranée. », AFDUDC, 13, 2009, 753-771., p.756

[18] Graphic Annex 4

This new legal situation gives the Mediterranean waters an extremely fragmented character likely to generate confusion and uncertainty:

"*Recently in the Mediterranean, new areas also appear to circumvent the lack of EEZ. This complicates the delimitation of maritime areas of the riparian states. Thus, beyond the territorial waters, the Mediterranean remains a de facto offshore area. This new claim thus gives coastal states new powers to intervene in high Mediterranean Sea. Areas of "environmental protection" or "fisheries protection" are joined by unilateral character without the scope of a potential crisis if the legitimacy and enforceability of these claims were challenged*.[21]"

As noted by the IUCN 2010 report, the combination of different types of areas creates problems. Unlike land borders, 60% of maritime boundaries remain virtual. In the Mediterranean, many countries (e.g. Morocco, Tunisia, Croatia, and Italy) did not promulgate new legislation, creating a degree of uncertainty:

"*These zones still have to be duly delimited in accordance with international law and the law of the sea. So, problems relating to the delimitation of maritime boundaries still exist in the Mediterranean Sea, and in some cases are very difficult to resolve. It is estimated that about 30 maritime boundaries remain to be delimited in the Mediterranean Sea. In some cases, where there have been no delimitation, the median line has been applied, such as between Morocco and Spain*[22]."

The issue of legal security

"*This situation does not contribute to the clarity or certainty and proved pernicious to the interests of coastal States and operators concerned. It creates difficulties in the implementation of existing regional agreements, particularly with regard to operations control and induces a rollover risk of illicit activities in unprotected areas. The situation is quite confusing concerning contiguous areas of legal terms. These zones between 12 and 24 miles off the coast, are of interest from the point of view of customs, health, tax, archaeological and for immigration control. Legal security from the perspective of the definition of the areas that their limits is far from guaranteed.*[23]"

However, good governance of this common space, ultimately requires to a clear division of different areas, an account of the different activities and of their different uses.

The regulation of space becomes even more crucial as MPAs, in a search for efficiency, need to expand their territory.

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[19] Annexes

[20] In UICN (2010).Vers une meilleure gouvernance pour la Méditerranée. Gland, Suisse et Malaga, Espagne, p.15

[21] **François** Féral, « L'extension récente de la taille des aires marines protégées : une progression des surfaces inversement proportionnelle à leur normativité », *Vertigo - la revue électronique en sciences de l'environnement* [En ligne], Hors-série 9 | Juillet 2011, mis en ligne le 13 juillet 2011, repère 18.

[22] IUCN (2010). *Towards a better Governance of the Mediterranean.*Gland, Switzerland and Malaga, Spain: IUCN. p.17 + Annex 1

[23]In UICN (2010). Vers une meilleure gouvernance pour la Méditerranée. Gland, Suisse et Malaga, Espagne: p.26

The creation of a network of MPAs

The establishment of a network of MPAs is a further step in the management towards more effective conservation. A commonly used definition of an MPA network is:

"*A set of individual MPAs operating cooperatively and synergistically, at various spatial scales, and with a range of protection levels, to achieve environmental goals more effectively and more completely than individual sites could not do. The network will also provide social and economic benefits; however they will not be seen until it is completely developed after a long period, as and when ecosystems recover.* [24]

A number of international and regional legislations are in place which set the scene for creating MPAs and MPA networks. These are discussed in detail in Chapter 1.

The urgency to build a network beyond the legal constraints

In recent years the marine conservation community has begun to establish a consensus towards designing MPA networks which offer greater advantages than individual MPAs.[25].

The scientific criteria

It is generally agreed that MPA networks should:

- Include existing MPAs
- Include ecologically critical areas
- Establish new MPAs in unprotected areas
- Include management measures outside of MPAs. This will preserve links and the networks integrity

The ideal goal should be to create a network covering 20 to 30% of the basins. These networks can potentially provide significant benefits in terms of conservation, providing the highest possible protection to the most ecologically important areas, species and habitats.

During the Azores workshop 2007 (CBD 2007), a set of scientific criteria for representative networks of MPAs was established. This included offshore habitats and the seabed. The following criteria were identified as being an essential base for an MPA network:

- Areas of ecological and biological importance
- Representativeness
- Connectivity
- Replication of ecological features
- Adequate and viable sites

In addition, MPA networks also have other benefits. They collectively constitute a spatial management tool that can be used to protect highly migratory or mobile species, in which the key habitats for various life stages are preserved[26].

[24] UICN WCPA 2007e
[25] UNEP/MAP, 2009
[26] MEDPAN report 2010

The political and legal constraints

Networks can offer economies of scale to train staff and provide a mechanism for linking individuals and institutions. This facilitates cross-project learning and enables integrated research and sharing of scientific data. It is clear that the parties to the Barcelona Convention and its Protocol on Specially Protected Areas and biodiversity are seriously committed to creating representative networks of MPAs throughout the Mediterranean.

"*But how these networks might be established and are there universal lessons that could guide the development of networks of MPAs in the Mediterranean*?"[27]

It should be noted that the design of any MPA within an ecological network must be developed, taking into account the socio-economic feasibility and socio-political wills of states.

Although a process of scientific planning can be used to identify potential sites, science alone cannot influence decisions on the type of MPA to create, their size, their spatial footprint or their legal status.

These decisions should be made taking into account the site specific circumstances, preferably through a participatory process.

Existing examples prove that MPAs must result from a balance between ecological and socio-economic elements

Economic issues should not be understated. For example, offshore wind could provide 13-16% of EU electricity by 2030. This also represents an industrial activity with the potential to revitalize other connected sectors other sectors (e.g. ports).

The additional legal obstacles related to this industry cannot be ignored. The status of OWFs is treated as artificial islands by the Montego Bay Convention, facilities comparable to oil rigs. Riparian States are solely responsible for the authorization decisions but they cannot influence the rights of movement, access and transit of commercial or military fleets, and the rights of boaters. Beyond 12 nautical miles uncertainty remains on the rights that the states could exercise in the energy field. In particular the right to install artificial islands over the territorial waters remains an issue not yet mentioned, and it may raise numerous challenges in a sea overfilled by activities.

French manufacturers are eagerly waiting for a legislative, regulatory and economic frame to enable them to develop their projects, generating thousands of jobs in total, and to export their know-how from their accomplishments at sea. The general context of economic recession raises issue of 'protection vs development'.

The need to increase the size of an MPA or interconnect them is recognized, but the establishment of a network creates a legal challenge. The socio-economic realities battle for the distribution of their space in a complex legal mesh.

[27] In UNEP(DEPI)/MED WG.331/7, 10 Avril 2009

To help overcome these challenges, this task seeks to propose a possible framework for cooperation with incentives or disincentives, allowing for the development of the various activities present in the Mediterranean basin.

2 PRINCIPLES AND OBJECTIVES

General purpose

Developing MPA networks in areas such as the Mediterranean and Black Sea requires use of an "Integrated Maritime Policy." This is consistent with the guidelines of the European Union established on December 14, 2007 in the "Blue Book on Maritime Policy for the European Union" and its legal translation into the Marine Strategy Framework Directive (MSFD) (Directive No. 2008 / 56/CE).

The concept of integrated maritime policy aims to exceed the thematic or sectorial approaches with a global vision including all public actions. It aims to combine marine and coastal development with ecological protection. However, the EU is not alone in the Mediterranean and Black Sea basins and must convince the other coastal states to share its goals and approaches. Non-coastal actors are also involved in marine policy. Foreign fleets commonly use both seas and need to be involved in the decision making process.

Main problems

A number of obstacles stand in the way of developing such policies in the Mediterranean and Black Sea's.

In the Black Sea developing a common approach towards integrated coastal zone management (ICZM) and marine spatial planning (MSP) is a significant challenge due to the fragile political institutions present in coastal states.

In the Mediterranean the lack of political stability in southern countries is also an issue. As is the questions of the 'high seas'.

On 11.09.2009 a communication from the European Commission on the subject of improved maritime governance highlighted two major problems in the Mediterranean:

*"**Firstly**, in many Mediterranean countries, sectorial policies are carried out by different authorities and, in the same way, every international agreement is executed according to its own rules, because of this situation, it is difficult to obtain an overview of the cumulative impacts of marine activities, at the basin level.*

***Secondly**, a large part of the marine space consists of offshore waters and coastal states cannot easily plan, organize and regulate activities that have a direct effect on their waters and coasts.*

The combination of these two elements creates a situation in which the policies and activities often evolve independently of each other, without any real coordination between the various sectors affecting the sea, nor between all national, regional and international actors.

Other key issues for good governance are also taken into account: the participation of stakeholders, transparency of the process of decision and of the implementation of rules fixed by mutual agreement.[28].

Through the process of physical and virtual workshops and data collection, this deliverables aims to achieve the following:

- To identify legislative problems within the basins
- To clarify the scope of national and sectorial policies in the basins
- To measure the effectiveness of international agreements
- To assess the consequences of the legal disparities for the management of the marine environment in the Mediterranean and the Black sea

The development of an improved European policy questions the effectiveness of existing international laws

All international conventions currently acting in the Mediterranean[29] and Black Sea are fragmented and consist of laws developed for individual sectors.

Since the Second World War, international law has developed in a more integrated manner. This is mostly due to environmental law being integrated with other disciplines. However, these links are often contradictory. As a result, many conflicts exist between environmental and commercial law.

Thus, "*economic law, incorporated into Environmental Law contains specific provisions and submits to the environmental logic. Environmental standards incorporated by economic law are subject to liberal logic. However, this logic is sometimes opposed, and can cancel the protection of the environment, trade name or, conversely, allow unilateral trade measures for the defence of nature, which goes against the logic of each of these branches of law. It is common to see various international conventions relate to the same subject and offer different solutions to the same conflict.*[30]"

This study will integrate international and regional conventions. It will also document the conflicts between sectorial policies and the geopolitical context which can undermine the creation of an MPA network in the two basins.

[28] Commission of the European Communities, Communication from the Commission to the Council and the European Parliament, *For a better governance in the Mediterranean with an integrated maritime policy*, COM (2009) 466 final, p. 3.

[29] Annex 6

[30] Marcello Dias Varella, « *La complexité croissante du système juridique international : certains problèmes de cohérence systémique.* », Revue Belge de Droit International, 2004, vol. IV, p. 33.

Linking legal and scientific data

The maritime industry is expected to intensify in both the Mediterranean and Black Sea's. Industrial activities related to port functions and the urbanization of coastal areas are inevitable. This puts increasing human pressure on the natural environment. [31]

According to the EC, population growth and economic development is compatible with the achieving Good Environmental Status (GES) through *Maritime Spatial Planning* (MSP):

"*The PEM is an effective governance tool for implementing an ecosystem-based management addressing the interrelated impacts of maritime activities, conflicts between different uses of space and the preservation of marine habitats. The Roadmap 2008 of the Commission established* a *set of principles for the development of MSP approaches by Member States and may also be useful in the broader context of the Mediterranean*.[32]"

However, MSP practices in the Mediterranean and Black Sea remain insufficient due to the difficulties in establishing maritime zones and the demarcation of borders. However, the opportunistic attitude of coastal states, combined with barriers preventing quick-decision-making at all levels (i.e. corporate, local, provincial, national, European, international) are also an issue.

EU member states have agreed to achieve GES by 2020[33] through the introduction of "integral marine strategies" that "apply an ecosystem-based approach to human activities affecting the sea and are closely related to MSP".

The context of regional seas conventions such as the Barcelona Convention[34] and the General Fisheries Commission for the Mediterranean (GFCM)], may offer the key to constructing such a system.

A key aspect of this deliverable will be to incorporate scientific principles which are compatible with the legal framework.

The use of legal and institutional mechanisms for the development of an efficient and sustainable design can only be based on the best available scientific knowledge.

3 METHODOLOGY

[31] See in this connection the UNEP report, the marine and coastal Mediterranean state and pressures, Summary. AAE, Copenhagen, 1999

[32] Commission of the European Communities, Communication from the Commission to the Council and the European Parliament, *For a better governance in the Mediterranean with an integrated maritime policy*, COM (2009) 466 final, p.7

[33] Directive 2008/56/CE du 25.06.2008

[34] According to the report of the Blue Plan, the Barcelona Convention provides a number of positive points in the advance for the protection of the Mediterranean and the management of MPAs, Blue Plan Sophia Antipolis, July 2008, p.22

In order to effectively carry out this task, the method has been divided into three parts:

1. Inventory and / or the identification of all legal provisions applicable to the management of MPAs

2. Analysis of collected legislation

3. Development of legal proposals to harmonize legal and institutional arrangements necessary for the establishment of an MPA network

3.1 Inventory of legislation relating to MPAs

There is no legal framework specifically dedicated to establishing MPAs. Instead, a set of international laws, combining elements of "hard" and "soft" law, have evolved within which MPA statutes are based.

The international framework

The international framework integrating marine areas is primarily set in the reference texts establishing the international law of the sea. This legal basis essentially consists of the different Geneva Conventions, the UN Convention on the Law of the Sea (UNCLOS), of the Convention on Biological Diversity (CBD), and the various agreements or thematic conventions[35].

The UN Convention on the Law of the Sea (UNCLOS)

The United Nations Convention on the Law of the Sea of 1982, considered as the "Constitution of the Oceans", divides the seas and oceans into different zones:

1. Internal waters: "waters on the landward side of the baseline of the territorial sea form part of the internal waters of the state" (Article 8). The coastal State exercises full territorial sovereignty over internal waters.

2. Territorial sea: the zone adjacent to the territory and the internal waters of the coastal State. The coastal State exercises full sovereignty over this zone. The maximum breadth of the territorial sea is 12 nautical miles (Articles 2, 3 and 4).

3. Contiguous zone: waters located beyond the territorial sea. The coastal State is allowed to regulate customs, fiscal, immigration and health issues in this zone. Its breadth may not exceed 24 nautical miles from the baseline from which the territorial sea is measured (Article 33).

4. Exclusive economic zone: maritime area beyond and adjacent to the territorial sea. Here, the coastal State exercises sovereign rights for the purposes of exploring and exploiting, conserving and managing the natural resources. The breadth of the EEZ may not exceed 200 nautical miles from the baseline (Articles 55, 56 and 57).

[35] Ameer Abdulla, Marina Gomei, Elodie Maison et Catherine Piante (2008) *Statut des Aires Marines Protégées en Mer Méditerranée*. UICN, Malaga et WWF, France.

5. Continental shelf: natural prolongation of a coastal State's submarine territory to the outer edge of the continental margin, or to a distance of 200 nautical miles (Article 76).

6. High seas: the remaining parts of the sea. The high seas are free for all states and reserved for peaceful purposes (Article 88).

7. Area: the sea and ocean bed and its subsoil beyond the borders of national jurisdiction. The Area and its resources are the common heritage of mankind (Articles 136, 137).

UNCLOS has been ratified by 60 states in total, including 17 Mediterranean states and all Black Sea coastal states (with the exception of Turkey). The EU is also a signatory.

The agreement does not include specific devices for MPAs but Part XII is devoted to provisions relating to the protection of the marine environment. It has also led to the creation of the International Tribunal for the Law of the Sea, which has jurisdiction over disputes arising to the interpretation and application of the Convention.

The different zoning will be taken into account in the study of national legislation affecting the regime of the high seas and thus influencing the status of MPAs. Depending on their distance from the coast, some marine areas will depend exclusively on the international law of the sea. The creation of a network could lead to a legal regime beyond national legislations.

The Convention on Biological Diversity (CBD)

The Convention on Biological Diversity (CBD, Rio de Janeiro, 1992), ratified by all the Mediterranean and Black Sea coastal States is the international legal framework for the establishment and management of protected areas. Article 8 (a) specifically requires the establishment of systems of protected areas for biodiversity conservation. Also, commitments signed by the States in the CBD have given birth to other international initiatives.

International Maritime Organization (IMO) and International Convention for the Prevention of Marine Pollution from Ships (MARPOL)

All of the Black Sea States are members of the IMO, the United Nations specialised agency with responsibility for the safety and security of shipping, and of the MARPOL convention. MARPOL defines certain sea areas as "special areas" in which the adoption of special mandatory methods for the prevention of sea pollution is required. A Particularly Sensitive Sea Area (PSSA) is approved when an area needs special protection through action by the IMO because of its significance for recognized ecological or socio-economic or scientific reasons. In consequence, specific measures can be applied to control maritime activities in that area (cf.: Article 211 VI of UNCLOS).

In spite of these there is an absence of any specific legal frameworks for establishment of MPAs. As a result this method will seek to compile the main provisions relating to environmental protection and biodiversity. Broader legal systems which also provide protection for marine areas will also be identified.

Protecting the quality of the marine environment has become a major component of international law due to increased awareness of anthropogenic pressures. This awareness has raised a number of

international conventions, aimed at identifying and classifying sources of pollution, and adopting measures necessary to answer the various threats to the marine world[36].

From the UN conference in Stockholm in June 1972, which legally qualified the notion of pollution, the legal means of struggle and the approaches have gradually evolved. This has happened in three stages:

1. A specialized legal framework. This responded to the international law on pollution problems. This focused on specific issues such as oil spills. While being a useful tool, this framework could not effectively prevent all pollution.

2. A global legal framework. This was born from the UN conference in Stockholm and implemented by the Montego Bay Convention on the Law of the Sea 1982.

3. A global legal framework aimed at specific ecosystems. This new legal framework will allow for the adaptation to specific situations in different seas. This gives greater efficiency by adapting the framework to each case. It is also binding insofar as coastal states constrain themselves by ratifying the new generation of regional seas convention[37].

The European framework

For many years the seas and oceans have been under exclusive jurisdiction of the state and not of the European Community. However, the problems of maritime safety, pollution and overfishing led the EC to respond by encouraging Member States to implement international conventions and forcing them to adopt environmental policies. Management of marine fisheries has become one of the common policies of the European Union since 1976 which is currently regulated by the 2002 Directive on the entire Community fishing zone[38].

In order to protect sensitive marine species, habitats and ecosystems, a number of Directives have been established. It should be noted that these have only been adopted by EU members states bordering the Mediterranean and Black Sea's.

[36] J.P. Beurier, Droits maritimes, Dalloz 2006 /2007, p.918
[37] J.P. Beurier, Droits maritimes, Dalloz 2006 /2007, pp.919 et 920

[38] The Ministerial Conference for the Sustainable Development of Fisheries in the Mediterranean held on 25 and 26 November 2003 in Venice, organized by the Italian Presidency of the European Union and the European Commission. It was attended by 43 countries, residents of the European Union or members of the General Fisheries Commission for the Mediterranean. The conference had three objectives: 1) to reaffirm the general objectives of fisheries policy in the Mediterranean, ensuring the exploitation of fisheries resources under sustainable economic and social environment, 2) strengthen multilateral cooperation through the activation of General Fisheries Commission for the Mediterranean (GFCM), 3) develop a specific control scheme for the Mediterranean and for the fight against illegal, unreported and unregulated fishery.

Habitats and Birds Directives

The "Conservation of natural habitats and habitats of species" chapter of the Habitats Directive (92/43/EEC) addresses the establishment and conservation of a network of sites known as NATURA 2000.

The Birds Directive (2009/147/EC) also places great emphasis on the protection of habitats of endangered as well as migratory species through the establishment of a coherent network of Special Protection Areas (SPAs). Since 1994, all SPAs form an integral part of the NATURA 2000 ecological network.

Marine Strategy Framework Directive (MSFD)

Directive 2008/56/EC names in Article 13 IV: spatial protection measures that contribute to coherent and representative networks of MPAs and adequately cover the diversity of ecosystems as a measure to be taken in order to achieve or maintain good environmental status (GES).

Mediterranean Regional Framework

The framework of regional conventions specific to the Mediterranean will provide a set of legal instruments undoubtedly more suitable[39] for managing a network of MPAs. As such, the Barcelona system needs to be developed[40] and all its protocols will be listed in addition to the protocol dedicated to SPAMIs. Other legal instruments to be listed include the Madrid Protocol introducing ICZM in the Mediterranean[41], GFCM rules concerning restricted areas of fishing or the ACCOBAMS Agreement on the Conservation of Cetaceans.

Black Sea Regional Framework

Similarly a number of regional frameworks exist in the Black Sea which have relevance and use in developing MPAs and networks of MPAs. These are described below:

The Black Sea Economic Cooperation (BSEC)

In 1992, the BSEC was created by eleven states, including all Black Sea coastal States. In 1999 it became a regional economic organisation. Even though the BSEC focuses on the economic development of the Black Sea region, it also develops programmes for the protection of the environment.

The Danube River Protection Convention (DRPC)

The Danube River Protection Convention forms the legal instrument for co-operation on transboundary water management in the Danube River Basin. The Convention was signed in 1994 and came into force in 1998. It aims to ensure that surface waters and groundwater within the Danube River Basin are managed and used sustainably and equitably. The convention comprises 15 Contracting Parties, among them Bulgaria, Romania and Ukraine.

[39] In UICN (2010). Vers une meilleure gouvernance pour la Méditerranée. Gland, Suisse et Malaga, Espagne: p.26

[40] **Christophe** Lefebvre, « Protection et préservation du milieu marin : « Les apports des Conventions Régionales sur les mers aux dispositions de la Convention des Nations Unies sur le droit de la mer » », *VertigO - la revue électronique en sciences de l'environnement* [En ligne], Hors-série 8 | octobre 2010, mis en ligne le 20 octobre 2010

[41] Michel Prieur, *« Le protocole de Madrid à la convention de Barcelone relatif à la gestion intégrée des zones côtières de la Méditerranée. »*, in Vertigo, hors-série 9, juillet 2011

The Bucharest Convention

The Convention on the Protection of the Black Sea against Pollution (also referred to as "the Bucharest Convention") constitutes the legal framework for combating pollution from land based sources and maritime transport in the Black Sea. Furthermore, the Convention aims to facilitate the sustainable management of marine living resources and the preservation of representative types of coastal and marine ecosystems. The activities under the Convention have significantly increased public involvement in environmental protection. Progress has also been made in efficiently addressing transboundary environmental issues. However, progress still needs to be made, especially with regard to financing and enforcement.

The Convention on the Protection of the Black Sea against Pollution was signed in Bucharest in April 1992, and ratified by all legislative assemblies of the six Black Sea coastal States in 1994. In 1996, a Strategic Action Plan for the Environmental Protection of the Black Sea was signed. The plan was updated in 2009 and now contains principles for effective environmental protection such as the precautionary and the polluter pays principles. Advanced approaches to environmental management such as the ecosystem approach and a list of Ecosystem Quality Objectives (EcoQOs).

The Convention has four integral Protocols:

1. Protocol on the Protection of the Black Sea Marine Environment against Pollution from Land Based Sources and Activities (LBS Protocol)

2. Protocol on Cooperation in combating pollution of the Black Sea Marine Environment by Oil and Other Harmful Substances (Emergency Protocol)

3. Protocol on the Protection of the Marine Environment against Pollution by Dumping

4. The Black Sea Biodiversity and Landscape Conservation Protocol (CBD Protocol)

Structure:

The implementation of the Convention is managed by the Commission for the Protection of the Black Sea against Pollution and its Permanent Secretariat located in Istanbul, Turkey.

The Black Sea Commission consists of one representative of each of the Contracting Parties to the Bucharest Convention. It is chaired on a rotation principle and meets at least once a year. The Commission is responsible for promoting the Convention and its Protocols and for advancing the cooperation with international organizations. It has therefore granted many international organizations an observer status.

In 2000, the Permanent Secretariat was established to assist the Black Sea Commission. The Executive Director and other officials are appointed by the Commission. The Secretariat has contributed to the development of institutional mechanisms for the implementation of the Bucharest Convention and the Black Sea Strategic Action Plan. Concrete activities are based on the Annual Work Programs adopted by the Commission.

The seven Advisory Groups to the Black Sea Commission are its main source of expertise, information and support to realize the Black Sea Strategic Action Plan (BSSAP).

For each of the seven strategic sectors of the BSSAP, there is also an Activity Centre that supports the activities of the Black Sea Commission.

The national framework

At the national level, the Mediterranean and Black Sea States sectorial policies are managed by different authorities and every international agreement is interpreted differently.

The twin issues of the high seas and maritime delimitation add further complications. As a result, shipping activities and related rights have evolved independently and in a dissimilar way. Therefore it will be necessary to collect legislation from the various sectors involved in maritime activities, on a state-by-state basis. This will allow for a comparison between states and their governance of the marine environment.

This work will be carried out via workshops to compile articles and contributions summarizing the different legal provisions available. A gap analysis on the differences between national legal frameworks and their incentives and disincentives for creating MPAs will then be conducted.

3.2 **Analysis of collected legislation**

Once all data has been collected an analysis will be conducted. This will identify relationships between different legislations within and between countries and the two basins. Particularly noteworthy will be the relationships between environmental legislations and those for other activities.

3.3 **Development of legal proposals**

Based on the results of the first two parts and on the available scientific data, this work will lead to proposing a coherent legal framework. This framework will incorporate incentives to disincentives to enable the establishment and management of a network of MPAs.

To assist in this a comparative study of different management models from outside of CoCoNet project region will be conducted.

A good example is the case studies conducted by FAO in 2011 (Marine Protected Areas Country case studies on policy, governance and institutional issues). This looked at countries with weak administrative and science abilities[42] which may be comparable with some Mediterranean and Black Sea states.

In France alone there are some interesting comparisons due to overseas territories (e.g. Polynesia).

[42] Voir Jean-Yves WEIGEL, François FÉRAL, Bertrand CAZALET *Éditeurs scientifiques*, Les aires marines protégées d'Afrique de l'Ouest : Gouvernance et politiques publiques, Perpignan, 2007 ; Jean-Yves Weigeil, François Féral, Bertrand Cazalet- Governance of marine protected areas in least developped countries . FAO fisheries and aquaculture technical paper N°548 Rome 2011 . PAPER N°548 ROME 2011- Annuaire du droit de la mer, tome XVI Gouvernance, droit et administration des aires marines protégées, Pedone 2012

However, on a more local scale opposing models can be seen in the French Mediterranean reserves of Banyuls and the 'Blue Coast' fisheries reserve.

The marine reserve of *Banyuls sur mer* is a public institution with an area of 600 hectares, of which 60 are protected. Managements costs are estimated at € 600 000 per year. It attracts large numbers of tourists due to an underwater trail and diving activities. The majority of management costs are spent on monitoring.

On the other hand, The 'Blue Coast' reserve is managed by local fisherman and is based on an original and decentralized mode l(" *la prud'homie*").

It covers over 10 000 hectares of which 30 hectares are no-take. Its operating costs are estimated at €150000 for monitoring. The monitoring is performed by professional fishermen.

The reserve was established to protect fishing areas against fishing trawlers from Marseille. The proportion cost / area is considered as the best of the French Mediterranean MPAs. (Sources: ANR GAIUS 2010)

These two cases are interesting because:

- They have different functions (i.e. conservation and fisheries management)
- The have differing legal framework (i.e. bureaucratic/scientific vs department)
- The Blue Coast is decentralized, empirical and community focused
- The running costs are disproportionate between the two

For any recommendations to be effective they must consider legal, socio-economic and functional aspects of MPAs, rather than just biology. MPAs must manage men, more than fish.

4 ANNEXES

ANNEX 1: Table of maritime areas, their boundaries and jurisdiction of the States Published in the Official Bulletin of the Ministry of Justice and Liberties BOMJL No. 2011 of October 31, 2011, source / report M. Lamour , MP.

ANNEX 2: Table defining the various zoning and maritime jurisdiction of States. Published in the Official Bulletin of the Ministry of Justice and Liberties BOMJL No. 2011 of October 31, 2011 – source CEDRE

ANNEX 2: Maritime zones in international Law. Published in the Official Bulletin of the Ministry of Justice and Liberties BOMJL No. 2011 of October 31, 2011 - source CEDRE

ANNEX 3: Political Map of the Mediterranean Sea and Black Sea. Published by Juan Luis Suárez de Vivero, "Study: Territorial waters in the Mediterranean and Black Sea, 2010," for the Committee on Fisheries European Parliament. Directorate General for Internal Policies of the Union, Policy Department B: Structural and Cohesion Policies- Source Marine Plan University of Seville

ANNEX 4: Map of the High Seas in the Mediterranean. Published by Juan Luis Suárez de Vivero, "Study: Territorial waters in the Mediterranean and Black Sea, 2010," for the Committee on Fisheries European Parliament. Directorate General for Internal Policies of the Union, Policy Department B: Structural and Cohesion Policies-Source Marine Plan University of Seville.

Graphic of the marine jurisdictions in the Mediterranean and Black Sea, produced by the author.

ANNEX 5: Maps 1, Maritime Traffic, Source: NESTEAR - Buguellou, 2008 ; Eurostat, COMEX, 2006, in Économie et territoire, Territoire et transports **:** Christian Reynaud, « Les composantes du transport maritime en Méditerranée », Med.2009.

Maps 2 : Gas and Oil in the Mediterranean. Published by Juan Luis Suárez de Vivero, "Study: Territorial waters in the Mediterranean and Black Sea, 2010," for the Committee on Fisheries European Parliament. Directorate General for Internal Policies of the Union, Policy Department B: Structural and Cohesion Policies-Source Marine Plan University of Seville

ANNEX 6: Major international agreements applicable to the Mediterranean and Black Sea. Published by Juan Luis Suárez de Vivero, "Study: Territorial waters in the Mediterranean and Black Sea, 2010," for the Committee on Fisheries European Parliament. Directorate General for Internal Policies of the Union, Policy Department B: Structural and Cohesion Policies-Source: European Commission 2008

ANNEX 1

BULLETIN OFFICIEL DU MINISTÈRE DE LA JUSTICE ET DES LIBERTÉS

Annexe 5

Tableau récapitulant les différents espaces maritimes, leurs délimitations et les compétences des Etats

Plusieurs textes et règles coutumières antérieurs à la convention de Montego Bay ont défini les espaces maritimes. Néanmoins, certains ont été créés par cette convention qui, d'une manière générale, a précisé leur régime.

ESPACES MARITIMES	DÉLIMITATIONS	COMPÉTENCES
Souveraineté des Etats côtiers		
EAUX INTÉRIEURES	Espaces maritimes liés aux domaines terrestres en deçà des lignes de base droites qui déterminent la mer territoriale : ports, rades, baies (articles 8 à 12 de la convention de 1982).	Compétence législative, réglementaire et juridictionnelle de l'Etat côtier. Limites : libre accès aux ports et rades pour les navires étrangers (convention de Genève du 9 décembre 1923). Dans le cas de la France, les opérations de police judiciaire sont effectuées d'office en application des lois françaises ou à la demande du consul de l'Etat du pavillon si des accords bilatéraux l'autorisent.
MER TERRITORIALE	Espaces maritimes adjacents aux côtes d'une largeur maximale de 12 miles à partir du trait de cote et éventuellement des lignes de base normales ou droites lorsqu'elles sont définies (droit reconnu par l'article 3 de la convention de 1982).	Projection des compétences que l'Etat exerce sur son territoire national : - compétence législative entière à condition de ne pas porter atteinte aux règles de droit international (droit de passage inoffensif, notamment) ; - limitations de la juridiction pénale et civile.
Contrôle de l'Etat côtier		
ZONE CONTIGUË	Espace maritime contigu à la mer territoriale, elle est comprise entre 12 et 24 milles marins mesurés à partir des lignes de base de la mer territoriale, sous réserve d'accords de délimitation avec les Etats voisins.	Contrôle de l'Etat côtier en vue de prévenir et réprimer les infractions aux règlements douaniers, fiscaux, sanitaires.
Loi de l'Etat du pavillon		
HAUTE MER (y compris la « Zone économique exclusive »)	Zone à partir des limites extérieures de la mer territoriale.	Libre navigation, mais pouvoirs de contrôle par les navires de l'Etat du pavillon ou ceux d'Etat tiers en cas de transport d'esclaves, de piraterie, d'absence de pavillon ou d'émissions radiophoniques non autorisées. Sinon, droit d'approche par les navires d'Etats tiers, étendu au contrôle sur la base de conventions spécifiques (conventions de Vienne et de Palerme pour les trafics illicites de stupéfiants et de migrants).

Source : rapport de Madame Marguerite LAMOUR, députée (site de l'Assemblée Nationale – XIIème législature – loi du 22 avril 2005) relatif au projet de loi modifiant la loi du 15 juillet 1994

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ANNEX 2

BULLETIN OFFICIEL DU MINISTÈRE DE LA JUSTICE ET DES LIBERTÉS

Largeur	ZONES MARITIMES	DEFINITION	DROITS DES ETATS
–	Eaux Intérieures	Sont comprises entre la terre et la ligne de base normale (laisse de basse mer) des eaux territoriales comprenant notamment les estuaires, les ports, les baies (d'une ouverture inférieure à 24 milles).	La souveraineté d'un État côtier s'étend au delà de son territoire et de ses eaux intérieures (et dans le cas d'un État archipel, de ses eaux archipélagiques).
	Eaux archipélagiques	Constituent les eaux entre les différentes îles et archipels d'un Etat archipel tracées à partir des lignes de base archipélagiques pouvant atteindre 100 milles (et même 125 milles pour 3% d'entre elles).	Un État archipel, constitué entièrement d'îles, ne peut s'opposer au droit de passage inoffensif des navires et aéronefs étrangers. La Polynésie ou la Nouvelle-Calédonie n'étant pas des États indépendants ne peuvent pas actuellement être considérés comme États archipel.
	Eaux territoriales	Sont une zone adjacente au territoire riverain et s'étendent jusqu'à la limite maximum de 12 milles de la ligne de base.	L'Etat riverain exerce sa souveraineté dans les conditions prévues par le droit international et qui touche aussi à l'espace aérien surjacent, au lit et au sous-sol des eaux territoriales. L'amplitude de cette zone est fixée par chaque Etat dans laquelle il a les pleins pouvoirs et obligations.
	Zone contiguë	S'étend jusqu'à 24 milles au delà de la mer territoriale.	L'Etat côtier peut exercer certains contrôles (douaniers, fiscaux etc.) et un droit de poursuite pour réprimer les infractions à ses règles nationales.
		Sont des juridictions étendues au delà des eaux territoriales	
	Zone de Protection Ecologique (ZPE)	S'étend entre la limite des eaux territoriale et la haute mer dans la limite maximum des 188 milles	La zone de protection écologique est une création récente dans les conditions autorisées par la convention UNCLOS. Elle s'étend au delà de la zone économique exclusive et comporte les mêmes droits. C'est une déclinaison de la ZEE en autorisant des mesures de protection du milieu marin. La délimitation de cette zone a été inaugurée par la France en avril 2003, en mer Méditerranée, suivie par la Croatie, le 3 octobre 2003, en se dotant d'une ZPEP, zone de protection écologique et de pêche, en mer Adriatique. L'Etat français peut disposer de pouvoirs de contrôle et de sanction équivalents à ceux dont il dispose à l'intérieur de la ZEE. Ces mesures doivent permettre de réduire la pollution des côtes méditerranéennes liée aux rejets illicites d'hydrocarbures au-delà de la zone contiguë.
	Zone de Protection de la Pêche (ZPP)	Etendue variable	Les États côtiers se réservent un droit de pêche exclusif.
	Zone Economique Exclusive (ZEE)	Située au-delà de la mer territoriale et adjacente à celle-ci, elle s'étend au maximum jusqu'à 200 milles marins des lignes de base à partir desquelles est calculée la largeur de la mer territoriale.	L'Etat riverain exerce : - des droits de souveraineté pour les fins d'exploitation, conservation et administration des ressources naturelles vivantes et non vivantes, des eaux surjacentes, du lit marin et du sous-sol, et dans le respect des autres activités à fins économiques, comme la production d'énergie dérivée de l'eau, des courants et des vents ; - une juridiction en matière d'établissement et d'utilisation des îles artificielles, installations et structure, en matière de recherche scientifique marine et en matière de protection et de préservation du milieu marin.
	Plateau continental	S'étend au-delà de la mer territoriale jusqu'au rebord de la marge continentale, ou jusqu'à 200 milles marins, soit la plus grande distance, et comprend le fond marin et le sous-sol	L'Etat peut exercer ses droits et obligations à l'égard de l'exploration et de l'exploitation des ressources minérales et autres ressources naturelles non biologiques, ainsi que des organismes vivants (espèces sédentaires seulement).
+	Haute mer	Constitue les espaces marins s'étendant au-delà des eaux intérieures, de la mer territoriales des différents États et, le cas échéant, de la Zone économique exclusive.	Les Etats n'y disposent en principe d'un pouvoir de juridiction (contrôle et sanction) qu'à l'égard des navires battant leur pavillon.

Source : CEDRE - Centre de documentation, de recherche et d'expérimentations sur les pollutions accidentelles des eaux (http://www.cedre.fr/fr/rejet/rejet-illicite/zone-maritime.pdf)

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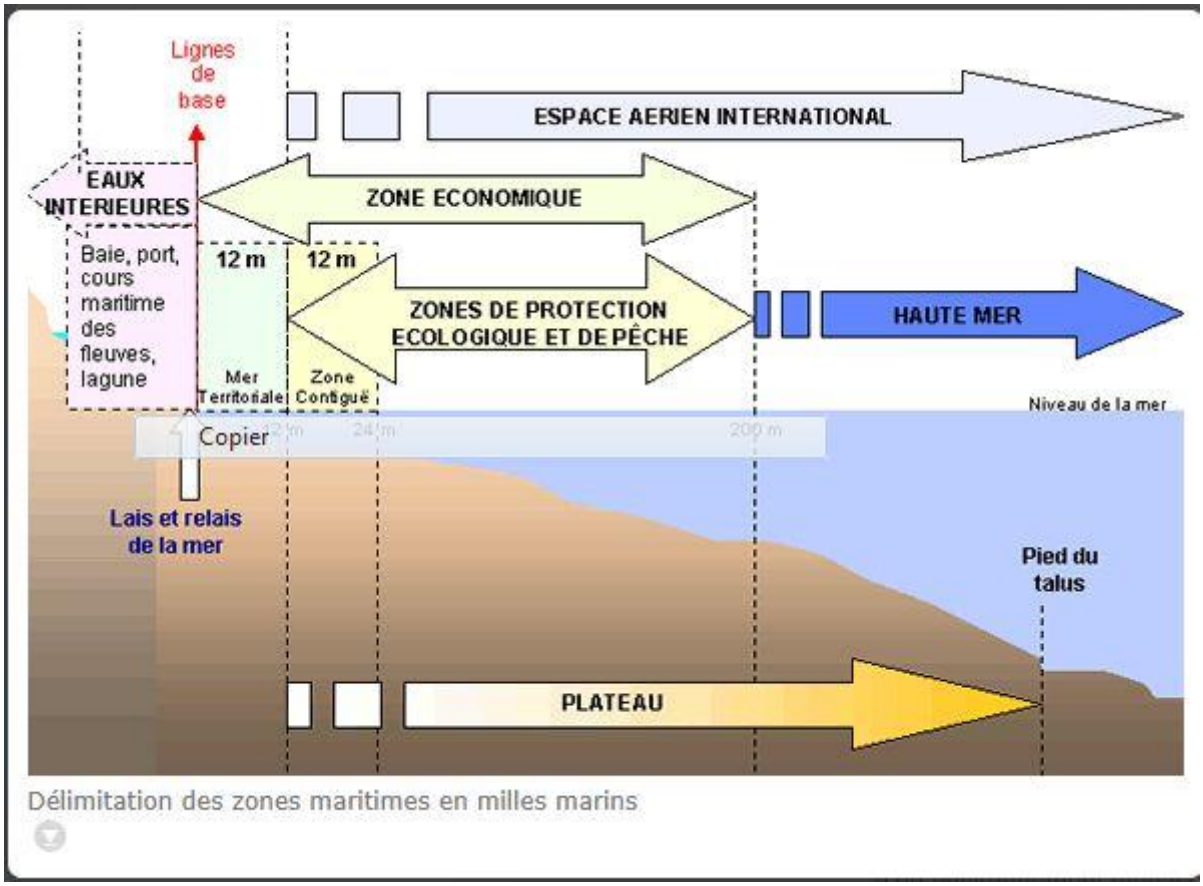
ANNEX 2 CONT.

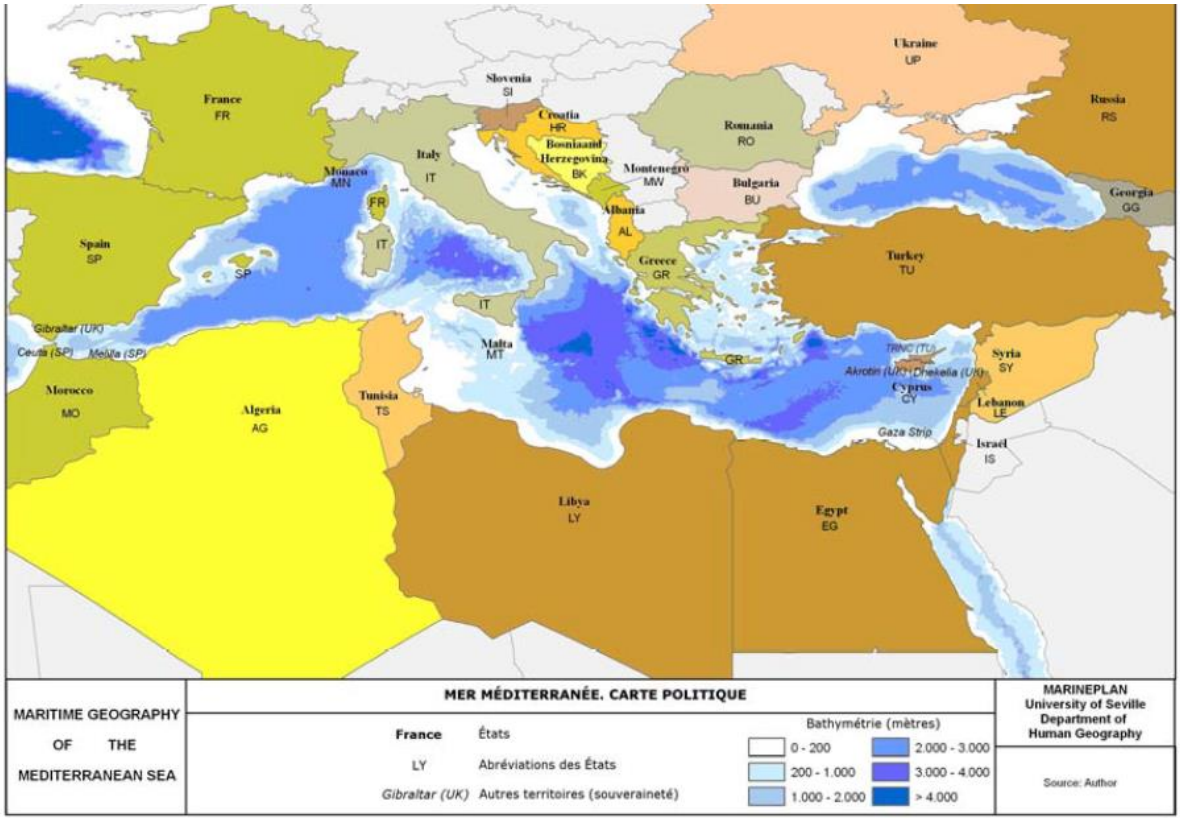


Source : CEDRE - Centre de documentation, de recherche et d'expérimentations sur les pollutions accidentelles des eaux (http://www.cedre.fr/fr/rejet/rejet-illicite/zone-maritime.php)

Les droits souverains des Etats signataires de la convention de Montego Bay sont relatifs à l'exploitation et l'exploration des ressources naturelles des fonds marins et de leur sous-sol, à l'exclusion des eaux surjacentes, jusqu'au rebord externe du plateau continental, ou au plus jusqu'à 350 milles (648 km).

Au-delà de cette dernière limite s'étend la zone internationale des fonds marins qui échappe à toute appropriation et doit être uniquement utilisée « à des fins exclusivement pacifiques » et exploitée « dans l'intérêt de l'humanité toute entière ». La communauté internationale se mobilise peu à peu pour envisager des voies nouvelles aux vues d'une gestion durable de la haute mer et de ses ressources.

ANNEX 3


Ukraine
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Herzegovina
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Montenegro
MW
Bulgaria
BU
Monaco
MN
Georgia
GG
Albania
AL
Spain
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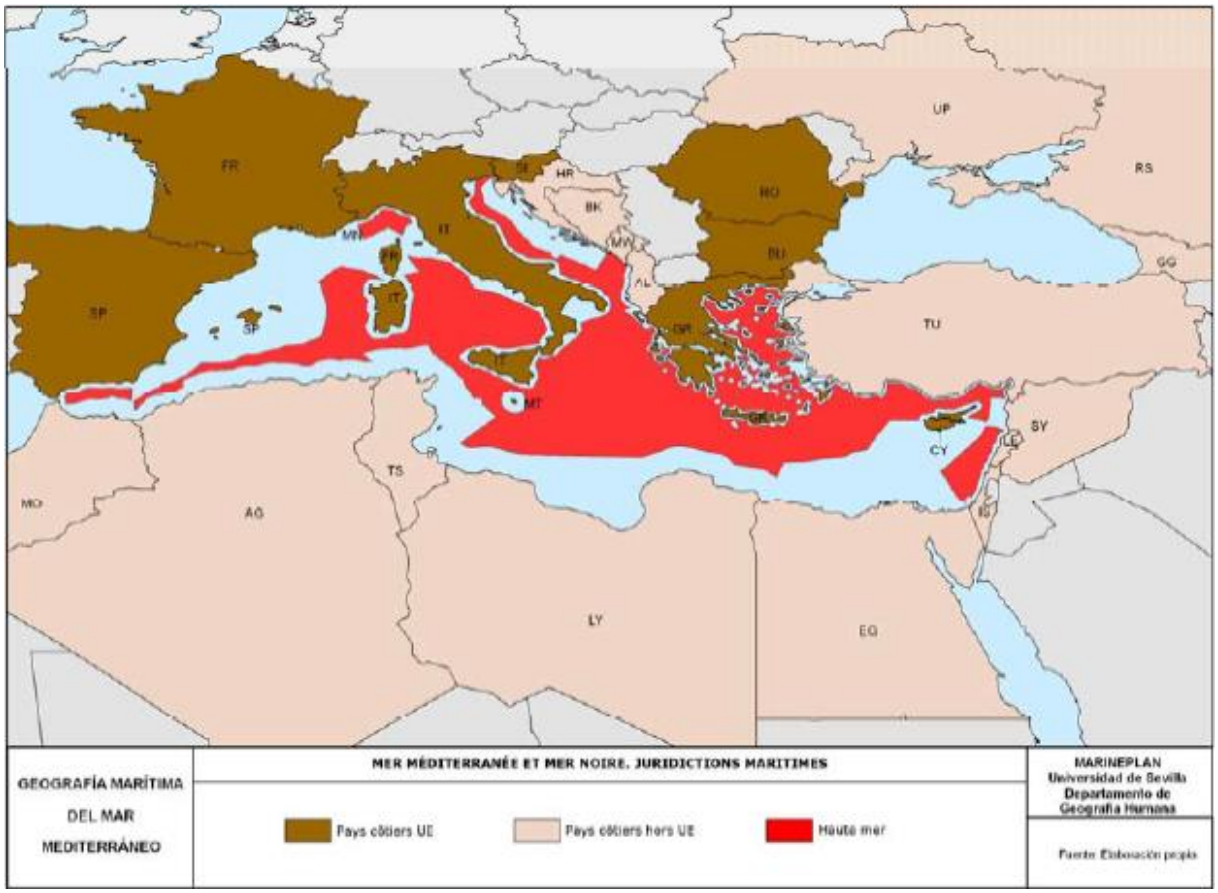
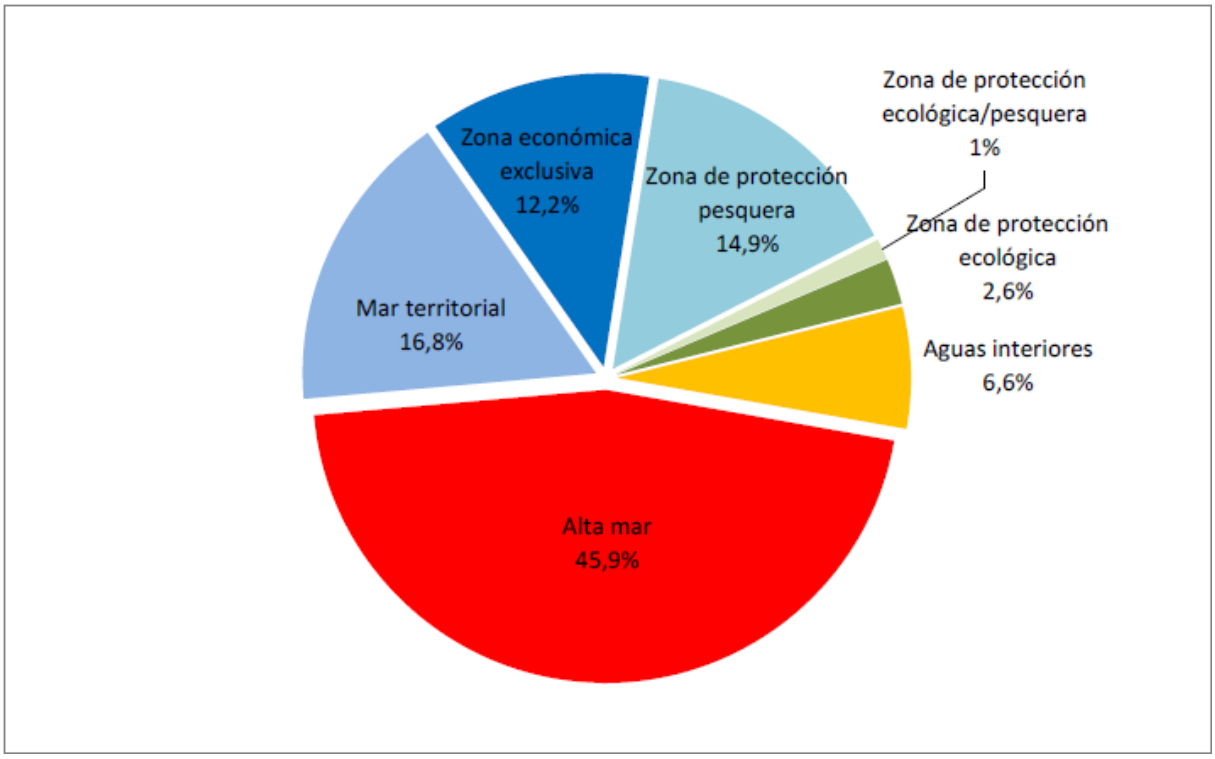
Greece
GR
Turkey
TU
Gibraltar (UK)
Ceuta (SP)
Melilla (SP)
Malta
MT
TRNC (TU)
Akrotiri (UK)
Dhekelia (UK)
Syria
SY
Cyprus
CY
Lebanon
LE
Morocco
MO
Tunisia
TS
Algeria
AG
Gaza Strip
Israel
IS
Libya
LY
Egypt
EG
MARITIME GEOGRAPHY OF THE MEDITERRANEAN SEA
MER MÉDITERRANÉE. CARTE POLITIQUE
France États
LY Abréviations des États
Gibraltar (UK) Autres territoires (souveraineté)
Bathymétrie (mètres)
0 - 200
200 - 1.000
1.000 - 2.000
2.000 - 3.000
3.000 - 4.000
> 4.000
MARINEPLAN
University of Seville
Department of
Human Geography
Source: Author

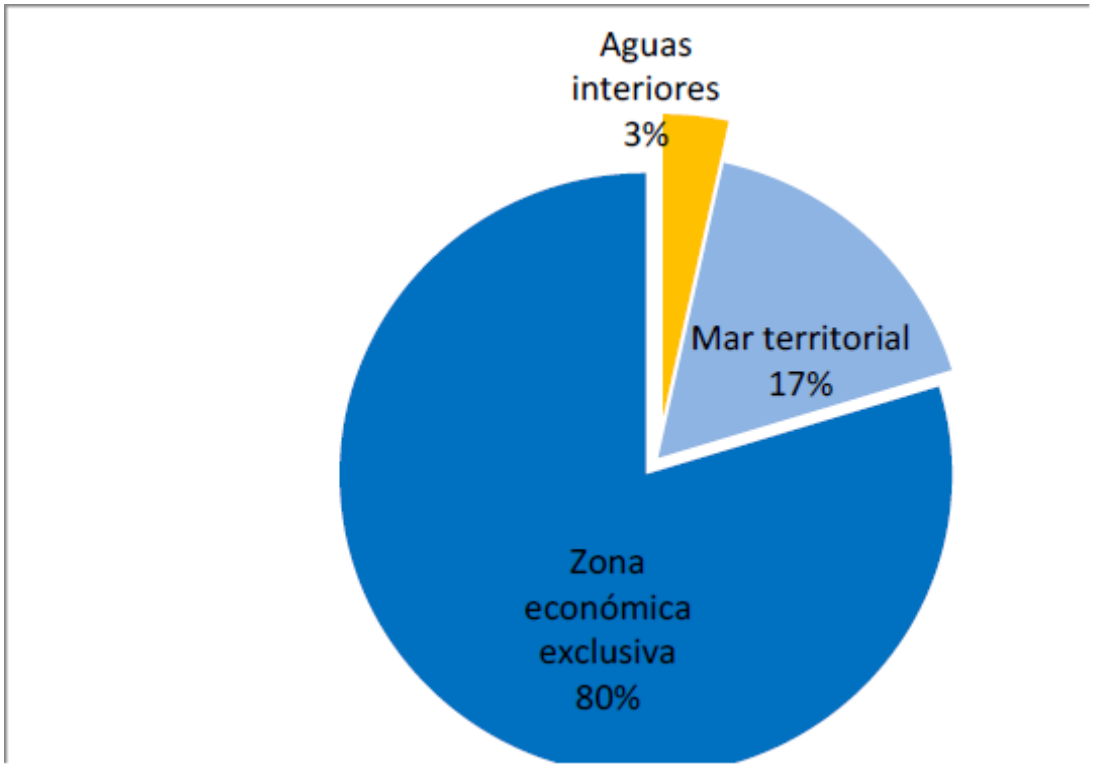
ANNEX 4

Mediterranean High Seas



MARINE JURISDICTIONS IN THE MEDITERRANEAN AND THE BLACK SEA

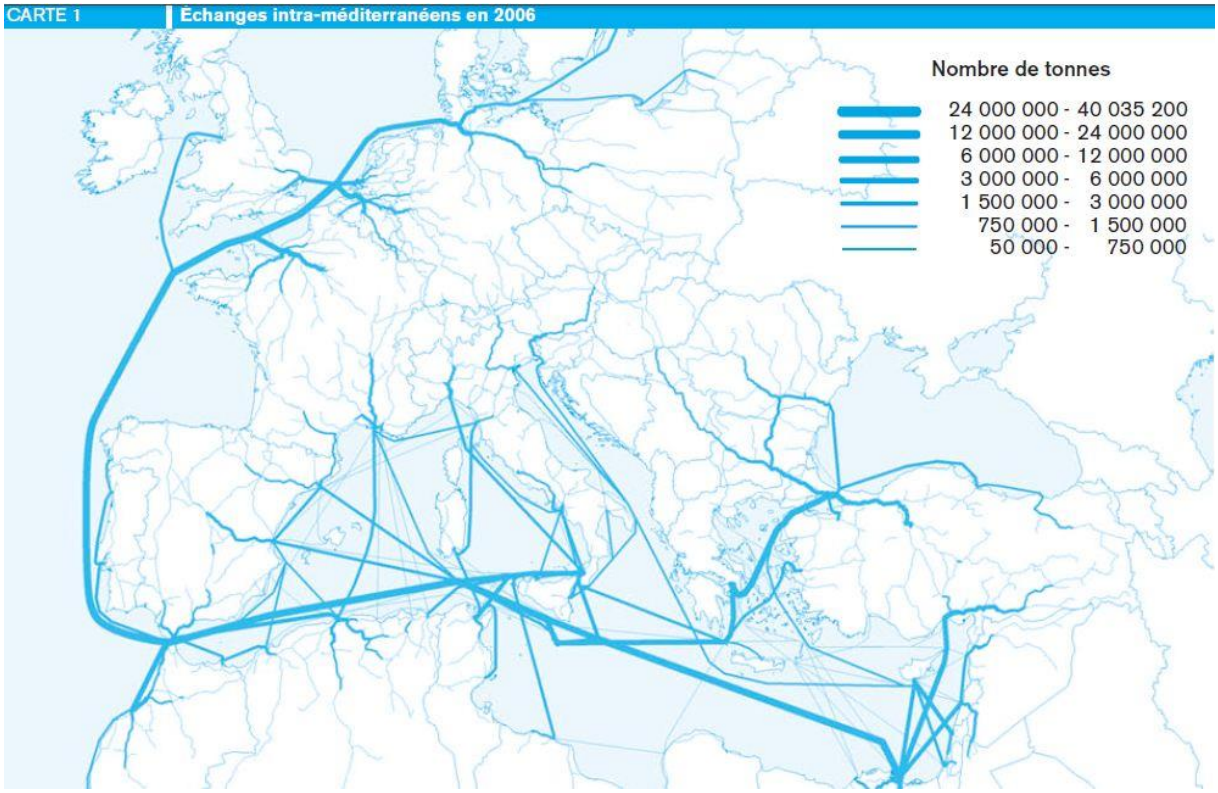

Zona económica exclusiva 12,2%
Zona de protección pesquera 14,9%
Zona de protección ecológica/pesquera 1%
Zona de protección ecológica 2,6%
Aguas interiores 6,6%
Alta mar 45,9%
Mar territorial 16,8%


Aguas interiores 3%
Mar territorial 17%
Zona económica exclusiva 80%

ANNEX 5

“Certains usages qui sont fait de l’espace maritime, comme la navigation, sont non seulement réglementés par des conventions internationales, mais leur incidence environnementale ou le fait qu’ils se superposent à d’autres usages ou entre en concurrence pour un même espace les rendent également dignes de considération dans la planification de l’espace marin.” étude, **Juan Luis Suarez de Vivero**

“*Certain uses which are made of marine space, such as navigation, are regulated by international conventions, but their environmental impact or the fact that they overlap with other uses or competes in the same space also make it worthy of consideration in the planning of marine space.”* Study**, Juan Luis Suarez de Vivero**



Source : NESTEAR - Buguellou, 2008 ; Eurostat, COMEXT, 2006.

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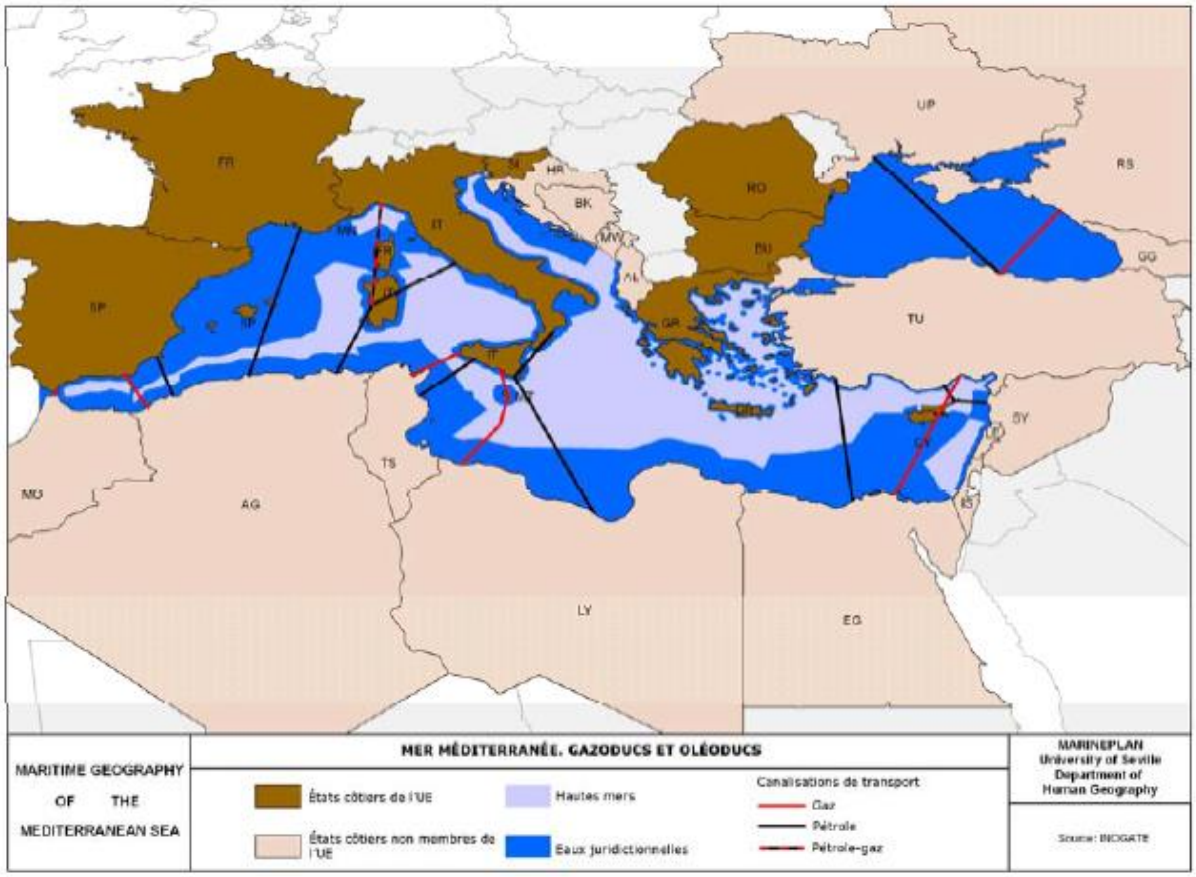

Chapter 2 – International Legal Overview

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LIST OF ACRONYMS AND ABBREVIATIONS

ACCOBAMS	Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area
Barcelona Convention	Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean
BBNJ Working Group	Ad Hoc Open-ended Informal Working Group to Study Issues Relating to the Conservation and Sustainable Use of Marine Biological Diversity Beyond Areas of National Jurisdiction
Birds Directive	Directive 79/409 of 2 April 1979 on the Conservation of Wild Birds
BLC Protocol	Black Sea Biodiversity and Landscape Conservation Protocol to the Convention on the Protection of the Black Sea Against Pollution
BSI List	List of Landscapes and Habitats of Black Sea Importance
Bucharest Convention	Convention on the Protection of the Black Sea Against Pollution
CBD	United Nations Convention on Biological Diversity
EAP	Environmental Action Programme
EBSA	Ecologically or Biologically Significant Marine Areas
EIA Directive	Council Directive 85/37 of 27 June 1985 on the Assessment of the Effects of Certain Public and Private Projects on the Environment
Fish Stocks Agreement	Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks

GFCM	General Fisheries Commission for the Mediterranean
Habitats Directive	Council Directive 42/93/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora
ICCAT	International Commission for the Conservation of Atlantic Tunas
IMO	International Maritime Organization
IUCN	International Union for the Conservation of Nature
IWC	International Whaling Commission
Marine Strategy Framework Directive	Directive 2008/56/EC of 17 June 2008 Establishing a Framework for Community Action in the Field of Marine Environmental Policy
MARPOL	International Convention for the Prevention of Pollution from Ships
MEPC	Marine Environment Protection Committee
NGO	Non-governmental Organization
n.m.	Nautical mile
PSSA	Particularly Sensitive Sea Area
SAC	Special Area of Conservation
SCI	Site of Community Importance
SPA	Special Protection Area
SPA Protocol	Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean
SPAMI List	List of Specially Protected Areas of Mediterranean Importance
UNCLOS	United Nations Convention on the Law of the Sea
Vienna Convention	Convention on the Law of Treaties

Water Framework Directive	Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 Establishing a Framework for Community Action in the Field of Water Policy
Whaling Convention	International Convention for the Regulation of Whaling
WHC	Convention Concerning the Protection of the World Cultural and Natural Heritage

1. Terms of Reference

In the context of the collaborative project titled “Towards COast to COast NETworks of marine protected areas (from the shore to the high and deep sea), coupled with sea-based wind energy potential” (CoCoNeT), the consultants have been requested to provide an analysis of the legislation on marine protected areas, including networks thereof, and of the existing legal regime regulating offshore wind-energy production in the Mediterranean and Black Seas. This work, led by CONISMA, has been carried out within CoCoNet’s Work Package 6 (MPA Socio-Economic Issues, Management and Legislation), Task 6.4 (Legislative Implications of an Integrated MPA / Wind Farm Network in the Mediterranean and Black Seas). In particular, this study is intended to contribute to CoCoNet’s Deliverable 6.3, concerning “Review and analysis of legislation relevant to the establishment and management of MPAs in the Mediterranean and Black Seas”.

CHAPTER I

MARINE PROTECTED AREAS AS POLICY TOOLS FOR ECOLOGICALLY SUSTAINABLE DEVELOPMENT

2. Peculiarities and Challenges of Marine Environmental Protection

Compared to terrestrial, marine environmental protection presents marked peculiarities and consequential challenges. On the one hand, the distinct natural features and characteristics of the marine environment are less known than those of terrestrial ecosystems and still need to be thoroughly studied and understood, if an effectively protective regime has to be put in place. On the other hand, the rules applicable at sea are different from those relating to land territory, thus necessitating special legal considerations and legislative approaches.

Generally speaking, terrestrial and marine protected areas are created for reasons that are ultimately the same, namely the maintenance of essential ecological processes and life-support systems, the preservation of genetic diversity, and the sustainable utilization of species and ecosystems.[43] The fluid and multi-dimensional nature of the sea, however, characterizes the marine environment as a more complex and dynamic one, where habitats are not precisely circumscribed and living organisms move horizontally and vertically, often throughout very large geographic ranges. Highly migratory species may cover distances of thousands of kilometers, posing difficult challenges from a resource management perspective. For the same reasons, human pressures on marine and coastal areas may produce impacts even at great distances from the point where the events or activities originating those pressures actually take place, thus requiring a carefully coordinated planning that takes into account much larger and multisectoral scopes and scales of management. Patrol and enforcement activities in the marine environment are more difficult than in protected sites situated on land, as there are countless points of access to areas which are often far offshore and, therefore, far from sight. Moreover, in most countries, competences relating to management within the marine environment are distributed in a fragmentary way among a wide variety of agencies, ranging from institutions with responsibilities over living resources (wildlife, fisheries, aquaculture), navigation (port authorities, shipping), national defense and security (navy, coast guard, customs and immigration authorities) and protection of the environment (pollution control, disaster preparedness, emergency management) to others with responsibilities associated to tourism and recreation (leisure craft and fishing, aquatic sports) or educational purposes (marine research institutions). This confusion or overlapping of competences between different authorities certainly does not help the management of marine protected areas and may often lead to divergences or delays in the adoption of the appropriate measures.

Compared to terrestrial ecosystems, the marine environment also faces distinct threats, the most pressing and significant being overfishing, habitat destruction and land-based pollution. In a growing number of marine and coastal areas other high-impact activities, such as mining, aquaculture, oil and gas exploitation as well as unsustainable

[43] IUCN, *World Conservation Strategy*, 1980.

tourism threaten marine ecosystems and their supporting life. It is now recognized worldwide that, in the longer term, climate change is likely to produce dramatic adverse impacts on the marine environment, including coastal erosion, shifts in the distribution and abundance of marine habitats and species, flooding, saltwater intrusion and increased ocean acidification. Efforts to face the impacts of climate change on the marine environment will require the implementation of means of mitigation and adaptation, which may include the establishment of networks of coastal and marine protected areas to enhance the resilience of coastal and marine ecosystems and ensure their maximum adaptive capacity.

The development of the legal frameworks for the establishment and management of marine protected areas has progressed slowly worldwide, compared to the setting up of land use legal frameworks. As of today, just over 1 percent of the oceans is under protection, as opposed to the nearly 15 percent of the earth's land area which is included in protected sites. The Conference of the Parties to the United Nations Convention on Biological Diversity (Rio de Janeiro, 1992; hereinafter "CBD") has pointed out that marine and coastal protected areas consequently make a relatively small contribution to the sustainable management of marine and coastal biodiversity.[44] Moreover, the large majority of existing marine protected areas lies within 12 n.m. from the baselines of the territorial sea, and only a minority extends beyond these limits, covering less than 2 percent of the exclusive economic zones worldwide. More than 60 percent of the global oceans, in fact, still falls beyond the limits of national jurisdiction: as opposed to terrestrial ecosystems, where almost all areas fall within national jurisdiction,[45] the main part of the marine environment is subject to a legal regime that presents substantial challenges, requires effective political will by the States concerned to ensure its protection and entails costs and capacity requirements never before faced by most countries for management, monitoring and enforcement over large and remote areas of sea.

[44] CBD COP Decision VII/5 (Kuala Lumpur, 2004), UNEP/CBD/COP/DEC/VII/5.

[45] A remarkable exception is the legal regime of Antarctica. According to Art. IV of the Antarctic Treaty (Washington, 1959), "No acts or activities taking place while the present Treaty is in force shall constitute a basis for asserting, supporting or denying a claim to territorial sovereignty in Antarctica or create any rights of sovereignty in Antarctica. No new claim, or enlargement of an existing claim to territorial sovereignty in Antarctica shall be asserted while the present Treaty is in force". However, seven States still put forward claims to Antarctic sectors which had been advanced before the entry into force of the Antarctic Treaty and there is an Antarctic sector which has never been claimed by any State.

The preamble of the United Nations Convention on the Law of the Sea (Montego Bay, 1982; hereinafter "UNCLOS") attests the consciousness of all States that the problems of ocean spaces are closely interrelated and need to be considered as a whole.[46] This statement holds true also with respect to the great level of connectivity that exists between areas that lie beyond national jurisdiction and those which fall within the jurisdiction of coastal States. Although maritime zones of different sizes and regimes have been artificially designed by legal provisions for a variety of management purposes, areas within and beyond national jurisdiction are part of the same body of salt water that covers more than 70 percent of the earth's surface; they share biological and ecological processes, together host a wide variety of living resources, and constantly influence each other. For these reasons, it has been recognized that tools applied in areas beyond national jurisdiction, including marine protected areas and other area-based management tools, should be coherent, compatible and complementary to those applied in areas under national jurisdiction.[47]

3. The Role of Marine Protected Areas in International Environmental Policy

Although the use of marine protected areas does not represent a revolutionary phenomenon in municipal law,[48] it was not until recently that this topic has received attention at the international level, along with the recognition that the protection of the world oceans goes beyond a national concern and demands the attention of the global community. The First World Conference on National Parks (Seattle, 1962) invited all States to examine, as a matter of urgency, the possibility of creating marine parks or reserves to defend underwater areas of special significance from all forms of human interference. Calls

[46] The report *Our Common Future* (1987), also known as the *Brundtland Report*, published by the United Nations World Commission on Environment and Development, recognized in the same years that "the underlying unity of the oceans requires effective global management regimes", and it highlighted that "shared resource characteristics of many regional seas make forms of regional management mandatory" (para. 16).

[47] CBD COP Decision VIII/24 (Curitiba, 2006), UNEP/CBD/COP/DEC/VIII/24; recalled in CBD COP Decision IX/20 (Bonn, 2008), UNEP/CBD/COP/DEC/IX/20.

[48] Without considering those marine protected areas which may date back hundreds of years and were created mainly for fisheries management or to protect sacred sites, the first protected area extending to marine waters in its modern meaning was established in 1879 (Royal National Park, New South Wales, Australia). This Australian reserve hosted a terrestrial site with marine components and respective regulations. The establishment of marine protected areas experienced a slowing down during the 20th century, gaining new attention around the beginning of the 70s.

for action in this field have been reiterated over the years. The Third World Congress on National Parks (Bali, 1982) called for the establishment of protected areas, with the marine biome being singled out as requiring specific attention. Adding to the previously listed priority biomes – which included tropical, arid, polar and sub-polar regions, mountains and islands – coastal and freshwater systems were singled out for a need of specific protection as well. This was a year before the establishment of the United Nations World Commission on Environment and Development and five years before the publication of its report, *Our Common Future*, that brought the terms "sustainable development" and "ecosystem approach" into every day usage.

At the 17th session of its General Assembly in 1990, the International Union for the Conservation of Nature (IUCN) adopted a primary marine conservation goal in Resolution 17.38, "to provide for the protection, restoration, wise use, understanding and enjoyment of the marine heritage of the world in perpetuity through the creation of a global representative system of marine protected areas and through the management in accordance with the principles of the World Conservation Strategy of human activities that use or affect the marine environment". It has been remarked that the primary goal set forth in Resolution 17.38 identified marine protected areas as a means to an end, rather than an end in themselves.[49] One year later, the IUCN published the first edition of its guidelines for establishing marine protected areas.[50]

In 1992, the United Nations Conference on Environment and Development, held in Rio de Janeiro, adopted a declaration and an action programme – the second commonly referred to as Agenda 21. The declaration contained 27 principles providing guidance for environmental decision making, with the goal of "working towards international agreements which respect the interests of all and protect the integrity of the global environmental and developmental system".[51]

As far as oceans and seas are concerned, Agenda 21 called on States, acting individually, bilaterally, regionally or multilaterally and within the framework of the

[49] Kelleher, *A Global Representative System of Marine Protected Areas*, in *The George Wright Forum – The GWS Journal of Parks, Protected Areas & Cultural Sites*, 1998, No. 3, p. 18.
[50] Kelleher, *Guidelines for Establishing Marine Protected Areas*, Gland, 1991.
[51] 1992 Rio Declaration, Preamble.

International Maritime Organization (IMO) and other relevant international organizations, to assess the need for additional measures to address degradation of the marine environment.[52] According to Agenda 21, States should identify marine ecosystems exhibiting high levels of biodiversity and productivity and other critical habitat areas and provide necessary limitations on use in these areas through, *inter alia*, designation of protected areas.[53] Agenda 21 recognized that coastal States, with the support of international organizations, should undertake measures to maintain biological diversity and productivity of marine species and habitats under national jurisdiction. These measures certainly include the establishment and management of protected areas.[54]

Agenda 21 considered international law, as reflected in the UNCLOS, as the normative basis upon which to pursue the protection and sustainable development of the marine and coastal environment and its resources. According to this programme, the objectives in question required new approaches to marine and coastal area management and development, at the national, subregional, regional and global levels – approaches that were integrated in content, and precautionary and anticipatory in ambit.[55] The marine protected area tool certainly responds to both the above-mentioned necessities: on the one hand, the delimitation of a defined marine space and its submission to a special legal regime call for an integrated management within the area; on the other hand, restrictions to extractive activities, which represent typical measures linked to the establishment of marine protected areas, constitute an exemplary way to implement the precautionary principle. In connection with this principle it has been affirmed, as a key lesson learnt, that

> "it is better to have an MPA which is not ideal in the ecological sense but meets the primary objective than to strive vainly to create the "perfect MPA"; it is usually a mistake to postpone action on the establishment of an MPA because biophysical information is incomplete. There will usually be sufficient information to indicate whether the MPA is justified ecologically and to set reasonable boundaries."[56]

[52] Para. 17.30.
[53] Para. 17.85.
[54] Para. 17.7.
[55] Para. 17.1.
[56] Kelleher, *Guidelines for Marine Protected Areas*, Gland - Cambridge, 1999, p. xiii.

In the same year of adoption of Agenda 21, the Fourth World Congress on National Parks and Protected Areas (Caracas, 1992) adopted a plan of action that, *inter alia*, called for participating States to contribute to a global system for categorizing coastal marine regions as the basis for assessing the adequacy of protected areas in these regions; to participate actively in coastal zone management programmes and ensure that both marine and terrestrial protected areas are used as key management tools in such programmes; and to develop and implement integrated management programmes for marine protected areas.[57]

In 1995, the IUCN published a study in four volumes, covering 18 marine regions, calling for the establishment of marine protected areas.[58] The report included proposals for the establishment of marine protected areas off Samoa, Tanzania and Vietnam, through funds provided by the Global Environmental Facility of the World Bank. A few years later, along with the recognition of the inadequate developments towards the aims of sustainability declared then far, the World Summit on Sustainable Development (Johannesburg, 2002) established the first deadlines within which certain results at the global level were to be achieved. The Plan of Implementation adopted at the conference confirmed the need to promote the conservation and management of the oceans through actions at all levels, in accordance with Agenda 21, giving due regard to the relevant international instruments, and to maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, including in areas within and beyond national jurisdiction. The Plan put forward the concept of "representative networks" of marine protected areas, and the deadline of 2012 was set for its achievement. In particular, the Plan invited States to

> "develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds and periods (…)."

[57] *Caracas Action Plan*, Action 3.5 (Give attention to the special requirements for managing marine protected areas).
[58] Kelleher, Beakley & Wells, *A Global Representative System of Marine Protected Areas*, 1995.

It was the first time that the concept of "network" of marine protected areas had gained acknowledgment at an international conference. It was recognized that, ideally, marine protected areas should not be established in a vacuum and in isolation, but within a logical and integrated network. In fact, protected area networks offer advantages in comparison to individual marine protected areas because they can encompass representative examples of regional biodiversity as well as an appropriate number and spread of critical habitats. This is especially useful for migratory species, such as cetaceans, and for straddling stocks moving between waters subject to the jurisdiction of neighboring countries as well as beyond national jurisdiction.

On the occasion of the Fifth World Congress on National Parks (Durban, 2003), which convened a high number of nature conservation experts, specific objectives for the high seas were set forth as well. Still, the conference had disappointing statistics to report: only 0.5 percent of the marine biome was under some form of protection, and most areas continued to be open to fishing. It was strongly recommended to endorse and promote the Plan of Implementation adopted in Johannesburg together with the goal of establishing a global system of effectively managed, representative networks of marine protected areas that included, within its scope, the world's oceans and seas beyond national jurisdiction, consistent with international law. It was also recommended to utilize available mechanisms and authorities to establish and effectively manage by 2008 at least five ecologically significant and globally representative marine protected areas on the high seas, incorporating strictly protected areas consistent with international law and based on sound science to enhance the conservation of marine biodiversity, species, productivity and ecosystems.[59] The recommendation constituted a compromise between the position of experts who had suggested the establishment of at least twenty five protected areas beyond national jurisdiction and the view of others that even the establishment of a second protected area on the high seas, following the example of the Pelagos Sanctuary in the Mediterranean Sea,[60] would have been a noteworthy result already.

[59] Recommendation V.23 of the World Parks Congress (Durban, 2003).
[60] See *infra*, para.7.B.3.

Still today, on the one hand, in some frameworks, the process for the identification on the basis of appropriate criteria of a network of marine areas that require protection beyond national jurisdiction is in a quite advanced phase.[61] On the other hand, new deadlines have also been established, following the partial failure of the international community in fulfilling its prior commitments.

An in-depth discussion on the issue of "Area-based management tools, in particular marine protected areas" took place during the 2010 meeting of the Ad Hoc Open-ended Informal Working Group to Study Issues Relating to the Conservation and Sustainable Use of Marine Biological Diversity Beyond Areas of National Jurisdiction (BBNJ Working Group), established by the United Nations General Assembly.[62] Attention was drawn to the lack of progress in meeting the commitment of the Johannesburg Plan of Implementation with respect to areas beyond national jurisdiction.[63] Several delegations noted the fundamental role of area-based management tools, including marine protected areas, in the conservation and sustainable use of marine biodiversity and in ensuring the resilience of marine ecosystems. They highlighted the importance of these tools, as part of a range of management options, in implementing precautionary and ecosystem approaches to the management of human activities and in integrating scientific advice on cross-sectoral and cumulative impacts.[64] Several delegations emphasized the need to avoid a "one-size-fits-all" approach, recognizing regional and local characteristics. In that regard, some delegations noted that the designation of marine protected areas did not require closing those areas to all activities, or particular activities, but rather managing those areas to ensure that ecological values were maintained.[65] Additionally, several delegations emphasized that marine protected areas beyond areas of national jurisdiction needed to be consistent with international law, as reflected in the UNCLOS. The view was expressed that marine protected areas needed to have: clearly delineated boundaries; a strong causal link between the harm being addressed and management measures, which should be flexible and adaptive; and implementation, compliance and enforcement measures consistent with international law,

[61] For what has been done in this regard within the framework of the CBD, and the Mediterranean, see *infra*, paras. 6.D, 7.B. and 7.C.
[62] UN Doc. A/RES/59/24 of 17 November 2004, para. 73.
[63] UN Doc. A/65/8 of 17 March 2010, para. 60.
[64] *Ibid*., para. 58.
[65] *Ibid*., para. 66.

as reflected in the UNCLOS.[66] The need to ensure the full participation of sectors and other stakeholders in the development of area-based management was also emphasized.[67]

At the 2011 meeting of the BBNJ Working Group, several delegations recalled the imminent deadline set out in the Johannesburg Plan of Implementation and stressed the need to demonstrate progress towards the achievement of the relevant commitments, including representative networks of marine protected areas. The realization of those commitments was also identified as one of the ways in which Art. 197 of the UNCLOS could be implemented.[68] The central role of the General Assembly and the responsibility of the BBNJ Working Group in developing a framework for marine protected areas beyond areas of national jurisdiction was emphasized,[69] and the establishment of marine protected areas beyond national jurisdiction in the context of the Commission for the Protection of the Marine Environment of the North-East Atlantic was recalled as a successful example, the value of regional cooperation and the lessons to be learned from that experience being suggested for further study and consideration. Another suggestion was made to designate pilot sites as a means to determine feasibility and effectiveness of existing tools.[70]

The General Assembly of the United Nations has repeatedly affirmed the need for States to continue and intensify their efforts, directly and through competent international organizations, to develop and facilitate the use of diverse approaches and tools for conserving and managing vulnerable marine ecosystems, including the possible establishment of marine protected areas.[71] Lately, in the outcome of the United Nations Conference on Sustainable Development held in Rio de Janeiro in June 2012 (the so-called Rio+20 Conference), States reaffirmed the importance of area-based conservation measures, including marine protected areas, consistent with international law and based on best

[66] *Ibid*., para. 67.
[67] *Ibid*., para. 68.
[68] UN Doc. A/66/119 of 30 June 2011, para. 23. Under Art. 197 of the UNCLOS, "States shall cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with this Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features".
[69] UN Doc. A/66/119 of 30 June 2011, para. 24.
[70] *Ibid*., para. 29.
[71] For an example, see General Assembly Resolution 66/231 of 24 December 2011, para. 176.

available scientific information, as a tool for conservation of biological diversity and sustainable use of its components.

However, for quite evident chronological reasons, States realized that the objective to establish a representative network of marine protected areas by the year 2012 could not be achieved. This led them to change the envisaged deadline into 2020 and to set forth the ratio of 10 percent of marine and coastal areas to be included in systems of protected areas. In *The Future We Want*, that is the outcome document of the Rio+20 Conference,[72] States

> "(…) reaffirm the importance of area-based conservation measures, including marine protected areas, consistent with international law and based on best available scientific information, as a tool for conservation of biological diversity and sustainable use of its components" and "note decision X/2 of the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity, held in Nagoya, Japan, from 18 to 29 October 2010, that, by 2020, 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are to be conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures."[73]

The reference to the 2020 deadline and to the 10 percent ratio is retained in General Assembly Resolution 67/78 of 11 December 2012 on "Oceans and the Law of the Sea".[74]

In general, the establishment of marine protected areas is linked to the most advanced concepts of environmental policy. In addition to pursuing the goal of sustainable development, marine protected areas represent a means to implement integrated coastal zone management and marine spatial planning; they can be used to implement an ecosystem approach and promote transboundary cooperation. Marine protected areas have found increasing support in policy and *soft law* instruments as tools to protect biodiversity at large scale and conserve fishery resources, including for scientific purposes, while binding

[72] Doc. A/RES/66/288 of 11 September 2012.
[73] Para. 177. Reference is made to Target 11 of the Annex (Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets) to Decision X/2 adopted in 2010 by the Conference of the Parties to the CBD: "By 2020, at least 17 per cent of terrestrial and inland water areas, and 10 per cent of coastal and marine, especially areas of particular importance for biodiversity and ecosystem services, are to be 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 wider landscapes and seascapes" (doc. UNEP/CBD/COP/DEC/X/2 of 29 October 2010).
[74] Para. 193.

instruments[75] have predominantly linked the concept of marine protected area to goals relating to pollution control, the individual protection of specific endangered species or specific *habitat* conservation.

4. The Notion of Marine Protected Area

Although the call for marine protected areas, including networks thereof, has been reiterated in various fora, there is no uniformity of views, in the general debate, as to what is meant by "marine protected area" and "representative network". Some terminological confusion also derives from the fact that, at the national level, different terms are often used to describe entities that pursue similar goals (*marine reserve*, *marine park*, *marine sanctuary*, *marine monument, wildlife sanctuary*, *no-take zone*, *closed area*, *national marine park*, *marine protected area*, *protected seascape*, etc.). Besides, the same term – for instance, *marine reserve* – is used to refer to different tools in different national contexts. Moreover, most published guidance on marine protected areas, with corresponding definitions, has been compiled with a biodiversity focus and does not necessarily include additional perspectives (such as fisheries, among others).

By the same token, the concept of "network" and its accessories, which has gained prominence in the debate on marine protect areas since the early 90s, encounters several terminological varieties worldwide, seemingly following analogous goals: *reserve network*, *ecological network*, *wildlife network*, *biological corridor*, *biodiversity corridor*, *conservation corridor*, *biogeographical corridor*, *sustainable-development corridor*, *bioregional planning*, *ecosystem-based management tools network*, *ecosystem and livelihoods adaptation network*, *marine fish conservation network*, *cross-sectoral biotope integrated system*, etc.[76]

The concepts of spatial management measures and networks are therefore applied and named diversely, and a number of definitions and categories for similar policies have been offered at the national, regional and international level. As of today, the most widely

[75] As shown *infra*, in Chapter II.
[76] In the European context and within intergovernmental organizations, "ecological network" is the most common term to refer to the concept in question.

accepted definitions of marine protect area, including networks thereof, have been the ones proposed by the IUCN and the CBD Conference of the Parties. Other fora, including at the regional level,[77] as well as individual countries[78] have also established their own definitions of marine protect area. Commonly, different categories of marine protected areas are also attached to established definitions.

Starting in the late 80s, a general definition had been put forward by the IUCN and subsequently adopted in most international dialogs on marine protected areas. The IUCN definition described a marine protected area as

> "any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment."[79]

According to the guidelines elaborated by IUCN in 1999,[80] for the area in question to be called a marine protected area, the total area of sea encompassed by it had to exceed the area of land within its boundaries, or the marine part of a large protected area had to be sufficient in size to be classified as a marine protected area in its own right. Moreover, the marine protected area (and accordingly the provisions for its management) should cover not only the seabed, but also at least part of the water column above with its flora and fauna.

The first international treaty introducing a definition of "protected area" was the CBD, which in Art. 2 contains the following wording:

> "'Protected area' means a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives".

[77] For instance, the Commission established under the Convention for the Protection of the Marine Environment of the North-East Atlantic (Paris, 1992, as amended) defined a marine protect area as an "area within the maritime area for which protective, conservation, restorative or precautionary measures, consistent with international law have been instituted for the purpose of protecting and conserving species, habitats, ecosystems or ecological processes of the marine environment" (Recommendation 2003/3 on a Network of Marine Protected Areas).

[78] For instance, in the United States, a marine protect area is defined as "any area of the marine environment that has been reserved by Federal, State, territorial, tribal, or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources therein" (Presidential Executive Order 13158 of 26 May 2000).

[79] IUCN General Assembly Resolution 17.38, 1988, para 2, lett. b).

[80] Kelleher, *Guidelines for Marine Protected Areas*, Gland - Cambridge,1999.

This is the only legally binding definition of "protected area" available today.[81] In 2002, the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) of the CBD recommended to the Conference of the Parties the following definition, applicable to marine and coastal areas:

> "'Marine and coastal protected area' means any defined are within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna, and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings."[82]

More recently, in 2008, the IUCN provided a revised definition of "protected area". This definition has been developed within the framework of the World Commission on Protected Areas and is applicable to both marine protected areas and protected areas on land. According to the most recent terminology of the IUCN, a protected area is

> "A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values."[83]

The IUCN provided a detailed explanation of its current definition of "protected area" in its 2008 guidelines on protected area management categories, with examples aiming at illustrating the definition. The guidelines also include a list of categories of protected areas, all applicable to the marine environment: *strict nature reserve* (protected area managed mainly for science); *wilderness area* (protected area managed mainly for wilderness protection); *national park* (protected area managed mainly for ecosystem protection and recreation); *natural monument* (protected area managed mainly for conservation of specific natural features); *habitat/species management area* (protected area managed mainly for conservation through active management); *protected landscape/seascape* (protected area managed mainly for landscape/seascape conservation and recreation); and *managed resource protected area* (protected area managed mainly for the sustainable use of natural

[81] The Convention for the Conservation of Biodiversity and the Protection of Wilderness Areas in Central America (Managua, 1992), the other international instrument containing a legally binding definition of "protected area", recalls *in toto* the definition of the CBD.
[82] UNEP/CBD/SBSTTA/8/9/Add.1, 27 November 2002.
[83] Dudley, *Guidelines for Applying Protected Areas Management Categories*, Gland, 2008.

ecosystems). In addition to these categories of protected areas, a number of principles is provided in the guidelines to help decide whether an area meets the IUCN definition of protected area and what category it should be assigned to.

The opinion of the authors of this report is that besides definitions and categories, which often enter into the details of a matter that could also be addressed under a more flexible approach, it is important to bear in mind that marine protected areas are to be considered, first of all, as malleable spatial tools aimed at implementing those measures which prove appropriate, on a case-by-case basis, to ensure prescribed protection, conservation or sustainable development objectives without unnecessarily burdening maritime activities. Defining and categorizing such tools in a way that is both all-inclusive and unambiguous in all ecological, geographical and socio-economic contexts proves difficult, if not impossible, and the search for an internationally agreed upon definition of marine protected area may also be an unnecessary effort. As fishery management is increasingly moving towards the goal of ecosystem approach and sustainability implementation and some protected areas are being considered, for instance, as energy production areas[84] or so-called "parks for peace",[85] marine protected areas with combined objectives – not only with a biodiversity or cultural focus – are likely to become more common and pose even more difficulties to definitions and standardizations. The elaboration of principles made by IUCN could well help, rather than for categorizing marine protected areas, for decision-making guidance. Here are some examples of such principles: "in the case of conflict, nature conservation will be the priority"; "protected areas must prevent, or eliminate where necessary, any exploitation or management practice that will be harmful to the objectives of designation"; "protected areas should usually aim to maintain, or ideally, increase the degree of naturalness of the ecosystem being protected" and "should not be used as an excuse for dispossessing people of their land or sea territory".

[84] The establishment of coast-to-coast networks of MPAs coupled with wind-energy installations goes in this direction.

[85] IUCN defined "parks for peace" as "transboundary protected areas that are formally dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and to the promotion of peace and co-operation". Sandwith, *Transboundary Protected Areas for Peace and Co-operation*, Gland -Cambridge, 2001, p. 3.

For the reasons above, this report does not adopt a single definition for marine protect area, but explores the full range of area-based management tools in a broader sense – and generally refers to them as marine protect areas. Any area of marine waters or seabed that is delimited within precise boundaries (including, if appropriate, buffer zones) and is afforded a stricter protection for specific purposes (ecological, biological, scientific, cultural, educational, aesthetical, recreational, etc.) is considered a marine protect area.[86] The expression includes marine and coastal areas and, depending on the context, may relate to sites that are completely offshore, entirely coastal or a combination of the two.

For those who rely on definitions and categorizations in a determined effort towards "speaking a common language",[87] it could be interesting to have a look at the work of the National Marine Protected Areas Center of the United States, where five functional criteria applicable to most marine protected areas have been elaborated in an attempt to bring some order in the rapidly developing use of area-based management tools in the country and elsewhere. The greatest merit of the marine protected areas classification system elaborated in the United States lies in its pragmatism and simplicity as well as in its decomposable trait, with minimal connotations describing marine protected areas in purely functional terms and no overlapping with programmatic names (such as "sanctuary", "monument", "reserve" or "park", which rarely reflect the actual area's conservation purpose, allowable uses or management approach). The five functional characteristics constituting the system are: *conservation focus*,[88] *level of protection*,[89] *permanence of protection*,[90] *constancy of protection*,[91] and *scale of protection*.[92] The classification system

[86] This simplified concept of marine protected area does not substantively depart from the definition of "protected area" given in Art. 2 of the CBD.

[87] This has been the goal of IUCN since the elaboration of its first definition of protected area and related categories. Successes, failures, strengths and weaknesses of the categories after a decade of use were addressed in *Speaking a Common Language – The Uses and Performance of the IUCN System of Management Categories for Protected Areas*, 2004.

[88] It represents the characteristics of the area that the marine protected area was established to conserve and influences many fundamental aspects of the site, including its design, location, size, scale, management strategies and potential contribution to surrounding ecosystems. Marine protected areas generally address one or more of these areas of conservation focus: *natural heritage*, *cultural heritage*, or *sustainable production*.

[89] Any marine protected area, or management zone within a larger marine protect area, can be characterized by one of the following six levels of protection: *uniform multiple-use*, *zoned multiple-use*, *zoned multiple-use with no-take area(s)*, *no-take*, *no impact*, or *no access*.

[90] Since not all marine protected areas are permanently protected, the classification system makes the following distinctions: *permanent*, *conditional*, or *temporary*.

[91] Three degrees of constancy throughout the year are provided in the classification system: *year-round*, *seasonal*, or *rotating*.

can be applied to single marine protected areas or to individual management zones established within a larger site.

As far as "networks" are concerned, their importance has already been recalled in connection with the need of protection of regional biodiversity and migratory species. Here, one may add that marine protected areas networks can contribute to protection, conservation or sustainable development goals in at least other two ways, fostering an integrated management of marine and coastal areas: from a social perspective, networks can help resolve and manage conflicts in the use of natural resources; and from an economical perspective, networks can facilitate the efficient use of human and financial resources within a given region.[93] Also with regard to the concept of "network", the IUCN has put forward a definition, as follows:

> "An MPA [= marine protected area] network can be defined as a collection of individual MPAs or reserves operating cooperatively and synergistically, at various spatial scales, and with a range of protection levels designed to meet objectives that a single reserve cannot achieve."[94]

As seen above, a marine protected area terminology has not yet consolidated at the international level, but the concepts of marine protected area and networks thereof are nowadays widely supported, irrespective of their names and definitions. Commonly, a qualification is also attached to the concept of network: it is often recommended that marine protected areas networks be "representative".

In 2008, within the CBD, scientific criteria and guidance were provided for selecting areas to establish networks which meet the above-mentioned qualification, following a recommendation by the Expert Workshop on Ecological Criteria and Biogeographic Classification Systems for Marine Areas in Need of Protection (Azores, 2-4 October 2007). According to the scientific guidance of the experts, areas to be included in a representative network should meet the following scientific criteria of selection: (i) *ecologically and*

[92] According to the United States classification system, marine protected areas conservation targets may range from *ecosystem* focus to *focal resource*.
[93] IUCN World Commission on Protected Areas (IUCN-WCPA), *Establishing Marine Protected Area Networks–Making It Happen*, Washington, 2008.
[94] *Ibid*., p. 12.

biologically significant areas; (ii) *representativity*; (iii) *connectivity*; (iv) *replicated ecological features*; and (v) *adequate and viable sites*.[95] Besides the truism that a network, in order to be "representative", should be composed of marine protected areas which meet the criterion of "representativity", the criteria elaborated within the CBD framework only concern biological and ecological features and do not cover socio-economic aspects. However, these aspects should also be considered when addressing the concept of network, for the reasons mentioned above: the risk implied in this lack of coordinated approach to both ecological and socio-economic issues in a given region may lead, in the worst cases, to the arising of conflicts – for instance, between biodiversity conservation and fisheries interests. The trend towards the establishment of representative networks of marine protected areas, in other words, should not leave aside the consideration of other priorities and approaches that, in certain cases, have proved effective and appropriate for the problems being addressed.

[95] CBD COP Decision IX/20 (Bonn, 2008), UNEP/CBD/COD/DEC/IX/20, Annex II, where each criterion is explained.

CHAPTER II

THE BASIS FOR MARINE PROTECTED AREAS IN INTERNATIONAL

AND EUROPEAN UNION LAW, WITH A SPECIAL EMPHASIS ON THE MEDITERRANEAN AND BLACK SEAS

5. Marine Protected Areas in Different Kinds of Maritime Zones

Under Art. 192 of the UNCLOS,

> "States have the obligation to protect and preserve the marine environment."

This obligation applies everywhere in the sea, including the high seas and the seabed.

Under Art. 194, para. 5, of the UNCLOS,

> "The measures taken in accordance with this Part [= Part XII: "Protection and Preservation of the Marine Environment"] shall include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life".

Also this obligation has a general scope of application. It covers any kind of vulnerable marine ecosystems and species, irrespective of the legal condition of the waters or seabed where they are located[96]. It goes without saying that a typical measure to protect such ecosystems and species is the establishment of marine protected areas. However, rules of international law on the legal regime of different marine spaces can influence the process for the designation of marine protected areas and the implementation of the measures established therein.

Today, most marine protected areas are located close to shore, within territorial waters or even in internal maritime waters. In several cases, they include land areas as well. The number of marine protected areas beyond territorial waters is limited.

Even marine protected areas established within the national jurisdiction of a coastal State may require the cooperation of other States to comply with a number of special measures for the regulation of a wide range of human activities, in which navigation is included. Therefore, in almost all cases, the establishment of marine protected areas presents international implications.

International law of the sea regulates human activities, including the establishment of marine protected areas and the special measures applicable therein, according to the different categories under which maritime spaces are legally distinguished. This kind of artificial distinctions, however, often do not correspond to the natural characteristics of the waters involved.

As on its land territory each State is entitled to exercise full sovereign powers, also the parts of protected areas which are located on land are subject to the full sovereign powers of the territorial State. The situation is different at sea, as the content of the rights of the coastal State with respect to the rights of other States varies in relation to the legal

[96] On the legal aspects of marine protected areas see Cazalet, Feral & Garcia, *Gouvernance, droit et administration des aires marines protégées*, in *Annuaire du Droit de la Mer*, 2011, p.121 ; Da Cunha Machado Ribeiro, *A protecção da biodiversidade marinha através de áreas protegidas nos espaços marítimos sob soberania ou juridição do Estado: discussões e soluções jurídicas contemporâneas*, Coimbra, 2013.

condition of the marine waters and seabed according to the present customary international law of the sea. For its most part, the UNCLOS is considered to reflect such customary rules.

5.1. Internal maritime waters

The internal maritime waters are the waters located on the land-ward side of the low-water line (normal baseline of the territorial sea) or on the land-ward side of the straight baselines from which, in certain cases (such as bays, deep indentations or fringes of islands in the immediate vicinity of the coast), the territorial sea is measured. In the internal maritime waters the coastal State exercises full sovereignty and is entitled to enact laws to regulate any activity, including navigation, and the use of resources of any kind.[97]

Several Mediterranean States (Albania, Algeria, Croatia, Cyprus, Egypt, France, Italy, Libya, Malta, Montenegro, Morocco, Spain, Tunisia, and Turkey) apply legislation measuring the breadth of the territorial sea from straight baselines joining specific points located on the mainland or islands. So-called "historic" bays[98] are claimed by Italy (Gulf of Taranto)[99] and Libya (Gulf of Sidra or Surt).[100] In the Black Sea, straight baselines have been drawn by Bulgaria, Romania, the Russian Federation, and Ukraine. In all other cases, the rule of the normal baseline of the low-water line applies.[101]

Among the international legal instruments specifically devoted to protected areas and analyzed in this report,[102] the Convention on Wetlands of International Importance, Especially as Waterfowl Habitat (Ramsar, 1971; hereinafter "Ramsar Convention"), has the

[97] Under Art. 8, para. 2, of the UNCLOS, if the establishment of straight baselines has the effect of enclosing as internal waters areas which had not previously been considered as such, a right of innocent passage by foreign vessels does exist through those waters.
[98] Although there is no definition of "historic" bay in the UNCLOS (Art. 10, para. 6, only excludes "historic" bays from its application), its basic elements are enumerated in a report prepared by the United Nations Secretariat (A/CN.4/143, *Juridical Regime of Historic Waters, Including Historic Bays*, in *Yearbook of the International Law Commission*, Vol. II, 1962, p. 1).
[99] The closing line connects S. Maria di Leuca and Punta Alice (Presidential Decree No. 816 of 26 April 1977).
[100] In 1973, Libya deposited with the Secretary-General of the United Nations the following declaration: "The Gulf of Surt located within the territory of the Libyan Arab Republic and surrounded by land boundaries on its east, south and west side, and extending north offshore to latitude 32 degrees and 30 minutes, constitutes an integral part of the territory of the Libyan Arab Republic and is under its complete sovereignty".
[101] Art. 5 of the UNCLOS.
[102] See *infra*, paras. 6, 7 and 8.

narrowest scope of application at sea. It is limited to wetlands and includes those maritime waters generally responding to the characteristic delineated below:

> "For the purpose of this Convention wetlands are areas of marsh fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters."[103]

Areas designated by the coastal State as wetlands of international importance may include extents of internal maritime waters or of territorial sea, depending on whether straight baselines have been established.

5.2. Territorial sea

In the territorial sea[104] the coastal State is granted sovereignty, but foreign ships enjoy the right of innocent passage. The customary nature of the innocent passage rule is generally recognized,[105] and the coastal State may not hamper the innocent passage of foreign ships through its territorial sea except in accordance with the provisions of international law as specified in the UNCLOS.[106] It follows that in no case the restrictions associated to the establishment of a marine protected area in the territorial sea may be

[103] Art. 1 of the Ramsar Convention.
[104] The territorial sea legally includes the air space above, the seabed and subsoil thereof.
[105] See, among others, International Court of Justice, *Case Concerning Military and Paramilitary Activities in and Against Nicaragua (Nicaragua/United States)*, judgment of 27 June 1986, in I.C.J., *Reports*, 1986, para. 214.
[106] "1. Passage is innocent so long as it is not prejudicial to the peace, good order or security of the coastal State. Such passage shall take place in conformity with this Convention and with other rules of international law. 2. Passage of a foreign ship shall be considered to be prejudicial to the peace, good order or security of the coastal State if in the territorial sea it engages in any of the following activities: (a) any threat or use of force against the sovereignty, territorial integrity or political independence of the coastal State, or in any other manner in violation of the principles of international law embodied in the Charter of the United Nations; (b) any exercise or practice with weapons of any kind; (c) any act aimed at collecting information to the prejudice of the defense or security of the coastal State; (d) any act of propaganda aimed at affecting the defense or security of the coastal State; (e) the launching, landing or taking on board of any aircraft; (f) the launching, landing or taking on board of any military device; (g) the loading or unloading of any commodity, currency or person contrary to the customs, fiscal, immigration or sanitary laws and regulations of the coastal State; (h) any act of willful and serious pollution contrary to this Convention; (i) any fishing activities; (j) the carrying out of research or survey activities; (k) any act aimed at interfering with any systems of communication or any other facilities or installations of the coastal State; (l) any other activity not having a direct bearing on passage" (Art. 19 of the UNCLOS). Some States take the position that the list is exhaustive and that a coastal State may not treat passage as non-innocent if a foreign vessel engages in activities other than those enumerated in the list.

applied by the coastal State in a manner that would prevent the innocent passage of foreign ships.

The UNCLOS has specified the customary rule of the innocent passage by providing that the coastal State may suspend temporarily in specified areas of its territorial sea the innocent passage if such suspension is essential for the protection of its security, including weapons exercises.[107] However, the wording of this provision seems to refer only to military security and does not seem to allow suspension of innocent passage, for instance, for environmental reasons.

The rule that foreign ships have the right to pass through the territorial sea does not necessarily mean that any ship has the right to pass in any portion of the territorial sea without any regulation. In particular, vessels transporting dangerous substances or nuclear-powered vessels, when passing through ecologically sensitive areas, represent a matter of concern. As far as the territorial sea is concerned, the national provisions on innocent passage reflect a variety of views. Several States require prior notification or even prior authorization before dangerous ships may enter their territorial sea, while others take the position that no prior notification or authorization is required for nuclear-powered and other dangerous vessels to engage in innocent passage through territorial waters, and consistently object to such requirements.[108]

Actually, when considering this issue, a distinction should be drawn between the two requirements. On the one hand, the requirement of "prior notification" seems fully consistent with the UNCLOS, because it is compatible with the competence of the coastal State to enact laws and regulations aiming at ensuring the safety of navigation and protecting its coastal environment in accordance with Art. 21, para. 1, (a) and (f). Moreover, only the prior notification requirement would put the coastal State in the condition to exercise its powers under Art. 22 and require foreign ships, in particular those carrying hazardous substances, to confine their passage to certain sea lanes. In fact, the coastal State

[107] Art. 25 of the UNCLOS.
[108] The position of Italy, among others, is that none of the provisions of the UNCLOS, which correspond on this matter to customary international law, can be regarded as entitling the coastal State to make innocent passage of particular categories of foreign ships dependent on prior consent or notification. See the declaration made by Italy upon signature of the UNCLOS (7 December 1984) and confirmed upon ratification (13 January 1995).

may exercise its powers under Art. 22 only if it knows, following prior notification, which foreign ships passing through its territorial waters fall into the category of ships covered by Art. 22, para. 2. On the other hand, the requirement of "prior authorization" is more debatable, because it could be seen as a denial of the right of innocent passage of foreign-nuclear powered vessels and other vessels carrying hazardous substances.

In any case, the innocent passage rule has been specified in the UNCLOS by providing that, due to the risk of pollution posed by dangerous cargoes, the coastal State may require on a non-discriminatory basis that ships carrying hazardous substances as well as nuclear-powered vessels confine their passage to identified sea lanes, taking into account the recommendations of the IMO.[109] The precise content of an obligation to "take into account" is difficult to determine. But, in the specific case, it seems that if the coastal State totally ignored the IMO recommendations, it would violate the legal obligation to ensure the innocent passage to foreign ships through its territorial waters. Typical IMO measures include traffic separation schemes, two-way routes, recommended tracks, areas to be avoided, inshore traffic zones, roundabouts, precautionary areas, deep-water routes.[110] These measures, originally conceived with a view to ensuring the safety of navigation, have been increasingly used for environmental purposes as well. The coastal State may seek the endorsement by the IMO and make use of these measures, for instance, within areas of special ecological or biological significance which have been identified in its territorial sea.

Vessels transporting dangerous cargoes engaged in the innocent passage through the territorial sea must carry documents and observe special precautionary measures as prescribed by the relevant international instruments.[111]

[109] Art. 22 of the UNCLOS. This requirement may relate to general IMO recommendations regarding all sea lanes and traffic separation schemes, but also to specific IMO recommendations regarding the particular sea lanes and traffic separation schemes being considered by the coastal State.

[110] See IMO Resolution A.572(14), *General Provisions on Ships' Routeing (GPSR)*, adopted on 20 November 1985, amended by Resolution A.827(19) adopted on 23 November 1995.

[111] Several conventions address the transport of hazardous substances, including the International Maritime Dangerous Goods Code adopted by the IMO in 1965, which became mandatory in 2004 to the Parties of the International Convention for the Safety of Life at Sea (London, 1974), and the Convention on the Transboundary Movement of Hazardous Wastes and their Disposal (Basel, 1989). With regards to nuclear and radioactive wasted, the International Atomic Energy Agency has published, and regularly updates, advisory regulations for the safe transport of these materials.

Apart from the special case of navigation, where the rules on innocent passage apply, the coastal State is certainly entitled to designate marine protected areas in its territorial sea in pursuance of a number of objectives which do not interfere with such passage, for instance the protection, conservation or sustainable development of the biodiversity of its coastal areas, the temporary or permanent closing of coastal areas to fishing or the promotion of marine scientific research through the designation of wilderness study areas.

As regards the enforcement jurisdiction of the coastal State, the UNCLOS provides that when a vessel is voluntarily within a port of the coastal State, that State may institute proceedings in respect of any violation of its laws and regulations or applicable international rules and standards for the prevention, reduction and control of pollution from vessels when the violation has occurred within the territorial sea or the exclusive economic zone of the coastal State. Where there are clear grounds for believing that a vessel navigating in the territorial sea of the coastal State has, during the passage, violated any of the above-mentioned laws, regulations, international rules and standards, the coastal State may undertake physical inspection of the vessel relating to the violation and may, where the evidence so warrants, institute proceedings, including detention of the vessel.[112]

In the Mediterranean Sea, most coastal States have established a 12-mile territorial sea. Three exceptions are the United Kingdom (3 n.m. for Gibraltar[113] and the British Sovereign Base Areas of Akrotiri and Dhekelia on the island of Cyprus), Greece (6 n.m.), and Turkey (6 n.m. in the Aegean Sea, but 12 n.m. elsewhere). In the Black sea, all coastal States have a 12-mile territorial sea.

Among the international legal instruments specifically devoted to protected areas and analyzed in this report,[114] the only international treaty whose territorial scope of application is restricted within the outer limit of the territorial sea is the Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, 1972; hereinafter “WHC”). Art. 3 of the WHC provides that it is for each State to identify and

[112] Art. 220, paras. 1 and 2, of the UNCLOS. Certain safeguards apply: see Section 7 of Part. XII of the UNCLOS.
[113] A long-lasting dispute is pending between Spain and the United Kingdom as to whether Gibraltar is entitled to a territorial sea.
[114] See *infra*, paras. 6, 7 and 8.

delineate the different properties situated on its "territory" that may be inscribed in the World Heritage List. The reference to the "territory" of States Parties may include terrestrial sites as well as sites in the territorial sea, but cannot easily be intended as to go beyond.[115]

5.3. Contiguous zone

In the contiguous zone, consisting of the belt of water adjacent to the territorial sea and extending up to 24 n.m. from the baseline, the coastal State exercises control only in order to prevent and punish infringements of its customs, fiscal, immigration or sanitary laws and regulations.[116] Marine protected areas do not fall under the scope of this zone.

5.4. Exclusive economic zone

The establishment of the exclusive economic zone is closely related to the negotiations for the UNCLOS: it is one of the two novel maritime zones – the other being the Area[117] – whose creation went beyond a mere codification of customary international law and entailed its progressive development.[118]

The exclusive economic zone extends up to 200 n.m. from the baseline of the territorial sea,[119] encompassing the water column as well as the seabed and its subsoil.[120] In many enclosed or semi-enclosed seas, such as the Mediterranean and Black Seas, the exclusive economic zone cannot reach its full 200-mile size for States with opposite or

[115] Heritage sites in the marine environment may include both cultural heritage sites, such as shipwrecks or sites of prehistoric human existence, and natural heritage sites that have unique or rare natural features.
[116] Art. 33 of the UNCLOS.
[117] According to the UNCLOS, "Area means the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction" (Art. 1). Due to their limited extension, no seabed having the legal condition of the Area does exist in the Mediterranean and Black Seas.
[118] The International Court of Justice touched on the matter in 1982, slightly before the adoption of the UNCLOS. In a case that only concerned the continental shelf, the Court stated that the concept of the exclusive economic zone "may be regarded as part of modern international law". International Court of Justice, *Continental Shelf (Tunisia/Libyan Arab Jamahiriya)*, judgment of 24 February 1982, in I.C.J., *Reports*, 1982, para. 100.
[119] For example, a State with a 12-mile territorial sea is entitled to declare up to 188 n.m. of exclusive economic zone beyond and adjacent to its territorial sea.
[120] For this reason, the regime envisaged for the continental shelf within 200 n.m. from the baseline of the territorial sea regulates the seabed and the subsoil of the exclusive economic zone.

adjacent coasts. In this case, its delimitation should be effected by agreement between the States concerned, on the basis of international law, in order to achieve an equitable solution (Art. 74 of the UNCLOS).[121]

Unlike the rights of the coastal State on the territorial sea and the continental shelf, which do not depend on occupation or any express proclamation, the coastal State has to explicitly establish an exclusive economic zone. Otherwise, the maritime spaces corresponding to its potential exclusive economic zone remain governed by the regime of the high seas.

Within the exclusive economic zone, the coastal State has sovereign rights for the purpose of exploiting the natural resources of the water column, the seabed and its subsoil, whether living or non-living, and producing energy from the water, currents and winds.[122] In addition, it has jurisdiction with regard to the establishment of artificial islands, installations and structures, marine scientific research as well as the protection and preservation of the marine environment.

Within the exclusive economic zone, all other States enjoy some specified high seas freedoms related to maritime communications, namely the freedoms of navigation, overflight, laying of submarine cables and pipelines, as well as other international lawful uses of the seas related to these freedoms.[123] The UNCLOS makes clear that high seas freedoms related to natural resources and marine scientific research do not apply in the exclusive economic zone, and that all related activities fall under the control of the coastal State. However, the UNCLOS makes equally clear that all other high seas freedoms (non-resource related) and other internationally lawful uses of the seas related to those

[121] On present delimitations see Annexes I and II.

[122] Art. 56 of the UNCLOS. The term "sovereign rights" aims at making a distinction between coastal State's rights and jurisdiction in the exclusive economic zone and coastal State's authority in the territorial sea, where the State enjoys a much broader and more comprehensive "sovereignty". Art. 89 of the UNCLOS confirms that the coastal State only enjoys "sovereign rights" in the exclusive economic zone, not "sovereignty". Whilst the latter is characterized by completeness and exclusiveness (in particular, it does not have limits *ratione materiae* or *ratione personae*; it includes both legislative and enforcement jurisdiction; and it is exclusive in the sense that only the State in question may exercise jurisdiction over its territory), "sovereign rights" are exercised only in matters defined by international law, therefore encountering a limitation *ratione materiae*. Apart from this, sovereign rights share with the concept of sovereignty all its other constituent elements.

[123] Notwithstanding the enjoyment of all these high seas freedoms, the UNCLOS makes clear that the exclusive economic zone is not part of the high seas (see Art. 86, specifically excluding the exclusive economic zone from the high seas regime).

freedoms, such as those associated with the operation of ships, aircraft and submarine cables and pipelines, may be exercised by all States in the exclusive economic zone.

As far as the living resources of the exclusive economic zone are concerned, the coastal State has two primary responsibilities: on the one hand, it is required to ensure, through proper conservation and management measures, that those resources are not endangered by over-exploitation;[124] on the other hand, it is under the duty to promote the objective of their optimum utilization.[125] In this connection, the coastal State is required to determine its own capacity to harvest the living resources of the exclusive economic zone as well as the total allowable catch. Where it does not have the capacity to harvest the entire allowable catch, it is under the obligation to grant access to the available surplus to other States. Nationals of other States fishing in the exclusive economic zone must comply with the relevant laws and regulations of the coastal State.[126]

It follows that the coastal State may well declare marine protected areas in its exclusive economic zone for the purpose of regulating fishing activities or for conducting marine scientific research, as long as the measures enacted do not hamper the exercise by other States of their freedom of navigation and other freedoms and rights stated in the UNCLOS. However, in view of the coastal State's duty to promote the optimum utilization of the living resources within its exclusive economic zone, the establishment therein of marine protected areas where fishing activities are prohibited on a permanent basis could be subject to objection by other States, where not supported by scientific evidence.[127]

[124] Art. 61 of the UNCLOS.
[125] Art. 62 of the UNCLOS.
[126] For a non-exhaustive list of matters which can be regulated by the coastal State in this regard, see Art. 62, para. 4, of the UNCLOS. In the exercise of its sovereign rights to explore, exploit, conserve and manage the living resources of its exclusive economic zone, the coastal State may take such measures, including boarding, inspection, arrest an judicial proceedings, as may be necessary to ensure compliance with the laws and regulations adopted by it (Art. 73 of the UNCLOS).
[127] However, on this particular matter, it has to be borne in mind that Art. 297 of the UNCLOS explicitly excludes from the mandatory procedures of dispute settlements provided for in the UNCLOS disputes relating to "sovereign rights [of the coastal State] with respect to the living resources in the exclusive economic zone or their exercise, including its discretionary powers for determining the allowable catch, its harvesting capacity, the allocation of surpluses to other States and the terms and conditions established in its conservation and management laws and regulations". Where no settlement of such a dispute has been reached by recourse to voluntary dispute settlement procedures under Section I of Part. XV of the UNCLOS, the dispute can be submitted to compulsory conciliation (Annex V, Section 2, of the UNCLOS) at the request of any party to the dispute, when it is alleged that "(i) a coastal State has manifestly failed to comply with its obligations to ensure through proper conservation and management measures that the maintenance of the living resources in the

Certain living resources are subject to specific rules. For example, it is provided that the coastal State or the competent international organization may prohibit, limit or regulate the exploitation of marine mammals more strictly than stated in the provisions of the UNCLOS relating to the exclusive economic zone.[128] This means that marine protected areas for marine mammals may well be established in the exclusive economic zone with a view to completely prohibiting the exploitation of these animals on a permanent basis, without any consideration of optimum utilization objectives. Instead, straddling fish stocks, i.e. fish stocks occurring within the exclusive economic zone of two or more States or both within the exclusive economic zone and in an area beyond or adjacent to it, and highly migratory fish stocks, such as tunas and marlins, are subject to a less protective treatment in the UNCLOS. It is only provided that States fishing for these species shall seek to cooperate, either directly or through the appropriate organizations, to agree upon the measures necessary to coordinate and ensure their conservation and development, with a view to promoting the objective of their optimum utilization.[129]

This topic has become the subject of a specific agreement, aimed at implementing and further developing the relevant provisions of the UNCLOS (1995 Fish Stocks Agreement).[130] For what here matters, it may be recalled that the 1995 Fish Stocks Agreement has been concluded between States "conscious of the need to avoid adverse impacts on the marine environment, preserve biodiversity, maintain the integrity of marine ecosystems and minimize the risk of long-term or irreversible effects of fishing operations".[131] Parties are required, *inter alia*, to: apply the precautionary approach; adopt,

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exclusive economic zone is not seriously endangered; (ii) a coastal State has arbitrarily refused to determine, at the request of another State, the allowable catch and its capacity to harvest living resources with respect to stocks which that other State is interested in fishing; or (iii) a coastal State has arbitrarily refused to allocate to any State, under articles 62, 69 and 70 and under the terms and conditions established by the coastal State consistent with this Convention, the whole or part of the surplus it has declared to exist." In no case the conciliation commission can substitute its discretion for that of the coastal State.

[128] Art. 65 of the UNCLOS.

[129] Arts. 63 and 64 of the UNCLOS.

[130] Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (New York, 4 December 1995). Although Annex I to the UNCLOS lists some cetaceans among the "highly migratory species", the 1995 Fish Stocks Agreement certainly does not apply to cetaceans, and rather develops the provisions of the UNCLOS which only relate to "fish" species, as the title of the agreement itself also makes clear. Under the 1995 Fish Stocks Agreement, cetaceans may be considered only as "non-target species", whose catch must be "minimized" in compliance with Art. 5 of the same instrument.

[131] *Ibid*., Preamble.

where necessary, measures for species belonging to the same ecosystem or associated with or dependent upon the target stocks; and protect biodiversity in the marine environment.[132] All these objectives may easily find implementation through the establishment of marine protected areas. It is also required that measures established for the high seas and those adopted for areas under national jurisdiction be compatible, in order to ensure conservation and management of the straddling and highly migratory fish stocks in their entirety. To this end, coastal States and States fishing on the high seas have a duty to cooperate, including by taking into account measures established and applied by subregional or regional fisheries management organizations or arrangements, as well as the biological unity and other biological characteristics of the stocks and the relationships between the distribution of the stocks, the fisheries and the geographical particularities of the region concerned, including the extent to which the stocks occur and are fished in areas under national jurisdiction.[133] For the purpose of the 1995 Fish Stocks Agreement, fishing in a closed area or during a closed season, *inter alia*, constitutes a "serious violation" of the conservation and management measures internationally agreed upon.[134] It follows that marine protected areas for the conservation and management of fish stocks may well be created by States in the exclusive economic zone, both individually – although in a manner compatible with the duty to ensure the optimum utilization of the resources – and through subregional and regional management organizations and arrangements. In this latter case, marine protected areas may be established for the conservation and management of fish stocks even on the high seas, for instance with a view to protecting migration corridors.[135] Any infringement of the measures associated with the establishment of such areas may be considered a serious violation of international provisions under the 1995 Fish Stocks Agreement.

Moving from fishing to other forms of impact on the marine environment equally addressed in the UNCLOS with regard to the exclusive economic zone, pollution – especially from vessels – comes into consideration. In this regard, the question is raised on whether it is possible for the coastal State to establish marine protected areas in its exclusive economic zone to protect the marine environment from pollution from vessels.

[132] *Ibid*., Art. 5. See also Art. 6 for the application of the precautionary approach.
[133] *Ibid*., Art. 7.
[134] *Ibid*., Art. 21, para. 11(c).
[135] See *infra*, para. 5.6.

The UNCLOS provides that coastal States may in respect of their exclusive economic zone adopt laws and regulations for the prevention, reduction and control of pollution from vessels conforming to and giving effect to generally accepted international rules and standards established by the competent international organization (i.e., the IMO). Furthermore, the UNCLOS provides that where the relevant international rules and standards adopted by the IMO are inadequate to meet special circumstances and the coastal State has reasonable grounds to believe that a particular, clearly defined area of its exclusive economic zone is an area where the adoption of special mandatory measures for the prevention of pollution from vessels is required for recognized technical reasons, the coastal State may initiate consultations through the organization, including with any other States concerned, and direct to it a communication together with supporting scientific and technical evidence. Such evidence may refer to the oceanographical and ecological conditions of the area, its utilization or the protection of its resources and the particular character of its traffic. Within 12 months after receiving the communication by the coastal State, the IMO assesses the conditions of the area in question and, if it determines that the area responds to the requirements advanced by the coastal State, this latter is entitled to adopt laws and regulations implementing those international rules, standards or navigational practices that are made applicable by the IMO for special areas. The coastal State is then under the obligation to publish the limits of any such particular, clearly defined area within its exclusive economic zone where those special measures apply.[136]

As seen, the coastal State cannot unilaterally establish a special area in its exclusive economic zone for the purpose of pollution control, but is only given a power of initiative in this sense. The competence to ascertain the presence of the conditions for a special area to be established in the exclusive economic zone is left to the IMO.[137] However, when submitting its communication for the establishment of the special area, the coastal State may also notify the IMO of its intention to adopt "additional" laws and regulations relating to discharges or navigational practices for the specific protection of the area in question. The wording of the UNCLOS[138] seems to suggest that these additional laws and regulations do

[136] Art. 211, paras. 6 and 6, of the UNCLOS.
[137] The IMO appears to be the competent authority also for the actual designation of the special area.
[138] See Art. 211, para. 6, at (a) and (c).

not have to be necessarily based on IMO instruments – the role of the IMO in this field being limited to a simple approval – and may well find their normative basis in national legislation. Nonetheless, national laws and regulations cannot require foreign vessels to observe design, construction, manning or equipment standards other than generally accepted international rules and standards.

Potentially, the provisions of the UNCLOS concerning particular, clearly defined areas within the exclusive economic zone recognize to coastal States an enhanced jurisdiction related to pollution control in this maritime space, derogating from the rules of general application on coastal State jurisdiction. So far, no coastal State has made use of such provisions, probably because of the complexity of the cooperation procedure through the organization.[139] However, it is possible that the provisions in question will serve in future as the juridical basis for the development of a new international practice.

Another provision of the UNCLOS concerning the jurisdiction of the coastal State in the field of pollution control relates to ice-covered areas.[140] However, in view of its irrelevance with regard to the Mediterranean and Black Seas, it will not be addressed in this report.

Among the international legal provisions specifically devoted to protected areas and analyzed in this report,[141] in addition to those contained in the UNCLOS, another instrument comes into consideration when dealing with the legal regime of the exclusive economic zone, namely the Council Directive 42/93/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (hereinafter "Habitats Directive"). This instrument has a regional application and will be analyzed under the legislation of the European Union relevant to the subject of this study.[142]

[139] Another reason may be that the provisions in questions only enhance the prescriptive jurisdiction of the coastal State, but not its enforcement jurisdiction, with the consequence that the special mandatory measures enacted by the coastal State through the IMO, which would certainly apply to all vessels navigating through the special area, could not be enforced by the coastal State with powers commensurate with such enhanced prescriptive jurisdiction (see, in this regard, Art. 220, para. 8, of the UNCLOS).
[140] Art. 234 of the UNCLOS.
[141] See *infra*, paras. 6, 7 and 8.
[142] See *infra*, para. 8.1.

Here, it suffices to notice that the Habitats Directive does apply up to the outer limit of the exclusive economic zone of those European coastal States that have declared one. The stated objective of the Habitats Directive is to contribute towards ensuring biodiversity through the conservation of natural habitats as well as wild fauna and flora in the European "territory" of the European Union member States.[143] Since the UNCLOS recognizes the territorial "sovereignty" of the coastal State as extending, beyond its land territory and internal waters, up to the outer limit of the territorial sea,[144] at first glance it would seem that the territorial scope of application of the Habitats Directive would be limited to these spaces. However, the European Commission itself has contributed to resolve the interpretative question of the territorial application of the Habitats Directive in the following way:

> "The provisions of the "Habitats" Directive automatically apply to the marine habitats and marine species located in territorial waters (maximum 12 miles). However, if a Member State exerts its sovereign rights in an exclusive economic zone of 200 nautical miles (for example, the granting of an operating license for a drilling platform), it thereby considers itself competent to enforce national laws in that area, and consequently the Commission considers in this case that the "Habitats" Directive also applies, in that Community legislation is an integral part of national legislation."[145]

This interpretation has been subsequently confirmed by the European Court of Justice[146] as well as by a national court.[147]

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[143] See Art. 2, para. 1, of the Habitats Directive.
[144] See Art. 2, para. 1, of the UNCLOS. The UNCLOS does not use the term "territory", but refers to territorial "sovereignty".
[145] Communication from the Commission to the Council and the European Parliament, *Fisheries Management and Nature Conservation in the Marine Environment*, Brussels, 14 July 1999, COM(1999) 363 final, para. 5.2.2.
[146] European Court of Justice, Case C-6/04 (*Commission of the European Communities v. United Kingdom of Great Britain and Northern Ireland*), Judgment of 20 October 2005. The complaint of the Commission read as follows: "The Commission alleges that the United Kingdom has limited the application of the provisions which transpose the Habitats Directive into national law to just national territory and United Kingdom territorial waters. It contends that within their exclusive economic zone the Member States have an obligation to comply with Community law in the fields where they exercise sovereign powers and that the directive therefore applies beyond territorial waters. In particular, the Commission complains that the United Kingdom has not complied in its exclusive economic zone with its obligation to designate Special Areas of Conservation" (para. 115). The Court found that the action of the Commission was well founded and ruled that United Kingdom had failed to fulfill its obligation under the Habitats Directive.
[147] See High Court of Justice of England and Wales, Queen's Bench Division (*The Queen v. Secretary of State for Trade and Industry, ex parte Greenpeace Ltd*), judgment of 5 November 1999, in which the High Court declared that the Habitats Directive "applies to the continental shelf [of the United Kingdom] and to the superjacent waters up to a limit of 200 nautical miles from the baselines from which the territorial sea is

When dealing with the legal regime of this maritime space, it is important to take into account that the concept itself of exclusive economic zone has been interpreted, in State practice, with great flexibility. The Mediterranean Sea is a notable example where some coastal States have chosen to declare, among the sovereign rights and jurisdictional functions inherent to the concept of exclusive economic zone as defined in the UNCLOS, only those that they wished to exercise in this maritime space, and have consequently proclaimed a fishing zone or an ecological protection zone. The situations of the two regional seas considered in this report differ substantially in this regard.

Whilst all Black Sea coastal States have declared an exclusive economic zone on the model provided for in Part V of the UNCLOS,[148] in the Mediterranean Sea only some States have so far declared a "full" exclusive economic zone, in accordance with all the constituent elements provided for in the UNCLOS. However, despite a certain number of unsettled boundaries, especially in the Mediterranean Sea, there is no doubt that all coastal States are entitled to establish an exclusive economic zone whenever they wish to do so, even though for geographical reasons they cannot claim a full size 200-mile zone. In fact, international law does not prevent States bordering seas of limited dimensions from establishing their own exclusive economic zone, provided of course that maritime boundaries are not unilaterally imposed by one State on its adjacent or opposite neighbouring States.[149]

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measured" (conclusions). In particular, the High Court stated that "it seems … that a Directive which includes in its aims the protection of, *inter alia*, *lophelia pertusa* and cetaceans will only achieve those aims, on purposive construction, if it extends beyond territorial waters. Although much of the concern of the Directive and some of its language can properly be described as 'land-based', it also deals specifically with some habitats which are sea-based and, to a large extent, flourish beyond territorial waters" (conclusion on geographical scope).

[148] Bulgaria adopted a Maritime Space, Inland Waterways and Ports Act on 28 January 2000; Georgia has succeeded to the Soviet Union in the Exchange of Notes Constituting an Agreement on the Delimitation of the Soviet Union and Turkey Economic Zone in the Black Sea of 23 December 1986 - 6 February 1987; Romania adopted Decree No. 142 of 25 April 1986 of the Council of State Concerning the Establishment of the Exclusive Economic Zone in the Black Sea; the Russian Federation adopted a Federal Act on the Exclusive Economic Zone on 2 December 1998 (see also Decree of the Presidium of the Supreme Soviet of 1 March 1984); Turkey enacted Decree No. 86/11264 by the Council of Ministers of 17 December 1986 concerning the establishment of an exclusive economic zone in the Black Sea; and Ukraine adopted a Law on the Exclusive (Marine) Economic Zone on 16 May 1995. On the maritime boundary of the exclusive economic zones of Romania and Ukraine, see *Maritime Delimitation in the Black Sea (Romania/Ukraine)*, judgment of 3 February 2009, I.C.J., *Reports*, 2009.

[149] As remarked by the International Court of Justice, "the delimitation of sea areas has always an international aspect; it cannot be dependent merely upon the will of the coastal State as expressed in its municipal law. Although it is true that the act of delimitation is necessarily a unilateral act, because only the coastal State is competent to undertake it, the validity of the delimitation with regard to other States depends upon international law", *Fisheries* case, judgment of 18 December 1951, I.C.J., *Reports*, 1951, p. 20.

The ten States that have so far established exclusive economic zones in the Mediterranean are Cyprus,[150] Egypt,[151] France,[152] Israel,[153] Lebanon,[154] Libya,[155] Morocco,[156] Spain,[157] Syria,[158] and Tunisia.[159]

Other Mediterranean States have declared diverse *sui generis* zones, i.e. zones where only some of the sovereign rights and jurisdictional functions inherent to the exclusive economic zone are exercised by the coastal State concerned. Maritime zones so established have been named differently, reflecting the prevalent content of the rights and functions exercised by the declaring State: fishing zones, fisheries protection zones, ecological protection zones, zones for fishing and ecological protection. In particular, fishing zones have

[150] Law to Provide for the Proclamation of the Exclusive Economic Zone by the Republic of Cyprus of 2 April 2004.

[151] Upon ratification of the UNCLOS on 26 August 1983, Egypt declared that it would exercise as from that day the rights attributed to it by the provisions of the UNCLOS relating to the exclusive economic zone in the Mediterranean and the Red Sea. An Agreement Between the Republic of Cyprus and the Arab Republic of Egypt on the Delimitation of the Exclusive Economic Zone was concluded on 17 February 2003.

[152] Decree No. 2012-1148 of 12 October 2012 on the creation of an exclusive economic zone off the coasts of the territory of the Republic in the Mediterranean. In these waters France had previously established an ecological protection zone (Law 2003-346 of 15 April 2003). On 23 October 2012, Spain addressed a note verbale to the Embassy of the French Republic in Madrid stating that "The authorities of Spain […] wish to place on record their opposition to the unilateral establishment of the [French Mediterranean] exclusive economic zone, which has boundaries that extend far beyond the equidistant border line between the two coasts that was drawn in accordance with international law" and that "none of the coordinates set out in the Decree can in any way be considered to constitute a dividing line between the maritime areas of the two States". The French exclusive economic zone and the previous ecological protection zone partially overlap with the Spanish fishing zone.

[153] An Agreement between the Government of the State of Israel and the Government of the Republic of Cyprus on the Delimitation of the Exclusive Economic Zone was concluded on 17 December 2010. On 20 June 2011, Lebanon addressed a letter to the Secretary-General of the United Nations concerning such Agreement. On 12 July 2011, Israel deposited with the Secretary-General of the United Nations a list of geographical coordinates for the delimitation of the northern limit of the territorial sea and exclusive economic zone. On 3 September 2011, Lebanon addressed a letter to the Secretary-General of the United Nations concerning the geographical coordinates transmitted by Israel.

[154] By Decree No. 6433 of 16 November 2011, Lebanon has established its exclusive economic zone. On the open question of the boundary with Israel see *supra*, note 111.

[155] General People's Committee Decision No. 260 of A.J. 1377 (A.D. 2009) concerning the declaration of the Exclusive Economic Zone of the Great Socialist People's Libyan Arab Jamahiriya. The external limit of the zone will be determined by agreements with the neighboring States concerned.

[156] Act No. 1-81 of 18 December 1980, promulgated by Dahir No. 1-81-179 of 8 April 1981, Establishing a 200-Nautical-Mile Exclusive Economic Zone off the Moroccan Coasts. The Dahir does not make a distinction between the Atlantic and the Mediterranean coasts.

[157] Royal Decreee 236/2013 of 5 April 2013. Spain had previously declared a fisheries protection zone in the Mediterranean Sea (Royal Decree 1315/1997, modified by Royal Decree 431/2000). The zone was delimited according to the line which is equidistant between Spain and the opposite or adjacent coasts of Algeria, France and Italy. No fishing zone had been established as regards the Spanish Mediterranean coast facing Morocco. The limits of the present exclusive economic zone are the same.

[158] Law No. 28 of 19 November 2003.

[159] Law No. 50/2005 of 27 June 2005 concerning the Exclusive Economic Zone off the Tunisian coasts. The modalities for the implementation of the law will be determined by decree, including for the establishment of special fishing zones, protected fishing zones, or environmental protection zones. The outer limit of the zone will be determined by agreements with the neighboring States concerned.

been established by Algeria,[160] Malta,[161] and Tunisia.[162] Ecological protection zones have been established by Italy[163] and Slovenia.[164] Croatia has established a zone for both fishing and ecological purposes.[165]

While none of these zones is explicitly mentioned in the UNCLOS, they are not prohibited either. In fact, the exercise of only some of the rights provided for in an international legal instrument seems compatible with international law, for the simple reason that the right to do less should be considered as implied in the right to do more (*in maiore stat minus*).[166]

The same cannot hold true with regard to the obligations of the declaring State: once a zone has been declared – whatever be the name by which this zone is called – the coastal State is required to comply with all the legal obligations inherent to the content of the rights it has chosen to exercise therein (*nemo obligationibus suis renuntiare potest*). For example, if

[160] The Algerian fishing zone extends 32 n.m. from the maritime frontier with Morocco to Ras Ténès, and 52 n.m. from Ras Ténès to the maritime frontier with Tunisia. Legislative Decree No. 94-13 of 17 Dhu'lhijjah 1414 (corresponding to 28 May 1994) Establishing the General Rules Relating to Fisheries.

[161] Territorial Waters and Contiguous Zone Amendment Act of 18 July 1978, providing for a 25-mile fishing zone. Under Legislative Act No. X of 26 July 2005, fishing waters may be designated beyond the limits laid down in the 1978 Act, and jurisdiction in these waters may also be extended to artificial islands, marine scientific research, and the protection and preservation of the marine environment.

[162] According to the Tunisian Law of 2005 (see *supra*, note 117), the provisions relating to special fishing zones stipulated in article 5 of Act No. 49/1973 of 2 August 1973 remain in force until the implementation of the exclusive economic zone. The Tunisian fishing zone (from Ras Kapoudia to the frontier with Lybia), delimited according to the criterion of the 50-meter isobath, encompasses a zone (a bank commonly called "the Big Breast") which is considered by Italy as a high seas zone of biological protection, where fishing by Italian vessels or nationals is prohibited (Decree of 25 September 1979).

[163] Law No. 61 of 8 February 2006 relating to the Establishment of Ecological Protection Zones Beyond the Outer Limit of the Territorial Sea. The zones in question are to be established by decrees. Therein, Italy exercises powers which are not limited to the prevention and control of pollution, but extend also to the protection of marine mammals, biodiversity, and the archaeological and historical heritage. The first of the implementing enactments is Decree of the President of the Republic of 27 October 2011, No. 209, which established an ecological protection zone in the Ligurian and Tyrrhenian Sea.

[164] Ecological Protection Zone and Continental Shelf of the Republic of Slovenia Act of 22 October 2005. Croatia has objected to the right of Slovenia to establish coastal zones beyond the territorial sea. The dispute pending between the two States will be decided by arbitration.

[165] On 3 October 2003, Croatia established an ecological and fisheries protection zone through its Decision on the Extension of the Jurisdiction of the Republic of Croatia in the Adriatic Sea. However, on 3 June 2004, the decision was amended as follows: "With regard to the member states of the European Union, the implementation of the legal regime of the Ecological and Fisheries Protection zone of the Republic of Croatia shall commence after the conclusion of the fisheries partnership agreement between the European Community and the Republic of Croatia".

[166] For a criticism of the *in maiore stat minus* assumption see Churchill, *The Growing Establishment of High Seas Marine Protected Areas: Implications for Shipping*, in Caddell & Thomas (eds.), *Shipping, Law and the Marine Environment in 21st Century*, Witney, 2013.

a State decides to exercise its exclusive right to install – or authorize to construct – platforms for the production of wind-energy within the zone in question,[167] the same State will also be under the obligation to remove any abandoned or disused installations. Such removal will have to be done taking into account any generally accepted international standards established in this regard by the competent international organization and having due regard to, *inter alia*, fishing and the protection of the marine environment.[168] By the same token, if a coastal State decides to exercise, within the same zone, jurisdiction with regard to marine scientific research,[169] it will have to abide by the general principles for the conduct of this activity[170] as well as by the obligations of cooperation established by the UNCLOS,[171] and will be subject to all relevant provisions concerning responsibility and liability.[172] Moreover, if the coastal State is a member of the European Union, it will be under the legal obligations deriving from the relevant legislation of this regional organization (for instance, it will have to implement the Habitats Directive in the maritime space in question). More generally, any coastal State that decides to exercise rights beyond its territorial sea in accordance with Part V of the UNCLOS is under the obligation to have due regard to the rights and duties of other States and act in a manner compatible with the relevant provisions of the UNCLOS.[173]

While the Mediterranean Sea may be considered today as a sea in transition towards a generalized exclusive economic zone regime,[174] as it already happens in the Black Sea, some high seas areas still exist within Mediterranean waters, together with many unsettled maritime boundaries.[175] In certain cases, where the interested States have agreed on a boundary relating to their continental shelf, the question is still open on whether the same boundary should apply to the superjacent waters.

[167] According to Art. 56, para. 1(b)(i), of the UNCLOS, coastal States are entitled to exercise jurisdiction in their exclusive economic zone with regard to the establishment and use of artificial islands, installations and structures.
[168] Art. 60 of the UNCLOS.
[169] According to Art. 56, para. 1(b)(ii), of the UNCLOS, coastal States are entitled to exercise jurisdiction in their exclusive economic zone with regard to marine scientific research.
[170] Art. 240 of the UNCLOS.
[171] Arts. 242-244 and 246 of the UNCLOS.
[172] Art. 263 of the UNCLOS.
[173] Art. 56, para. 2, of the UNCLOS.
[174] See the recent study commissioned by the European Commission, *Costs and Benefits Arising from the Establishment of Maritime Zones in the Mediterranean Sea*, June 2013.
[175] See Annexes I and II.

Such a transitional situation must be taken into account when dealing with marine protected areas, above all where these entail restrictions to fishing activities. More generally, as long as high seas areas persist, together with unsettled maritime boundaries, the jurisdictional picture of the Mediterranean Sea remains particularly complex and, in this context, regional cooperation proves essential. The entire sea basin represents a vital common resource. It is also in the interest of Mediterranean States to safeguard areas of Mediterranean high seas that in the near future could be proclaimed as falling under their national jurisdiction.

5.5. Continental shelf

The continental shelf of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea[176] throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 n.m. from the baselines of the territorial sea where the outer edge of the continental margin does not extend up to that distance.[177]

In other words, there are two alternative legal concepts of continental shelf in the UNCLOS: the first corresponds to the geological concept of continental margin and extends to the outer edge thereof; the second follows a distance criterion and corresponds to the seabed and subsoil up to 200 n.m. from the baselines of the territorial sea, where the coastal State does not have a continental margin that extends that far.[178] In any case, the continental shelf exists *ipso iure* and does not depend on any occupation or express proclamation by the coastal State.[179]

In the case where the continental margin of the coastal State extends beyond 200 n.m. from the baselines of the territorial sea, the coastal State may delineate the limits of the outer edge of the continental margin in accordance with the UNCLOS, provided that

[176] It follows that the continental shelf in a legal sense does not include the seabed and subsoil of the territorial sea.
[177] Art. 76, para. 1, of the UNCLOS.
[178] There is little doubt that the second criterion is closely linked to the concept of exclusive economic zone.
[179] Art. 77, para. 3, of the UNCLOS.

these limits do not exceed 350 n.m. from the baselines of the territorial sea or 100 n.m. from the 2,500 meter isobath. Information on the limits of the continental shelf so delineated shall be submitted by the coastal State to a special technical body established by the UNCLOS, the Commission on the Limits of the Continental Shelf. After considering a submission, the Commission makes a recommendation on which basis the outer limits of the continental shelf of the coastal State concerned are established. Limits set forth on the basis of such recommendation are "final and binding".[180] However, in the Mediterranean and the Black Seas, there is no point which is located at a distance of more than 200 n.m. from the nearest land or island. For these geographical reasons, no Mediterranean or Black Sea State is entitled to make a submission indicating a continental shelf extending beyond 200 n.m. from the baselines of the territorial sea. For the same geographical reasons, all Mediterranean and Black Sea seabed already falls under national jurisdiction, belonging to the continental shelf of one or another coastal State, and no seabed having the legal condition of the Area does exist in these two regional seas.

Over the continental shelf, the coastal State exercises sovereign rights for the purpose of exploring it and exploiting its natural resources, both living and non-living.[181] This means that, in the event that the coastal State does not exercise its rights on the natural resources of its continental shelf, no one else may explore or exploit it without the express consent of the coastal State.

Non-living resources of the continental shelf include oil and gas as well as other mineral resources. The living resources of the continental shelf which are subject to the sovereign rights of the coastal State only comprise organisms belonging to the so-called "sedentary species", such as oysters, abalones, sponges and clams.[182] In contrast to its obligations within the exclusive economic zone, the coastal State is not required to manage and conserve its sedentary fisheries with a view to promoting their "optimum utilization",

[180] Art. 76, para. 8, of the UNCLOS. It is to be borne in mind that what is "final and binding" are the limits established by the coastal State on the basis of the recommendation of the Commission, not the recommendation itself. In fact, further recommendations concerning the same coastal State may follow a new or revised submission by that State.
[181] Art. 77, paras. 1 and 4, of the UNCLOS.
[182] According to the UNCLOS, these include "organisms which, at the harvestable stage, either are immobile or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil" (Art. 77, para. 4).

nor is it required to grant to other States access to any resource surplus. It follows that the coastal State is entitled, for instance, to establish marine protected areas on its continental shelf with a view to ensuring the long-term conservation of certain sedentary species. By the same token, the coastal State may decide to establish marine protected areas to maintain portions of its continental shelf undamaged from drilling operations.

The rights of the coastal State over the continental shelf do not affect the legal status of the superjacent waters – which may be subject to the regime of either the exclusive economic zone (including exclusive zones *sui generis*) or the high seas – nor of the air space above those waters. Moreover, the exercise of the rights of the coastal State over the continental shelf must not infringe nor unjustifiably interfere with navigation and other rights and freedoms of other States as provided for in the UNCLOS.[183]

Over its continental shelf, the coastal State has the exclusive right to construct – and to authorize and regulate the construction, operation and use of – artificial islands, installations and structures.[184] The coastal State is entitled to construct or authorize the construction and use of installations for wind-energy production, for example, as long as these installations do not interfere with navigation and the other rights and freedoms mentioned above.

Without the consent of the coastal State, other States cannot drill on the continental shelf for any purpose,[185] including the exercise of high seas freedoms such as scientific research. The delineation of the course of pipelines (but not of cables) on the continental shelf is also subject to the consent of the coastal State.[186]

The biodiversity of the continental shelf includes a variety of organisms, including deep-water corals, other sedentary species and all those species which inhabit seamounts and hydrothermal vents. The main threats to which these organisms are exposed include bottom trawling, exploitation of mineral resources of the seabed, and bioprospecting.

[183] Art. 78 of the UNCLOS.
[184] Art. 80 of the UNCLOS.
[185] Art. 81 of the UNCLOS.
[186] Art. 79 of the UNCLOS.

Marine protected area networks could well be envisaged by the coastal State with a view to protecting the most vulnerable natural features of its continental shelf from human-induced threats. Some States have already created marine protected areas on their continental shelf for this purpose.

For example, in 2003 Canada established the *Endeavor Hydrothermal Vents Marine Protected Area* on the basis of its Ocean Act of 18 December 1996. The marine protected site lies at 2,500 meters below the ocean surface and covers approximately 100 square km of seabed. It is provided that, in the area, no person shall disturb, damage or destroy, or remove from the site, any part of the seabed, including a venting structure, or any part of the subsoil, or any living marine organism or any part of its habitat.[187] Norway protects cold-water coral reefs on its continental shelf by prohibiting to Norwegian and foreign fishing vessels to fish with dragnets in the areas specified in section 3 of Decree No. 6 of 2000.

As far as the Mediterranean Sea is concerned, the General Fisheries Commission for the Mediterranean (GFCM) adopted recommendations requiring its members to prohibit the use of towed dredges and bottom trawl net fisheries at depths greater than 1000 meters. In 2006, three specific areas in the Mediterranean, namely "Lophelia reef off Capo Santa Maria di Leuca", "The Nile delta area cold hydrocarbon seeps" and "The Eratosthenes Seamount", have been declared as fisheries restricted areas to protect corals, cold hydrocarbon seeps and seamounts.[188] In 2009, noting the advice of its Scientific Advisory Committee to ban the use of towed and fixed gears and longlines for demersal resources in an area on the continental shelf and slope of the Eastern Gulf of Lions, the GFCM agreed upon establishing therein a fisheries restricted area where the use of towed nets, bottom and mid-water longlines and bottom-set nets shall not exceed the level of fishing effort applied in 2008.[189]

The establishment of marine protected areas on the continental shelf in the Mediterranean and Black Seas may prove complex because of the overlapping of different legal competences. While some activities, such as oil and gas exploitation and installations

[187] Endeavor Hydrothermal Vents Marine Protected Area Regulations of 4 March 2003, sec. 2.
[188] REC.CM-GFCM/30/2006/3 (*Establishment of fisheries restricted areas in order to protect the deep sea sensitive habitats*).
[189] REC.CM-GFCM/33/2009/1 (*On the establishment of a Fisheries Restricted Area in the Gulf of Lions to protect spawning aggregations and deep sea sensitive habitats*).

construction are regulated at the national level by the coastal State, for ten Mediterranean and Black Sea States[190] fishing regulation falls within the competence of the European Union (Common Fisheries Policy). In any case, the parties to the 1995 Fish Stocks Agreement, which include the European Union, are required to implement the precautionary approach by, *inter alia*, developing data collection and research programmes to assess the impact of fishing on non-target and associated or dependent species and their environment, and by adopting plans which are necessary to ensure the conservation of such species and to protect habitats of special concern.[191] Moreover, the Code of Conduct for Responsible Fisheries of the Food and Agriculture Organization of the United Nations (FAO), although being an instrument of soft law, provides that selective and environmentally safe fishing gear and practices should be further developed and applied in order to maintain biodiversity and to conserve the population structure and aquatic ecosystems.[192]

Among the legal instruments specifically devoted to protected areas and analyzed in this report,[193] the Habitats Directive applies on the continental shelf of all European Union member States. The Directive, *inter alia*, lists "reefs" and "submarine structures made by leaking gases" among the natural habitat types of community interest whose conservation requires the designation of special areas of conservation.[194]

At the regional level, the Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean (Barcelona, 1995; hereinafter "SPA Protocol") may find application on the continental shelf of Mediterranean States parties, since its geographical scope covers all Mediterranean waters, including the seabed and its subsoil.[195]

[190] Bulgaria, Croatia, Cyprus, France, Greece, Italy, Malta, Romania, Slovenia, and Spain.
[191] Art. 6, para. 3(d), of the 1995 Fish Stocks Agreement.
[192] See para 6.6 of the FAO Code of Conduct for Responsible Fisheries.
[193] See *infra*, paras. 6, 7 and 8.
[194] Annex I to the Habitats Directive.
[195] Art. 2 of the SPA Protocol.

5.6. High Seas

Since their overall coverage is destined to a constant change in connection with the growing number of maritime zones falling under national jurisdiction, the high seas have been appropriately referred to in the UNCLOS *ex negativo*, as

> "all parts of the sea that are not included in the exclusive economic zone, in the territorial sea or in the internal waters of a State, or in the archipelagic waters of an archipelagic State."[196]

The high seas legal regime applies to the water column beyond areas of national jurisdiction. For evident reasons, this regime has to be read in conjunction with the provisions of the UNCLOS set forth for the seabed and subsoil constituting the continental shelf beyond 200 n.m. (where an exclusive economic zone has not yet been established, beyond the outer limit of the territorial sea) and the Area, which are subject to distinct regimes.

The terms "open seas" and "deep sea", which are frequently used in scientific studies, have no precise meaning in international law. For this reason, when developing legal approaches for managing marine protected areas, it would be preferable to avoid such wording and rather abide by the legal terminology of the UNCLOS.

On the high seas there is no coastal State by definition, and no State may validly purport to subject any part of the high seas to its sovereignty.[197] The high seas shall be reserved for peaceful purposes.[198] They are subject to a regime of freedom that encompasses different activities: navigation, overflight, laying of submarine cables and pipelines, construction of artificial islands and other installations permitted under international law, fishing, and scientific research. According to customary law, as reflected in the UNCLOS, these activities shall be exercised by all States with due regard for the interests of other States in their exercise of the freedom of the high seas.[199]

[196] Art. 86 of the UNCLOS.
[197] Art. 89 of the UNCLOS.
[198] Art. 88 of the UNCLOS.
[199] Art. 87 of the UNCLOS, para. 2.

As a corollary to these provisions, the high seas regime envisages the exclusive jurisdiction of any State over vessels flying its flag on the high seas.[200] No State can impose its own jurisdiction on vessels flying the flag of other States while on the high seas nor can it, for instance, unilaterally establish a marine protected area and claim that ships flying a foreign flag abide by the relevant provisions.

It would seem that the adoption of measures of environmental protection on the high seas be doomed to remain highly ineffective, if such measures may only apply to the ships flying the national flag of the enacting States while all other ships remain exempted from complying with them. However, it would be a mistake to think that the freedom of the high seas is always an insurmountable obstacle against the adoption of environmental measures, including the establishment of marine protected areas, in the maritime zone in question.

As outlined above, the freedom of the high seas is not unlimited. It may be exercised only under the conditions laid down in the UNCLOS and by other rules of international law.[201] In connection with the principle of exclusive jurisdiction of the flag State over its vessels on the high seas, international law creates a corresponding obligation requiring the flag State to "effectively" exercise such jurisdiction.[202] Every State is legally bound to ensure that its vessels on the high seas observe all applicable international rules concerning, *inter alia*, the prevention, reduction and control of marine pollution.[203] More generally, States are under the general obligation to protect and preserve the marine environment everywhere in the sea, including adopting measures to preserve and protect rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life.[204] The freedom to fish on the high seas is qualified by the obligation to adopt measures for the conservation of the living resources,[205] as well as by the duty to cooperate in their management in order to maintain and restore both harvested and associated

[200] Except when the flag State has consented the exercise of jurisdiction by other States under an international treaty or as otherwise provided in the UNCLOS.
[201] Art. 87 of the UNCLOS, para. 1.
[202] Art. 94, para. 1, of the UNCLOS.
[203] Art. 94, para. 4(c), of the UNCLOS.
[204] Arts. 192 and 194, para. 5, of the UNCLOS.
[205] Arts. 117 and 119 of the UNCLOS.

species.[206] In the case of marine mammals, exploitation may be fully prohibited through appropriate agreements among two or more States or by the competent international organization.[207]

All these provisions offer the legal basis for the establishment of marine protected areas on the high seas. As recalled before, several calls have been made to this purpose.[208]

The principle of the freedom of the sea, developed in the 17th century,[209] must be understood today in light of the present range of marine activities and connected environmental risks. Today galleons have been replaced by quite different ships, including nuclear-propelled vessels and supertankers. The present legal debate does not only deal with the right of maritime powers to freely cross the oceans, but it has many implications relating to the preservation of the marine environment which is increasingly put in danger. Today oceans face threats that could not be foreseen five centuries ago, when the principle of the freedom of the high seas was elaborated. To rely in an absolute way on this principle was justified in the circumstances existing in the past, but this position is no longer tenable today. A progressive understanding of this principle is therefore needed, without necessarily calling for a drastic change of the present legal regime.[210]

The trend towards a more forward-thinking understanding of the traditional principle of the freedom of the high seas is supported in several instances in the present evolutionary stage of the law of the sea. The obligations, codified in the UNCLOS, that require international cooperation for the sustainable use of the living resources of the high seas are but one example of such evolution. As a consequence of their customary character, they bind also States which are not parties to specific treaties. In fact, the problem of third States comes into prominent consideration when dealing with areas not subject to any national jurisdiction and open to free use by all.

[206] Art. 118 of the UNCLOS.
[207] Art. 120 of the UNCLOS.
[208] See *supra*, Chapter 1.
[209] The principle found his most prominent ideologist in Hugo Grotius (*Mare liberum sive de jure, quod Batavis competit ad Indicana commercia, dissertatio*, Lugduni Batavorum, 1609), who engaged in his elaborations in order to safeguard the right of any State (including his own country, the Netherlands) to navigate across the world oceans during the first European colonization wave in the Americas, India and Southeast Asia.
[210] There have been calls towards a formal change from the freedom of the sea to different regimes, such as a global commons regime. However, realistically speaking, a drastic change, as desirable as it may be, is unlikely to happen in the short term.

Under customary international law, a treaty does not create either obligations or rights for a third State without its consent.[211] This clearly means that a State which is not a party to a treaty establishing a marine protected area on the high seas is not bound by the provisions of such a treaty, nor are so the ships flying its flag. The application of this rule in the high seas context, however, does not necessarily stand against the effectiveness of environmental measures enacted in the maritime zone in question.

According to the Convention on the Law of Treaties (Vienna, 1969; hereinafter "Vienna Convention"), nothing precludes a rule set forth in a treaty from becoming binding upon a third State as a customary rule of international law, recognized as such.[212] There are already rules in the UNCLOS, reflecting customary law, that apply to the high seas and bind any State, irrespective of its participation to the relevant treaties, to a number of general commitments relating to the protection of the marine environment, the conservation of its resources and the protection of its rare and fragile ecosystems.

In international fisheries law there are instances of treaties applying to the high seas that provide for measures of "self-restraint" agreed upon by the parties, including the establishment of areas closed to fishing, in order to avoid the depletion of living resources.[213] The question is how to prevent conservation measures agreed upon by certain States from being frustrated by non-parties and by other States which enjoy the benefits of such measures without burdening themselves with the corresponding duties (so-called free-rider States).

In the context in question, an appropriate way to address the problem of free-rider States is to put emphasis on the customary obligations that their behaviour is likely to breach; for example, in the case of high seas fisheries, to address the question whether the general obligation of conservation of living resources of the high seas has been undermined by a certain free-rider State. If this is the case, lawful countermeasures can be adopted under international law by all other States. The 1995 Fish Stocks Agreement, among other instruments, is notable in this respect.

[211] This customary rule has been codified in Art. 34 of the Vienna Convention on the Law of Treaties.
[212] Art. 38 of the Vienna Convention.
[213] Other measures include interdiction to use certain fishing methods or to fish certain species or stocks, introduction of quotas, minimum size of nets, closed seasons, etc.

On the one hand, according to this instrument, where a subregional or regional fisheries management organization or arrangement has the competence to establish conservation and management measures for particular straddling or highly migratory fish stocks, States with a real interest to fish for the stocks on the high seas and relevant coastal States have the right to become members of such organization or participants in such arrangement, or are otherwise required to apply the conservation and management measures established by such organization or arrangement.[214] On the other hand, only those States which are members of such an organization or participants in such an arrangement, or which agree to apply the conservation and management measures established by such an organization or arrangement, have access to the fishery resources to which those measures apply.[215]

In certain cases, free riders have been subject to countermeasures. For instance, the International Commission for the Conservation of Atlantic Tunas (ICCAT), responsible for the management of tuna and tuna-like species in the Atlantic ocean and adjacent seas, have taken measures that can be considered as lawful countermeasures against free-rider States and represent one of the possible means to give effective implementation to the provisions of the 1995 Fish Stocks Agreement just mentioned.

In 1996, ICCAT recommended its parties to take appropriate measures to effect that the import of Atlantic bluefin tuna and its products in any form from two non-party States (Belize and Honduras) be prohibited.[216] This action constituted a lawful countermeasure, considering that the vessels of Belize and Honduras were fishing in the Mediterranean Sea during the closed season, in a manner that diminished the effectiveness of the conservation measures adopted by the competent regional fisheries management organization. It was recognized that the effective management of bluefin tuna stocks could not be achieved solely by the parties to ICCAT, whose fishermen were forced to reduce their catches, unless all non-parties cooperated with the organization in connection with its conservation and management measures. In 2006,

[214] Art. 8, para. 3, of the 1995 Fish Stocks Agreement.
[215] Art. 8, para. 4, of the 1995 Fish Stocks Agreement.
[216] Recommendation 96-11 (*Recommendation by ICCAT Regarding Belize and Honduras Pursuant to the 1994 Bluefin Tuna Action Plan Resolution*).

ICCAT also adopted a general instrument concerning trade restrictive measures against free-rider States.[217]

Both the exploitation of marine living resources and the protection of the marine environment are key components of the concept of sustainable development as applied to the high seas. From a logical and legal point of view, treaties that aim at establishing marine protected areas beyond national jurisdiction are close to treaties that aim at regulating fishing on the high seas. Both types of treaties make use of area-based management tools and may be affected by activities carried out by non-parties. Parties to both types of treaties may, *mutatis mutandis*, rely on similar means, that is resort to customary rules of international law and, where no other option is left, resort to the adoption of countermeasures to deter activities by third parties that undermine the conservation and management measures agreed upon.

A very significant achievement towards the establishment of marine protected areas beyond national jurisdiction comes from the action taken under the Convention for the Protection of the Marine Environment of the North East Atlantic (Paris, 1992; so-called OSPAR Convention).[218] The maritime areas falling under the scope of the OSPAR Convention are defined as those parts of the Atlantic Ocean which lie north of the 36° north latitude and between 42° west longitude and 51° east longitude (from the Strait of Gibraltar in the south, to the North Pole in the north, from Greenland in the west to the Barents Sea in the east) and include also the high seas and its seabed beyond the 200-mile limit.

In 1998 Annex V concerning the Protection and Conservation of the Ecosystems and Biological Diversity of the Maritime Area was added to the OSPAR Convention. The Parties to Annex V commit themselves to take the necessary measures to protect and conserve the ecosystems and the biological diversity of the maritime area and to restore, when practicable, marine areas which have been adversely affected. Art. 3, para. 1, *b*, ii, makes it a duty for the OSPAR Commission "to develop means, consistent with international law, for instituting

[217] Recommendation 06-13 (*Recommendation by ICCAT Concerning Trade Measures*): "trade restrictive measures should be implemented only as a last resort, where other measures have proven unsuccessful to prevent, deter and eliminate any act or omission that diminishes the effectiveness of ICCAT conservation and management measures".

[218] See Ribeiro, *The "Rainbow": The First National Marine Protected Area Proposed Under the High Seas*, in *International Journal of Marine and Coastal Law*, 2010, p 183.

protective, conservation, restorative or precautionary measures related to specific areas or sites or related to specific species or habitats".

In 2003 the Parties to the OSPAR Convention adopted Recommendation 2003/3 on a network of marine protected areas.[219] Its purpose is

> "to establish the OSPAR Network of Marine Protected Areas and to ensure that by 2010 it is an ecologically coherent network of well-managed marine protected areas which will: a) protect, conserve and restore species, habitats and ecological processes which have been adversely affected by human activities; b) prevent degradation of, and damage to, species, habitats and ecological processes, following the precautionary principle; c) protect and conserve areas that best represent the range of species, habitats and ecological processes in the maritime area".

Recommendation 2003/3 was amended by Recommendation 2010/2, based on the purpose to make further efforts "to ensure the ecological coherence of the network of marine protected areas in the North-East Atlantic, in particular through inclusion of areas in deeper water". Under the amended recommendation, Parties should

> "(…) *c*) contribute, as practicable, to assessments of areas beyond national jurisdiction in the North-East Atlantic which may justify selection as an OSPAR Marine Protected Area under the criteria set out in the identification and selection guidelines; and *d*) propose to the OSPAR Commission the areas beyond national jurisdiction that should be selected by the OSPAR Commission as components of the OSPAR Network of Marine Protected Areas" (para. 3.1).

This enabled the Parties to establish in 2010 six marine protected areas that regard waters or seabed located beyond national jurisdiction, namely Milne Seamount Complex Marine Protected Area, that is an area of seamounts of about 21,000 km² situated to the west of the Mid-Atlantic Ridge (Decision 2010/1), Charlie-Gibbs South Marine Protected Area, that is a fracture zone of 145,420 km² that divides the Mid-Atlantic Ridge into two sections (Decision 2010/2), Altair Seamount High Seas Marine Protected Area, that is an area of about 4,409 km² of high seas (Decision 2010/3), Antialtair Seamount High Seas Marine Protected Area, that is an area of about 2,208 km² of high seas (Decision 2010/4), Josephine Seamount High Seas Marine

[219] During the same 2003 meeting, the OSPAR Commission adopted the Guidelines of the Identification and Selection of Marine Protected Areas in the OSPAR Maritime Area and the Guidelines for the Management of Marine Protected Areas in the OSPAR Maritime Area.

Protected Area, that is an area of about 19,370 km² of high seas (Decision 2010/5) and MAR North of the Azores High Seas Marine Protected Area, that is an area of about 93,568 km² of high seas (Decision 2010/6). The OSPAR Parties have adopted recommendations on the management of each of the six marine protected areas (Recommendations from 2010/12 to 2010/17), providing that the management of human activities in the area should be guided by the general obligations set forth in Art. 2 of the OSPAR Convention, the ecosystem approach and the "Conservation Vision and Objectives" indicated in an annex to each recommendation.[220] The programmes and measures envisaged for the marine protected areas relate to the fields of awareness raising, information building, marine science, as well as human activities that may be potentially conflicting with the conservation objectives and likely to cause a significant impact to the ecosystems. These activities are subject to environmental impact assessment or strategic environmental assessment and the relevant stakeholders are involved in the planning of new activities.

The OSPAR decisions and recommendations on marine protected areas are notable for the spirit of co-operation that inspires them. While two of them include both the high seas waters and the seabed, the other four are limited to the high seas waters superjacent to the seabed beyond 200 n.m. claimed by Portugal as being within its continental margin. In this case, the goal of protecting and conserving the biodiversity and ecosystems of the waters is to be achieved in coordination with, and complementary to, protective measures taken by Portugal for the seabed. Furthermore, the OSPAR Parties should engage with third parties and relevant international organizations with a view to promoting the delivery of the conservation objectives that the OSPAR Commission has set for the marine protected areas and to encourage the application of the relevant programmes and measures. The decisions and recommendations on the marine protected areas recognize that a range of human activities occurring, or potentially occurring, in them "are regulated in the respective frameworks of other competent authorities", namely the North-East Atlantic Fisheries Commission (NEAFC), ICCAT, the North Atlantic Salmon Conservation Organization (NASCO), the North Atlantic Marine Mammal Commission (NAMMCO) and the International Whaling Commission (IWC), in the case of

[220] It includes a "conservation vision" and a number of "general conservation objectives" and "specific conservation objectives". For example, in the case of Milne Seamount the specific conservation objectives related to the water column, the benthopelagic layer, the benthos and habitats and species of specific concern.

fishing; IMO, in the case of shipping; the International Seabed Authority (ISA), in the case of extraction of mineral resources (the latter organization only for the two marine protected areas that include the seabed). Memoranda of understanding have been concluded in 2008 between the OSPAR Commission and NEAFC in order to promote mutual cooperation towards the conservation and sustainable use of marine biological diversity, including protection of marine ecosystems, in the North-East Atlantic,[221] and in 2010 between the OSPAR Commission and the ISA, to consult on matters of mutual interest with a view to promoting or enhancing a better understanding and coordination of their respective activities.

As there are no high seas in the Black Sea, the designation of marine protected areas remains a responsibility that coastal States may take individually and implement with effective results. Of course, the fact that no high seas are left in the Black Sea does not preclude the conclusion of multilateral agreements between the interested States establishing transboundary marine protected areas. On the contrary, the general duty to cooperate encourages this sort of legal arrangement, as confirmed by the conclusion of the Black Sea Biodiversity and Landscape Conservation Protocol to the Convention on the Protection of the Black Sea Against Pollution (Sofia, 2002; hereinafter "BLC Protocol").

In the Mediterranean Sea, the SPA Protocol, whose geographical scope covers all Mediterranean waters, offers another means to establish marine protected areas on the high seas.[222] As far as the question of third States is concerned, the SPA Protocol explicitly requires its parties to invite non-party States and international organizations to cooperate in its implementation[223] and to undertake to adopt appropriate measures, consistent with international law, to ensure that no one engages in any activity contrary to the principles and purposes of the SPA Protocol.[224]

[221] In the statement adopted in Bergen at their 2010 meeting, the Parties to the OSPAR Convention "welcome the decision by the North East Atlantic Fisheries Commission to close until 31 December 2015 an area almost identical to Charlie-Gibbs Fracture Zone, as well as areas coinciding with the Mid-Atlantic Ridge North of the Azores, Altair Seamount and Antialtair Seamount and other areas beyond national jurisdiction of the North-East Atlantic, to bottom fisheries in order to protect the vulnerable marine ecosystems in these areas from significant adverse impacts" (para. 30).

[222] See Arts. 2 and 9 of the SPA Protocol.

[223] Art. 28, para. 1, of the SPA Protocol.

[224] Art. 28, para. 2, of the SPA Protocol. This provision is shaped on a precedent taken from Art. X of the Antarctic Treaty (Washington, 1959): "Each of the Contracting Parties undertake to exert appropriate efforts, consistent with the Charter of the United Nations, to the end that no one engages in any activity in Antarctica contrary to the principles or purposes of the present Treaty".

The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (Monaco, 1996; hereinafter ACCOBAMS)[225] offers yet another means to establish marine protected areas on the Mediterranean high seas, especially in areas which serve as habitats for cetaceans or provide important food resources to them.[226] Furthermore, the GFCM, as the competent regional fisheries management organization in the Mediterranean, may declare fisheries restricted areas on the high seas, as it already did to protect corals, cold hydrocarbon seeps and seamounts on the Mediterranean seabed.[227]

At the world level, with the exception of the Pelagos Sanctuary,[228] no treaty establishing a marine protected area on the high seas has yet been concluded. However, a number of international organizations have been endowed with the competence to recommend, or to directly establish, marine protected areas in the maritime zone in question. Such organizations include the IWC, the conference of the parties to the CBD, and the IMO.[229]

5.7. Marine Protected Areas Straddling on Different Maritime Zones

As in the case of environmental measures to be implemented wholly on the high seas, international law offers the means for designating marine protected areas in waters or seabed sites straddling on maritime zones pertaining to two or more States, or straddling on zones subject to national jurisdiction and the high seas.

The general rules on the delimitation of maritime zones subject to national jurisdiction are contained in the UNCLOS and largely reflect customary international law.

As regards to the delimitation of the territorial sea between two States with opposite or adjacent coasts, the UNCLOS provides that neither of the two States is entitled, failing agreement between them to the contrary, to extend its territorial sea beyond a certain line,

[225] ACCOBAMS has been concluded within the framework of the Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 1979). On ACCOBAMS see *infra*, para. 7.C.2.
[226] Annex 2, Art. 3 of ACCOBAMS.
[227] On the GFCM see *infra*, para. 7.C.1.
[228] On the Pelagos Sanctuary see *infra*, para. 7.B.3.
[229] See *infra*, para. 6. The International Seabed Authority has the competence to close sections of the Area to mining. However, in view of the fact that no seabed having the legal condition of the Area does exist in the two regional seas considered in this report, the relevant provisions will not be addressed hereunder.

which is the median line every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial seas of the two States is measured. A delimitation so effected represents a sort of geometrical balance of the projections into the sea of the coastlines of the States involved. However indented or fringed by islands these latter may be, there is always one and only one equidistance line.

As an exception, the UNCLOS also provides that the equidistance rule does not apply when it is necessary, "by reason of historic title or other special circumstances", to delimit the territorial seas of the two States in a way which is at variance therewith. This clearly allows for exceptions to equidistance, departing from a model of full geometrical precision.[230]

The delimitations of the exclusive economic zone or the continental shelf between States with opposite or adjacent coasts have to be effected by agreement on the basis of international law, "with a view to achieving an equitable solution". It is also provided that where there is an agreement in force between the States concerned, questions relating to the delimitation of the exclusive economic zone or the continental shelf shall be defined in accordance with the provisions of that agreement.[231] The latter assumption is so evident to become a truism.

In fact, contrary to what it is envisaged for delimiting adjacent of opposite territorial seas, the UNCLOS does not provide for a substantive regime to delimit exclusive economic zones and continental shelves, offering procedural indications without specifying the content of the rules that should apply if the States concerned do not reach an agreement.

In several decisions concerning delimitations, however, international courts have chosen to pursue the method of drawing first an equidistance line and then considering

[230] See Art. 15 of the UNCLOS. This provision is deemed to have a customary character and is commonly referred to as the "equidistance/special circumstances" rule. The UNCLOS does not specify what the special circumstances to be taken into considerations actually are. Nor does it clarify how a historic title is to be defined. Nor does it state in what manner, different from equidistance, the delimitation is to be effected if a historic title or other special circumstances occur.

[231] See Arts. 74 and 83 of the UNCLOS. If no agreement can be reached within a reasonable period of time, it is provided that the States concerned resort to the procedures provided for in the UNCLOS regulating the Settlement of Disputes (Part. XV). Pending an agreement, the States concerned are required to make every effort to enter into provisional arrangements of a practical nature, in a spirit of understanding and cooperation. Such arrangements shall be without prejudice to the final delimitation.

where there were factors calling for the adjustment or shifting of that line in order to avoid inequitable results. From a logical point of view, this seems indeed the best way to determine the equity of a delimitation between States with opposite or adjacent coasts – using the equidistance line as first criterion of reference and then evaluating whether special circumstances suggest another delimitation line.

The lines of delimitation of the exclusive economic zone or the continental shelf between States with opposite or adjacent coasts must be shown on charts of a scale adequate to ascertain their position or through lists of geographical coordinates of points. States are required to give due publicity to such charts or lists of points, and a copy of them should be available with the Secretary-General of the United Nations.[232]

So far only a limited number of the required delimitation treaties have been concluded by adjacent or opposite Mediterranean States and not all of these instruments have entered into force.[233] Several instances of maritime boundaries are still unsettled in this region, including some that are quite complex to handle due to the peculiar geographical configuration of the coastlines of the States concerned (concave or convex coastlines, islands located on the so-called wrong side of the median line, coastal enclaves, etc.).[234] In certain cases, the situation is further complicated by the question whether the delimitation line of present or future exclusive economic zones (or diverse *sui generis* zones) should follow the line that has been defined in previous agreements relating only to the seabed (the continental shelf) or could depart from it.

Notwithstanding its complex situation in terms of maritime delimitations, the Mediterranean Sea has been hosting, since 1999, the first-ever example of marine protected area straddling on the maritime zones of three different States and including high seas as well. The Pelagos Sanctuary for marine mammals, established by France, Italy and Monaco,

[232] Arts. 75 and 84 of the UNCLOS.
[233] For the present picture of Mediterranean maritime boundaries, see Annex II to the present report.
[234] See Scovazzi, *Maritime Delimitations in the Mediterranean Sea*, in *Cursos Euromediterraneos Bancaja de Derecho Internacional*, 2005-2005, p. 349. For the delimitation questions pending in the Adriatic Sea, see Vukas, *Maritime Delimitations in a Semi-enclosed Sea: The Case of the Adriatic Sea*, in Lagoni & Vignes (eds.), *Maritime Delimitation*, Leiden, 2006, p. 205.

still today encompasses waters having the different legal condition of internal maritime waters, territorial sea, ecological protection zone, exclusive economic zone and high seas.[235]

The picture, in terms of maritime delimitations, is less complex in the Black Sea, where all coastal States have established an exclusive economic zone. In one case, the States concerned, failing a specific agreement, have resorted to the International Court of Justice, that has decided on the delimitation line.[236] However, some maritime boundaries are still unsettled.

6. Treaties Relevant to Marine Protected Areas Applicable at the World Level

While the previous paragraph addressed the international legal aspects that come into consideration when pursuing objectives of environmental protection in different kinds of maritime zones, with a special emphasis on the establishment of marine protected areas in the Mediterranean and Black Seas, this section is devoted to briefly analyzing the different kinds of marine protected areas envisaged in treaty law at the global level. Most of the multilateral treaties enumerated in this section have a wide participation, which includes the great majority of Mediterranean and Black Sea coastal States.

A variety of procedures have been developed in treaty law for designating marine protected areas. Some kinds of marine protected areas are identified and designated directly by the appropriate international organization (as in the case of the IMO and the IWC), others are proposed by States and then approved by an intergovernmental committee (as in the framework of the WHC) or by the conference of the parties to the relevant treaty (such as the CBD), yet others are designated directly by States (as in the case of the parties to the Ramsar Convention).

Most of the global treaties devoted to the establishment of marine protected areas and recalled below date back some decades, reflecting the single-species or single-habitat

[235] On the Pelagos Sanctuary see *infra*, para. 7.B.3.
[236] For the present picture of maritime boundaries in the Black Sea, see Annex I to the present report.

approach to nature conservation which characterized international environmental law at least until the 70s. Then, as a consequence of the elaboration of new legal strategies linked to innovative concepts and approaches, States have tried go beyond a merely sectorial consideration of the different marine species and features in need of protection.

In particular, while the concepts of sustainable development and precaution (this latter expounded in the precautionary principle) substantially address human activities by defining the operational limits thereof, the concepts of integrated management and ecosystem approach have led to the progressive development of more comprehensive legal regimes, which aim at accomplishing a number of environmental objectives at different levels simultaneously. An analysis of the work and practice of the relevant international organizations, intergovernmental committees and conferences of the parties to multilateral environmental treaties shows that such progressive development is today taking place even in the context of international legal frameworks elaborated decades ago.

The following paragraphs analyze the different kinds of marine protected areas envisaged in treaty law with a view to control, mitigate or avoid the adverse impacts of shipping, protect specific species or natural habitats, safeguard sites of outstanding universal value, or ensure the conservation and sustainable use of marine and coastal biodiversity in its entirety.

6.A. Marine Protected Areas and Shipping

The topic of marine protected areas and shipping may be dealt with under two different viewpoints. In certain cases, marine protected areas may be established with the specific objective of protecting marine sites from the direct impacts of shipping, when this activity represents itself a threat because of its own damaging effects (polluting discharges, collisions with cetaceans, underwater noise, various impacts on particularly sensitive marine areas, etc.). In other cases, the regulation of shipping may only respond to the exigencies of management in marine protected areas established for different purposes.

In both cases, the IMO acts as the specialized organization with the responsibility for regulating international shipping, including maritime safety, security and environmental protection. It is recognized as the only international body for developing guidelines, criteria and regulations on an international level for ships' routing systems and any proposal for the adoption of such systems must be referred to the IMO.[237] With the only exception of marine protected areas located in the internal maritime waters of the enacting coastal State, the competence of the IMO is always envisaged as far as navigation is concerned.

Having already dealt with the provisions relating to the jurisdiction of coastal States in different kinds of maritime zones and with the principle of the freedom of the high seas, which applies beyond the territorial sea as far as navigation is concerned,[238] the two following paragraphs analyze two kinds of marine protected areas elaborated within the IMO framework. Both deal with shipping by considering it an autonomous environmental threat, although they address different causes of ecological degradation and provide different responses.

6.A.1. Special Areas

The International Convention for the Prevention of Pollution from Ships (London, 1973, amended in 1978; hereinafter MARPOL) covers accidental and operational pollution from ships. It also provides for the establishment of special areas, where particularly strict standards are applied to discharges from ships.

Special areas provisions are contained in Annexes I (Regulations for the Prevention of Pollution by Oil), II (Regulations for the Prevention of Pollution by Noxious Substances in Bulk), V (Regulations for the Prevention of Pollution by Garbage from Ships) and VI (Regulations for the Prevention of Air Pollution by Ships) to the MARPOL. While the first two annexes are mandatory for all the parties to the MARPOL, Annexes V and VI maintain a voluntary nature.

[237] See Resolution MSC.46(65) adopted on 16 May 1995 (*Adoption of Amendments to the International Convention for the Safety of Life at Sea, 1974*).
[238] See *supra*, para. 5.

Under Annex I to the MARPOL, special area means

> "a sea area where for recognized technical reasons in relation to its oceanographical and ecological condition and to the particular character of its traffic the adoption of special mandatory methods for the prevention of sea pollution by oil is required."[239]

The same definition applies, *mutatis mutandis*, to the special areas provided for under Annexes II and V to the MARPOL. Annex VI establishes sulphur oxide (SOx) Emission Control Areas with more stringent controls on sulphur emissions.[240]

New guidelines were adopted by the IMO in 2001 to provide guidance to the parties to the MARPOL in the formulation and submission of applications for the designation of special areas under Annexes I, II and V.[241]

The procedure for the designation of special areas under the MARPOL does not substantially depart from the procedure provided in the UNCLOS to ensure the prevention of pollution in particular and clearly defined areas of the exclusive economic zone.[242] However, the oceanographic coverage of the area-based management tools envisaged in the MARPOL is far larger. Special and emission control areas, which are listed in the relevant annexes, may include also the high seas and reach the size of enclosed or semi-enclosed seas. Nonetheless, they have a very limited substantive scope, restricted to particular discharges from ships, and do not encompass the global system of protection that characterizes other marine protected areas.[243]

Each special area designation is formalized through an amendment of the relevant Annex to the MARPOL.[244] As most member States of the IMO are parties to the MARPOL, decisions regarding special areas under the MARPOL and amendments to the relevant Annexes are taken during the sessions of the Marine Environment Protection Committee

[239] Resolution MEPC.117(52) adopted on 15 October 2004, Regulation 1, para. 11.
[240] In these areas, the sulphur content of fuel oil used onboard ships must not exceed 1.5% m/m; alternatively, ships must fit an exhaust gas cleaning system or use any other technological method to limit SOx emissions.
[241] Resolution A.927(22) adopted on 29 November 2001. This instrument has replaced Resolution A.720(17) adopted on 6 November 1991.
[242] Art. 211, para. 6, of the UNCLOS. See *supra*, para. 6.A.2.
[243] In this respect, it has also been argued that because the discharge standards applying elsewhere than in special areas have been gradually reinforced within the framework of the MARPOL, the difference in the strictness of pollution control requirements in special areas and elsewhere is no longer particularly pronounced. See MOLENAAR, *Coastal State Jurisdiction Over Vessel Source Pollution*, The Hague, 1998, p. 431.
[244] For the amendment procedure, see Art. 16 of the MARPOL.

(MEPC) of the IMO, expanded to this purpose by those non-IMO member States that are parties to the MARPOL.

Amendments concerning special areas are adopted through a tacit acceptance procedure within the MEPC. Each proposal submitted to this body must contain the draft amendment to the relevant Annex and a background document with information concerning the proposed special area.[245]

The criteria followed by the IMO when evaluating the opportunity to designate a special area under the MARPOL are grouped in three categories, referring to "oceanographic conditions",[246] "ecological conditions"[247] and "vessel traffic characteristics"[248] of the area, respectively. At least one criterion per each of the three categories must be met by the area for the proposal to be considered by the IMO. The guidelines affirm that the designation of special areas is made on the basis of restrictive criteria with the explicit view "to avoid the proliferation of such areas".[249]

The whole Mediterranean and Black Seas are special areas for the purposes of Annexes I and V. Twenty-one Mediterranean coastal States[250] and all Black Sea coastal States are parties to Annexes I, II and V. In its regulations, the IMO has stressed that special area requirements may only take effect upon receipt of sufficient notifications on the existence of adequate reception facilities from the parties to the MARPOL whose coastlines border the

[245] For the information to be provided, see Resolution A.927(22), Annex I, para. 3.3. Proposals may be submitted simultaneously with regard to all special area Annexes, although they are considered separately by the MEPC.
[246] These include: "particular circulation patterns (e.g. convergence zones and gyres) or temperature and salinity stratification; long residence time caused by low flushing rates; extreme ice state; and adverse wind conditions". *Ibid*., para. 2.4.

[247] These include "conditions indicating that protection of the area from harmful substances is needed to preserve: depleted, threatened or endangered marine species; areas of high natural productivity (such as fronts, upwelling areas, gyres); spawning, breeding and nursery areas for important marine species and areas representing migratory routes for sea-birds and marine mammals; rare or fragile ecosystems such as coral reefs, mangroves, seagrass beds and wetlands; and critical habitats for marine resources including fish stocks and/or areas of critical importance for the support of large marine ecosystems". *Ibid*., para. 2.5.

[248] These occur when "the sea area is used by ships to an extent that the discharge of harmful substances by ships when operating in accordance with the requirements of the MARPOL for areas other than Special Areas would be unacceptable in the light of the existing oceanographic and ecological conditions in the area". *Ibid*., para. 2.6.

[249] *Ibid*., para. 2.2.
[250] Bosnia-Herzegovina and Palestine are the only two Mediterranean coastal States that are not yet parties to the MARPOL.

relevant special area.[251] Detailed requirements relating to discharges under Annexes I, II and V are available in the latest version of the MARPOL in force.

So far, only twelve Mediterranean coastal States[252] and four Black Sea coastal States[253] have become parties to Annex VI to the MARPOL.

6.A.2. Particularly Sensitive Sea Areas

The first guidelines on the identification of Particularly Sensitive Sea Areas (PSSAs) were elaborated by the IMO in 1991.[254] This instrument affirmed the competence of the IMO to identify PSSAs also beyond the territorial sea of its member States, by stating that, "because of the flexibility in size [of PSSAs], every part of the marine environment which meets the criteria can be a PSSA" and that "the design of a PSSA, including a buffer zone, depends on the environmental risk which should be reduced". Nonetheless, as of today, all existing PSSAs lie within areas of national jurisdiction.

The 1991 guidelines became soon subject to some criticism because of the complexity of the procedure for submitting proposals to the IMO and also because of the risk of conceptual confusion that they created between special areas under the MARPOL and PSSAs, since guidance on the two kinds of area-based management tools was provided in the same instrument.[255]

A second set of guidelines for PSSA identification were therefore adopted by the IMO in 1999.[256] In particular, this instrument defined the concept of "associated protective measure" as

> "an international rule or standard that falls within the purview of the IMO and regulates international maritime activities for the protection of the area at risk."[257]

[251] See also Resolution A.927(22), Annex, para. 2.7. This requirement has delayed the coming into force of several special areas.
[252] Croatia, Cyprus, France, Greece, Italy, Malta, Morocco, Slovenia, Spain, Syria, Tunisia, and the United Kingdom.
[253] Bulgaria, Romania, Russian Federation, and Ukraine.
[254] Resolution A.720(17), *Guidelines for the Designation of Special Areas and the Identification of Particularly Sensitive Sea Areas*, adopted on 6 November 1991.
[255] The Archipelago of Sabana-Camagüey (Cuba) is the only PSSA identified on the basis of the 1991 guidelines.
[256] Resolution A.885(21), *Procedures for the Identification of Particularly Sensitive Sea Areas and the Adoption of Associated Protective Measures and Amendments to the Guidelines Contained in Resolution A.720(17)*, adopted on 15 November 1999.

In 2001 the IMO adopted a new instrument, already referred to above when dealing with the concept of special area, which elaborated two different sets of guidelines for the establishment of special areas under the MARPOL and PSSAs, in Annex I and Annex II respectively.[258]

The updated version of the guidelines for the identification of PSSA has been adopted in 2005 (hereinafter "the guidelines").[259] This version deals with PSSA identification and designation as two different stages of the same process, without contextually regulating the designation of special areas under the MARPOL, which remains covered by the guidelines of 2001. Since the guidelines are contained in a resolution of the IMO, without being annexed to the text of a treaty (as in the case of the Annexes to the MARPOL), they are not legally binding.

According to the guidelines, a PSSA is

> "an area that needs special protection through action by the IMO because of its significance for recognized ecological, socio-economic, or scientific attributes where such attributes may be vulnerable to damage by international shipping activities."

The IMO is responsible for designating the PSSA and for adopting the associated protective measures. It is provided that at the time of designation of a PSSA, an associated protective measure, which meets the requirements of the appropriate legal instrument establishing such measure, must have been approved or adopted by IMO to prevent, reduce, or eliminate the threat or identified vulnerability.[260]

If the measure is not available under an IMO instrument, the proposal should set forth the steps that the proposing member State has taken or will take to have the measure approved or adopted by the IMO pursuant to an identified legal basis. Alternatively, if no new associated protective measure is being proposed because IMO measures are already associated with the area to protect it, then the application should identify the threat of damage or damage being caused to the area by international shipping activities, and show

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[257] *Ibid*., para. 2.1.
[258] Resolution A.927(22). One of the criteria provided for in the former guidelines – historical/archaeological significance – was eliminated in 2001 because of an overlapping with the subject of the concomitant negotiations of the Convention for the Protection of the Underwater Cultural Heritage (Paris, 2001).
[259] Resolution A.982(24), *Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas*, adopted on 1 December 2005.
[260] *Ibid*., para. 1.2.

how the area is already being protected from such identified vulnerability by the associated protective measures.[261] In other words, there must always be a clear link between the harm being addressed in the area and the associated measures proposed to mitigate it.

It is provided that only IMO member States can submit proposals for the designation of PSSAs and that the organization may consider also joint proposals, submitted by more than one member State for the same area of common interest.[262] Member States wishing to have IMO designate a PSSA must submit an application to the MEPC based on the criteria outlined in the guidelines, provide information pertaining to the vulnerability of the area to damage from international shipping activities, and include the proposed associated protective measures. Applications should be submitted in accordance with the procedures set forth in the guidelines[263] and the rules adopted by IMO for submission of documents.

More specifically, to be identified as a PSSA, an area must meet at least one criterion among eleven ecological criteria; three social, cultural and economic criteria; or three scientific and educational criteria.[264] In addition, the area should be at risk from international shipping activities, taking into consideration vessel traffic and natural factors of hydrographical, meteorological and oceanographical character.[265] The guidelines specify that the one criterion sufficient for the designation of the PSSA does not necessarily have to be the same throughout the area. Associated protective measures, which cannot be extended to fields different from shipping, may include: designation of special areas under the MARPOL (Annexes I, II, V and VI), adoption of ships' routing and reporting systems near or in the area under the Convention for the Safety of Life at Sea (London, 1974) and in accordance with the General Provisions on Ships' Routing and the Guidelines and Criteria for Ship Reporting Systems of the IMO, as well as the development and adoption of other measures aimed at protecting specific sea areas against environmental damage from ships, provided that they have an identified legal basis.[266]

[261] *Ibid*., para. 7.1-7.2.
[262] Resolution A.982(24), para. 3.1.
[263] See Section 7 of the guidelines.
[264] For the list of criteria, see Section 4 of the guidelines.
[265] See Section 5 of the guidelines.
[266] See Section 6 of the guidelines.

The environmental hazards associated with shipping taken into account by the guidelines include operational discharges, accidental or intentional pollution, and physical damage to marine habitats or organisms.[267] The guidelines consider PSSAs as possible tools against the impacts of a wide range of harmful substances that may be released by vessels as well as against a variety of possible impacts from shipping. According to the guidelines, releases may include oil and oily mixtures, noxious liquid substances, sewage, garbage, noxious solid substances, anti-fouling systems, harmful aquatic organisms and pathogens, and even noise. In addition, the guidelines recognize that ships may cause harm to marine organisms and their habitats through physical impact, including the smothering of habitats, contamination by anti-fouling systems or other substances through groundings, and ship strikes of marine mammals.[268]

Notwithstanding the variety of marine ecosystems that are constantly exposed to the kinds of impacts enumerated in the guidelines, so far only one PSSA has been designated in the Mediterranean Sea,[269] and no PSSAs have been designated in the Black Sea. The importance of the concept of PSSA in these two regional seas, therefore, will depend on its future developments.

As regards its relationship with the UNCLOS, the concept of PSSA precedes the adoption of the UNCLOS and, therefore, does not find its original legal basis in this instrument.[270] Nonetheless, it contributes to the pursue of the general objectives of the

[267] It is evident here the difference between PSSAs and special areas under the MARPOL, as the latter do not consider the risk of physical damage from shipping among the possible criteria for designation.
[268] Resolution A.982(24), para. 2.2.
[269] See Resolution MEPC.204(62), *Designation of the Strait of Bonifacio as a Particularly Sensitive Sea Area*, adopted on 15 July 2011.
[270] Its first elaboration dates back to 1978, on the occasion of the International Conference on Tanker Safety and Pollution Prevention (TSPP Conference) of the Intergovernmental Maritime Consultative Organization, when Sweden proposed to initiate studies for the establishment of a protective legal system for "particularly sensitive sea areas" that presented a particular value because of their natural or scientific importance (see Resolution 9 adopted at the TSPP Conference). The MEPC did not begin its studies on the PSSA concept until 1986, in collaboration with the Maritime Safety Committee (MSC) of the IMO and its Subcommittee on the Safety of Navigation (NAV) (see MEPC/Circ.171 on Particularly Sensitive Sea Areas, August 1986). The defining moment, however, was reached only in 1990, when Australia proposed the identification of the Great Barrier Reef as a PSSA and the adoption of a compulsory pilotage scheme in the area (see MEPC 30/19/4 and 30/19/4Corr.1, *Identification of Particularly Sensitive Sea Areas, Including Development of Guidelines for Designating Special Areas under Annexes I, II and V*, submitted by Australia, 19 September 1990; and MEPC 30/INF.12, *Identification of the Great Barrier Reef Region as a Particularly Sensitive Sea Area*, submitted by Australia, 17 September 1990). Following the Australian proposal, the IMO adopted on 16 November 1990 Resolution MEPC.44(30), *Identification of the Great Barrier Reef Region as a Particularly Sensitive Sea Area*, and Resolution MEPC.45(30), *Protection of the Great Barrier Reef Region*.

UNCLOS relating to marine environmental protection. Unlike the resemblance noticed between the concept of special areas under the MARPOL and the concept of particularly clearly defined areas under Art. 211, para. 6, of the UNCLOS, at least in terms of purpose of, and procedure for designation, there is no theoretical association between such areas and the concept of PSSA.

While Art. 211, para. 6, of the UNCLOS only allows for the approval of measures for the prevention of pollution from vessels, imposing particularly strict discharge standards, the concept of PSSA responds, more generally, to "damage from international shipping" – i.e. not only pollution, but also physical damage to habitats or organisms. Also, while the designation of areas under Art. 211, para. 6, of the UNCLOS requires all relevant criteria to be met,[271] the identification of PSSAs only requires one criterion to be met among the ones elaborated by the IMO. Furthermore, the criteria for the actual designation are not the same: while two of the PSSA criteria, namely those having an ecological and economic character, could be reconciled with the criteria enumerated in Art. 211, para. 6, of the UNCLOS, other PSSA criteria are not considered by the UNCLOS, such as those based on social and cultural value and on scientific and educational significance.[272]

As a confirmation to the assumption on the difference between the two concepts in question, none of the guidelines elaborated by the IMO over the years relating to the concept of PSSA has ever quoted Art. 211, para. 6, of the UNCLOS as the legal basis for the identification of PSSAs. In any event, the provision of the UNCLOS may represent one of the diverse legal opportunities through which protective measures associated to a given PSSA may be adopted.

With respect to the relationship between the concept of special areas under the MARPOL and the concept of PSSA, the first difference may be identified in the criteria and requirements for their respective designation. The conditions for the designation of special areas are more restrictive due to the fact that, as seen above, at least one criterion per each category of designation criteria must be met for the special area proposal to be considered

[271] An area identified under Art. 211, para. 6, of the UNCLOS requires the adoption of special mandatory measures for the prevention of pollution from vessels for recognized technical reasons in relation to "its oceanographical and ecological conditions, as well as its utilization or the protection of its resources and the particular character of its traffic".

[272] See MEPC 43/6/2, *Relationship Between the 1982 United Nations Convention on the Law of the Sea and the IMO Guidelines for the Designation of Special Areas and the Identification of Particularly Sensitive Sea Areas*, submitted by DOALOS (United Nations, Division for Ocean Affairs and the Law of the Sea), 31 March 1999.

by the MEPC. In the case of PSSAs, only one criterion among the ones elaborated by the IMO proves sufficient for the proposal to be considered.

Moreover, a PSSA designation allows for the adoption of a larger range of measures associated to marine sites in need of protection, compared to the very limited kind of protective measures provided for in the MARPOL and restricted to discharge prevention. Actually, the designation of a special area under the MARPOL may constitute a protective measure associated with the identification of a PSSA, although, paradoxically, the procedure for the adoption of the associated protective measure would be, in this particular case, more restrictive than the procedure for the designation of the PSSA itself.[273]

More generally, the designation of a PSSA allows for the adoption of measures that are not only the ones already available in the relevant instruments elaborated within the IMO framework,[274] but also include those not yet established on a conventional basis in existing legal texts, therefore promoting a progressive development in the normative work of the organization. This circumstance provides States with an important legal tool when they consider necessary to enforce in a given area higher standards than the ones already available under existing legal instruments and consequently enact measures for which no other legal basis exists.

However, it is important to clarify that the identification of a PSSA, although it may have some symbolic value on its own, is nothing more than a legal qualification, which risks remaining an empty box without the adoption of associated protective measures.

6.B. Marine protected areas for specific species and habitats

This section deals with two global treaties which aim at protecting specific species or specific natural habitats by establishing marine protected areas. Both treaties were concluded before the concepts of integrated management and ecosystem approach were elaborated and, therefore, suffer from a merely sectorial definition of environmental

[273] Besides the case of special areas under the MARPOL, there may be other cases where, paradoxically, because of the more stringent criteria of adoption, the potential range of associated protective measures may not be fully available to protect a PSSA.

[274] These include, in addition to special areas under the MARPOL, areas to be avoided and other routing measures, and vessel traffic service.

threats. However, an analysis of both legal frameworks shows that more innovative approaches have been gradually incorporated into the practice of the relevant executive bodies and have updated the original legal contexts.

The first legal instrument provides for the establishment of international sanctuaries for whales.[275] The second legal instrument provides for the designation of wetlands of international importance and will be addressed with an emphasis on wetlands with marine and coastal components. The main difference between the two treaties lies in their geographical scope: while whale sanctuaries may cover hundreds of square miles and extend to the high seas, wetlands of international importance only concern limited coastal areas.

6.B.1. Whale sanctuaries

The International Convention for the Regulation of Whaling (Washington, 1946; hereinafter "the Whaling Convention") applies to factory ships, land stations and whale catchers under the jurisdiction of its parties and to all waters in which whaling is prosecuted by such factory ships, land stations, and whale catchers.[276]

If one has to adopt a restrictive interpretation of the geographical scope of this treaty, it would seem that where whaling is not actually taking place, such as in the Mediterranean Sea, the treaty does not apply and the relevant executive body, the IWC, has no competence. Paradoxically, the competence of the body responsible for the conservation of whales would reemerge in the Mediterranean Sea only if whales within this sea suddenly became the target of whaling activities. A preferable interpretation rather suggests that the IWC is competent in all waters in which whaling may take place, even only potentially, i.e. wherever there is a whale. This interpretation is preferable because it extends to all waters of the world inhabited by large cetaceans the implementation of the recommendations of the IWC also concerning adverse impacts on whale stocks different from whaling (pollution and environmental degradation, impacts of sonar devices, incidental catches and entanglements, ship strikes, whale-watching activities, etc.).

[275] Since this section is devoted to the analysis of global instruments, the case of the Pelagos Sanctuary for marine mammals established in the Mediterranean Sea will be addressed *infra*, para. 7.B.3.
[276] Art. I, para. 2, of the Whaling Convention.

The Whaling Convention provides that the IWC may adopt regulations with respect to the conservation and utilization of whale resources, fixing, *inter alia*, "open and closed waters, including the designation of sanctuary areas."[277]

So far, two sanctuaries have been designated by the IWC. The first, the Indian Ocean Sanctuary, was established in 1979 and covers the whole of the Indian Ocean south to 55°S. The second was established in 1994 and covers the waters of the Southern Ocean around Antarctica. Both sanctuaries prohibit commercial whaling. Regrettably, they do not cover so-called "scientific whaling".

An additional proposal for a sanctuary in the South Atlantic Ocean has been repeatedly submitted to the IWC in recent years. To date, however, it has failed to achieve the three-quarters majority of votes needed to amend the Schedule annexed to the Whaling Convention and thus become designated by the IWC.

Following the creation of the sanctuary in the Indian Ocean, a Working Group was established within the IWC with the mandate of examining the concept of "sanctuary". The Working Group identified the prime objective of a sanctuary as a place where individual or groups of whale species populations are protected from whaling for a specified period. Nonetheless, the Indian Ocean sanctuary has a permanent nature and, therefore, the practice of the IWC supports the interpretation that sanctuaries for whales may be established by the IWC on a permanent basis.[278]

Nothing in the Whaling Convention prevents the IWC from designating the entire Mediterranean Sea as whale sanctuary on a permanent basis. The same cannot hold true for the Black Sea, where there are no whales.

6.B.2. Wetlands of international importance

The Preamble of the Ramsar Convention recognizes the fundamental ecological functions of wetlands as regulators of water regimes and as habitats supporting a

[277] Art. V, para. 1, of the Whaling Convention.
[278] The definition of the prime objective of a sanctuary provided above is contained in a report dating back to 1982 (IWC 34th Report, Section 10.2.) and it is not binding.

characteristic flora and fauna, especially waterfowl, and affirms that wetlands constitute a resource of great economic, cultural, scientific, and recreational value, the loss of which would be irreparable. The same paragraphs recognize that waterfowl in their seasonal migrations may transcend frontiers and so should be regarded as an international resource. For States which are parties to the Ramsar Convention, marine and coastal protected areas are a major tool for advancing compliance with this treaty.

The Ramsar Convention defines wetlands to include areas with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters.[279] The treaty provides for the maintenance of a List of Wetlands of International Importance (hereinafter, the "Ramsar List"), as well as for the obligation of the parties to designate at least one wetland to be included in the Ramsar List.

The boundaries of each wetland must be precisely described and also delimited on a map and they may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six meters at low tide lying within the wetlands, especially where these have importance as waterfowl habitat.[280] It is provided that wetlands should be selected for the Ramsar List on account of their international significance in terms of ecology, botany, zoology, limnology or hydrology. [281]

When becoming a party to the Ramsar Convention, each State shall designate at least one wetland to be included in the Ramsar List.[282] The inclusion of a wetland in the Ramsar List does not prejudice the exclusive sovereign rights of the party in whose territory the wetland is situated.[283]

It is important to note that sites designated for the Ramsar List do not have to be already established as legally protected areas before designation.[284] However, each party is under the obligation to promote the conservation of wetlands and waterfowl by establishing nature reserves on wetlands, whether they are included in the Ramsar List or not, and provide adequately for their wardening.[285]

[279] Art. 1, para. 1, of the Ramsar Convention. See also *supra*, para. 5.1.
[280] Art. 2, para. 1, of the Ramsar Convention.
[281] Art. 2, para. 2, of the Ramsar Convention.
[282] Art. 2, para. 4, of the Ramsar Convention.
[283] Art. 2, para. 3, of the Ramsar Convention.
[284] Ramsar Convention Secretariat, *The Ramsar Convention Manual : A Guide to the Convention on Wetlands (Ramsar, Iran, 1971)*, Gland, 2006, p. 89.
[285] Art. 4, para. 1, of the Ramsar Convention (emphasis added).

The parties to the Ramsar Convention are under the fundamental obligation to formulate and implement their planning so as to promote the conservation of the wetlands included in the Ramsar List, and as far as possible the wise use of wetlands in their territory.[286] The Conference of the Parties (Regina, 1987) initially clarified that wise use of wetlands means "their sustainable utilization for the benefit of humankind in a way compatible with the maintenance of the natural properties of the ecosystem".[287] Subsequently, following the adoption of the CBD, it affirmed that the concept of wise use enshrined in the Ramsar Convention has been developed substantially and is considered to be synonymous with "sustainable use".[288]

Although formulated in very basic terms, compared to more recent instruments devoted to nature conservation, Art. 4, para. 5, of the Ramsar Convention provides that parties shall also promote the training of personnel competent in the fields of wetland research, management and wardening. These commitments are functional to the obligation contained in Art. 3, according to which each party shall arrange to be informed at the earliest possible time if the ecological character of any wetland in its territory and included in the Ramsar List has changed, is changing or is likely to change as the result of technological developments, pollution or other human interference. Information on such changes shall be passed without delay to the responsible authorities under the Ramsar Convention.

Another important provision relates to the obligation on international cooperation. Art. 5 provides that parties shall consult with each other about implementing obligations arising from the Ramsar Convention, especially in the case of a wetland extending over the territories of more than one party or where a water system is shared by different parties. At the same time, parties shall endeavour to coordinate and support present and future policies and regulations concerning the conservation of wetlands and their flora and fauna.

The Ramsar Criteria for Identifying Wetlands of International Importance are undergoing constant review by the Ramsar Convention's Secretariat and its subsidiary expert body, the Scientific and Technical Review Panel. The work under the Ramsar Convention is coordinated by means of a six-year Strategic Plan which sets out the priority actions

[286] Art. 3, para. 1, of the Ramsar Convention.
[287] Recommendation 3.3 (Regina, 1987), *Wise Use of Wetlands*.
[288] *The Ramsar 25th Anniversary Statement*.

expected or requested of the Ramsar Convention's bodies and other collaborators, such as international organization partners. The third Strategic Plan covers the period 2009-2015. As of today, all Black Sea States and twenty-two Mediterranean coastal States are parties to the Ramsar Convention.[289]

6.C. Marine protected areas of outstanding universal value

The WHC deals with natural and cultural properties of outstanding universal value. Such properties are recognized as world heritage sites under the WHC through their inclusion in the World Heritage List.

In its preamble, the WHC states that deterioration or disappearance of any item of the cultural or natural heritage constitutes a harmful impoverishment of the heritage of all the nations of the world, and that parts of such heritage which are of outstanding interest need to be preserved as part of the world heritage of humankind as a whole.

The distinctive quality that the WHC aims at protecting is the "outstanding universal value" of certain properties, compared to other sites. The WHC does not intend to ensure the protection of all properties of great interest, importance or value, but only of a selected list of those outstanding from an international viewpoint. Therefore, it is not to be assumed that a property of national or regional importance will automatically be inscribed on the World Heritage List.[290]

The WHC does not specify which properties may be considered of outstanding universal value, but it is generally understood that properties of this kind present a cultural or natural significance which is "so exceptional as to transcend national boundaries and to be of common importance for present and future generations of all humanity".[291] It is for

[289] The only Mediterranean State which is not yet a party to the Ramsar Convention is Palestine.
[290] See *Operational Guidelines for the Implementation of the World Heritage Convention*, para. 52.
[291] *Ibid*., para. 49.

each State party to the WHC to identify and delineate the different properties situated on its territory.[292]

For the purposes of the WHC, the following shall be considered as "natural heritage":

> "natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;
>
> geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;
>
> natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty."[293]

The WHC Committee has defined criteria for selection of world heritage sites. For natural sites, the property shall meet the following criteria:

> "(vii) contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
>
> (viii) be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features
>
> (ix) be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
>
> (x) contain the most important and significant natural habitats for *in-situ* conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation".

Additionally, to be deemed of outstanding universal value, a property must meet the conditions of integrity or authenticity and must have an adequate protection and management system to ensure its safeguarding.[294] With regard to the specific condition of integrity, a certain degree of flexibility is recognized in the Operational Guidelines for the

[292] Art. 3 of the WHC.
[293] Art. 2, para. 2, of the WHC. This paper only deals with natural heritage under the WHC.
[294] *Operational Guidelines for the Implementation of the World Heritage Convention*, paras. 77-78. "Integrity" and "authenticity" are defined in the following paragraphs of the same instrument.

Implementation of the WHC, where they admit that "no area is totally pristine and that all natural areas are in a dynamic state, and to some extent involve contact with people".[295]

Although the present study only deals with world heritage natural properties, properties exist which can be considered as "mixed cultural and natural heritage".[296]

With regard to the fundamental obligations arising from the WHC, it is also important to clarify that such obligations apply to sites located in the territory of States parties, irrespective of the inclusion of those sites in the World Heritage List. Therefore, the WHC does not apply only to listed heritage.

Art. 4 of the WHC establishes that each State party recognizes that the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage situated on its territory belongs primarily to that State. Each State party will do all it can to this end, to the utmost of its own resources and, where appropriate, with any international assistance and cooperation which it may be able to obtain.

Art. 5 provides that, to ensure that effective and active measures are taken for the purposes listed above, each State party shall endeavor, in so far as possible, and as appropriate for each country: (a) to adopt a general policy which aims to give the cultural and natural heritage a function in the life of the community and to integrate the protection of that heritage into comprehensive planning programmes; (b) to set up within its territories, where such services do not exist, one or more services for the protection, conservation and presentation of the cultural and natural heritage with an appropriate staff and possessing the means to discharge their functions; (c) to develop scientific and technical studies and research and to work out such operating methods as will make the State capable of counteracting the dangers that threaten its cultural or natural heritage; (d) to take the appropriate legal, scientific, technical, administrative and financial measures necessary for the identification, protection, conservation, presentation and rehabilitation of this heritage; and (e) to foster the establishment or development of national or regional centre's for

[295] *Ibid*., para. 90.
[296] *Ibid*., para. 46.

training in the protection, conservation and presentation of the cultural and natural heritage and to encourage scientific research in this field.

Having dealt with the main features of the WHC legal framework, the specific application of the WHC to the marine environment now comes into consideration. Although its analysis focused on Small Island ecosystems of tropical seas, a seminar organized by UNESCO in Vietnam in 2002 substantially contributed to highlight the potential of the WHC legal framework for the conservation of marine biodiversity. In particular, it was recognized that only few marine sites were inscribed in the World Heritage List, notwithstanding the constant deterioration of the marine environment from an ecological, economic and social viewpoint. The group of experts participating in the seminar therefore recommended the WHC Committee to undertake the following actions:

> "1. Immediate steps and attention must be taken to enhance global marine conservation efforts. (...).
>
> 3. An ecosystem-approach should be applied to develop a 'network' of outstanding sites under World Heritage protection in light of the diversity and connectivity of the marine environment. (...).
>
> 5. Whenever feasible, marine World Heritage sites and other MPAs must be large enough to include the sources of larvae needed to replenish populations of organisms depleted by disturbances, to encompass important migration routes, and to fully protect viable breeding stocks of species that are endangered or crucial to ecosystem integrity. (…)
>
> 8. Where shipping occurs through or near a World Heritage site, investigations should be initiated to determine whether designation of the area as a Particularly Sensitive Sea Area by the International Maritime Organization would be appropriate.
>
> 9. The unique biodiversity attributes of areas of the high seas and threats to which they are subject need to be recognized by a program to identify and establish World Heritage sites that represent these attributes. (...).
>
> 12. As effectively managed areas, World Heritage sites can play a key role as models for "BEST PRACTICE" in the management of marine protected areas. (...).

16. Other mechanisms, such as Biosphere Reserves, Ramsar site designations and marine protected area networks should be applied to strengthen and complement the World Heritage Convention and give international recognition to important marine sites."[297]

In 2004, the WHC Committee addressed a proposal to the World Heritage Centre, the focal point and coordinator within UNESCO for all matters related to the World Heritage. The WHC Committee's proposal related to the introduction of a specific programme for the world marine and coastal heritage.[298] The programme was officially launched in 2005 as the "World Heritage Marine Programme".[299] Definition of "marine" for the purposes of this programme is:

"- properties for which marine values have been the principal reason for inscription as World Heritage (e.g. Great Barrier Reef), (...),

- properties, which are terrestrial (sometimes terrestrial values have been the principal reason for inscription) but also have a marine protected area attached to the World Heritage property (e.g. Sian Ka'an Biosphere Reserve), (...),

- properties that have only coastal components with no marine protected areas attached (e.g. Dorset and East Devon Coast), (...), and

- properties that have been inscribed for cultural heritage criteria but could potentially be inscribed as mixed properties to include a marine component, (...)."

Due to limited capacity, the majority of activities under the World Heritage Marine Programme have so far focused on sites within the first two categories and on those that are situated in developing countries.[300] As of today, all Mediterranean and Black Sea States are parties to the WHC.

6.D. Marine protected areas for the conservation and sustainable use of biodiversity

[297] UNESCO, *Hanoi Statement*, 2002.
[298] World Heritage Committee, 28th session (Suzhou, 2004), WHC-04/28.COM/26, para. 9 (Decision 28COM 9).
[299] World Heritage Committee, 29th session (Durban, 2005), WHC-05/29.COM/5, Annex I.
[300] World Heritage Committee, 29th Session (Durban 2005), WHC-05/29.COM/5, Annex I, par. 15.

The CBD sets out a series of measures for *in-situ* conservation. Parties are required, as far as possible and as appropriate, to establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity; to develop, where necessary, guidelines for the selection, establishment and management of protected areas where special measures need to be taken to conserve biological diversity; and to regulate or manage biological resources important for the conservation of biological diversity whether within or outside protected areas, with a view to ensuring their conservation and sustainable use.[301]

As to its territorial scope, the CBD applies, in relation to each party: (a) in the case of components of biological diversity, in areas within the limits of its national jurisdiction; and (b) to processes and activities, regardless of where their effects occur, carried out under its jurisdiction or control, within the area of its national jurisdiction or beyond the limits of national jurisdiction. It is also provided that the parties to the CBD implement its provisions with respect to the marine environment consistently with the rights and obligations of States under the law of the sea.[302]

Several decisions adopted by the parties to the CBD underline the importance of marine protected areas as one of the essential tools and approaches in the conservation and sustainable use of biodiversity, including marine genetic resources, and provide detailed guidance to the States concerned. Marine and coastal protected areas are also an element of the elaborated programme of work of the CBD on marine and coastal biological diversity, which aims at implementing the convention in marine and coastal ecosystems. This programme of work, also called Jakarta Mandate on Marine and Coastal Biodiversity, was adopted in 1995 and reviewed and updated in 2004. It is contained in the annex to Decision VII/5 on Marine and Coastal Biodiversity.

The Jakarta Mandate on Marine and Coastal Biodiversity provides guidance on integrated marine and coastal area management, the sustainable use of living resources and marine and coastal protected areas. Annex II (Guidance for the Development of a National

[301] Art. 8 (a), (b) and (c) of the CBD.
[302] Art. 22, para. 2, of the CBD.

Marine and Coastal Biodiversity Management Framework) to Decision VII/5 recommends that the legal or customary frameworks of marine and coastal protected areas clearly identify prohibited activities contrary to the objectives of such areas, as well as activities that are allowed, with clear restrictions or conditions to ensure that they will not be contrary to the objectives of the marine protected area and a decision-making process for all other activities.[303] Under Appendix 3 (Elements of a Marine and Coastal Biodiversity Management Framework) to the same decision, integrated networks of marine and coastal protected areas should consist of marine and coastal protected areas, where threats are managed for the purpose of biodiversity conservation or sustainable use and where extractive uses may be allowed, as well as of representative marine and coastal protected areas where extractive uses are excluded and other significant human pressures are removed or minimized, to enable the integrity, structure and functioning of ecosystems to be maintained or recovered.[304]

In 2006 the conference of the parties to the CBD recognized that marine protected areas are one of the essential tools to help achieve conservation and sustainable use of biodiversity in marine areas beyond the limits of national jurisdiction, and that they should be considered as part of a wider management framework consisting of a range of appropriate tools, consistent with international law and in the context of best available scientific information, the precautionary approach and ecosystem approach; and that the application of tools beyond and within national jurisdiction need to be coherent, compatible and complementary and without prejudice to the rights and obligations of coastal States under international law.[305]

In 2008 the conference of the parties to the CBD adopted a set of Scientific Criteria for Identifying Ecologically or Biologically Significant Marine Areas in Need of Protection in Open Waters and Deep-sea Habitats (the so-called EBSA criteria).[306] The EBSA criteria are

[303] CBD COP Decision VII/5 (Kuala Lumpur, 2004), Annex II, para. 6.
[304] *Ibid*., Appendix 3, para. 5.
[305] CBD COP Decision VIII/24 (Curitiba, 2006), para. 38
[306] CBC COP Decision IX/20 (Bonn, 2008), Annex I.

"uniqueness or rarity",[307] "special importance for life history stages of species",[308] "importance for threatened, endangered or declining species and/or habitats",[309] "vulnerability, fragility, sensitivity, or slow recovery",[310] "biological productivity",[311] "biological diversity",[312] and "naturalness".[313]

In addition, the same conference adopted the Scientific Guidance for Selecting Areas to Establish a Representative Network of Marine Protected Areas, Including in Open-ocean Waters and Deep-sea Habitats.[314] This instrument lists the required network properties and components, namely "ecologically and biologically significant areas", "representativity", "connectivity", "replicated ecological features" and "adequate and viable sites".

Four Initial Steps to be Considered in the Development of Representative Networks of Marine Protected Areas were also proposed,[315] namely "scientific identification of an initial set of ecologically or biologically significant areas", "develop/chose a biogeographic habitat and/or community classification scheme", "drawing upon steps 1 and 2 above, iteratively use qualitative and/or quantitative techniques to identify sites to include in a network" and "assess the adequacy and viability of the selected sites".[316]

[307] "Area contains either (i) unique ('the only one of its kind'), rare (occurs only in few locations) or endemic species, populations or communities, and/or (ii) unique, rare or distinct habitats or ecosystems, and/or (iii) unique or unusual geomorphological or oceanographic features".
[308] "Areas that are required for a population to survive and thrive".
[309] "Area containing habitat for the survival of and recovery of endangered, threatened, declining species or area with significant assemblages of such species".
[310] "Areas that contain a relatively high proportion of sensitive habitats, biotopes or species that are functionally fragile (highly susceptible to degradation or depletion by human activity or by natural events) or with slow recovery".
[311] "Area containing species, populations or communities with comparatively higher natural biological productivity".
[312] "Area contains comparatively higher diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity".
[313] "Area with a comparatively higher degree of naturalness as a result of the lack of or low level of human-induced disturbance or degradation".
[314] CBC COP Decision IX/20 (Bonn, 2008), Annex II. Despite their scientific basis, the terms "open-ocean waters" and "deep-sea" depart from well-established legal terminology and may create confusion at the time of creating marine protected areas.
[315] *Ibid*., Annex III.
[316] An expert workshop on scientific and technical guidance on the use of biogeographic classification systems and identification of marine areas beyond national jurisdiction in need of protection was held in 2009 in Ottawa. The report of the workshop (see doc. UNEP/CBD/EW-BCS&IMA/1/2 of 22 December 2009) includes (Annex IV) a Scientific Guidance on the Identification of Marine Areas Beyond National Jurisdiction, which Meet the Scientific Criteria in Annex I to Decision IX/20.

In 2010, the conference of the parties to the CBD noted with concern the slow progress towards achieving the 2012 target of establishment of marine protected areas, consistent with international law and based on the best scientific information available, including representative networks, and that despite efforts in the last few years, just over 1 percent of the ocean surface is designated as protected areas, compared to nearly 15 percent of protected-area coverage on land.[317] Parties were invited to make further efforts on improving the coverage, representativity and other network properties, as identified in Annex II to Decision IX/20, of the global system of marine and coastal protected areas, in particular identifying ways to accelerate progress in establishing ecologically representative and effectively managed marine and coastal protected areas under national jurisdiction or in areas subject to international regimes competent for the adoption of such measures, and achieving the commonly agreed 2012 target of establishing marine and coastal protected areas, in accordance with international law, including the UNCLOS, and based on the best scientific information available, including representative networks.[318]

In 2012, the conference of the parties to the CBD affirmed that scientific description of areas meeting EBSA criteria and other relevant criteria is an open and evolving process that should be continued to allow ongoing improvement and updating as improved scientific and technical information becomes available in each region.[319] The conference adopted Decision XI/17 (Marine and Coastal Biodiversity: Ecologically or Biologically Significant Marine Areas) which identifies in an annex several areas meeting the EBSA criteria in the Western South Pacific region, in the Wider Caribbean and Western Mid-Atlantic region and in the Mediterranean region as well. As far as the Mediterranean Sea is concerned, the parties took note of the particular need for a regional workshop to be organized in order to finalize the description of areas that meet the EBSA criteria by 2014.[320] The Annex to Decision XI/17, *inter alia*, presents the outcome of the work carried out within the framework of the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona, 1976, as amended in 1995; hereinafter “Barcelona

[317] CBD COP Decision X/29 (Nagoya, 2010), para. 4.
[318] *Ibid*., para. 13(a).
[319] CBD COP Decision XI/17 (Hyderabad, 2012), para. 8.
[320] *Ibid*., para. 11.

Convention") regarding the description of areas that could meet the EBSA criteria in the Mediterranean region.[321]

7. Treaties Relevant to Marine Protected Areas Applicable at the Regional Level

In many regional seas, both treaties having a world scope and treaties having a regional (or sub-regional) scope are in principle applicable.[322] While general concerns are better addressed on a world scale, regional or sub-regional treaties are the best tool to take into account the peculiarities of a specific marine area and to grant an added value to forms of cooperation already established at the world level. It may thus happen that the same kind of activity is regulated by more than one instrument.[323]

The legal tools for tackling the problem of potentially overlapping treaties are the result of the combination of different criteria (*ratione temporis*, *ratione personae*, and *ratione materiae*). A true conflict between treaties arises only if two successive treaties have been concluded by the same parties and relate to the same subject matter, as it can be inferred from Arts. 30 and 59 of the Vienna Convention on the Law of Treaties. Luckily enough the UNCLOS, the only world treaty on the law of the sea from the point of view of both its object and its territorial application, contains provisions on its relationship with treaties concluded either before[324] or after[325] its entry into force. Furthermore, a specific

[321] *Ibid*., Annex, Table 3.
[322] On regional cooperation see DiMento & Hickman (eds.), *Environmental Governance of the Great Seas*, Cheltenham, 2012.
[323] For instance, dumping falls under both the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London, 1982), which has a general sphere of application, and the Protocol for the Prevention of the Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft (Barcelona, 1976). It also falls under a number of instruments adopted by the European Union.
[324] "This Convention shall not alter the rights and obligations of States Parties which arise from the agreements compatible with this Convention and which do not affect the enjoyment by other States Parties of their rights or the performance of their obligations under this Convention", Art. 311, para. 2, of the UNCLOS.
[325] "Two or more States Parties may conclude agreements modifying or suspending the operation of provisions of this Convention, applicable solely to the relations between them, provided that such agreements do not relate to a provision derogation from which is incompatible with the effective execution of the object and purpose of this Convention, and provided further that such agreements shall not affect the application of the basic principles embodied herein, and that the provisions of such agreements do not affect the enjoyment of other States Parties of their rights or the performance of their obligations under this Convention", Art. 311, para. 3.

provision of the UNCLOS relates to the "obligations under other conventions on the protection and preservation of the marine environment".[326]

From these provisions it may be generally inferred that the UNCLOS is subject to other treaties relating to marine activities, provided that they are compatible with the general principles and objectives of the UNCLOS. For instance, as regards the field of the environment, this rather broad condition is met if the other treaties assure a level of protection which is higher than, or at least as high as, that achieved under the UNCLOS. In other words, the UNCLOS is designed to operate as an "umbrella" for further global, regional and national actions. Art. 197, relating to international cooperation on a global or regional basis, expressly recognizes and mandates regional approaches.[327] In the case of the Mediterranean Sea, as it will be seen, regional cooperation already has a longstanding basis and has been significantly improved in recent years.

Cooperation among States bordering the Mediterranean and Black Seas is not only encouraged by the interplay between general and special treaties. It is also encouraged by the fact that both seas fall under the category of enclosed and semi-enclosed seas. This concept is defined by Art. 122 of the UNCLOS as follows:

> "For the purposes of this Convention, "enclosed or semi-enclosed sea" means a gulf, basin or sea surrounded by two or more States and connected to another sea or the ocean by a narrow outlet or consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more coastal States."

According to Art. 123 of the UNCLOS, States bordering such seas "should cooperate with each other in the exercise of their rights and in the performance of their duties" under the UNCLOS. To this end, they shall endeavor, directly or through an appropriate regional organization, to coordinate their activities with respect to fisheries, protection of the environment, and scientific research.

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[326] "1. The provisions of this Part [= Part XII – Protection and Preservation of the Marine Environment] are without prejudice to the specific obligations assumed by States under special conventions and agreements concluded previously which relate to the protection and preservation of the marine environment and to agreements which may be concluded in furtherance of the general principles set forth in this Convention. 2. Specific obligations assumed by States under special conventions, with respect to the protection and preservation of the marine environment, should be carried out in a manner consistent with the general principles and objectives of this Convention", Art. 237 of the UNCLOS.

[327] It may also happen that treaties concluded on the world basis have specific provisions applying to regional seas. For example, the Mediterranean and other seas are "special areas" under the MARPOL (see *supra*, para. 6.A.1).

It can be inferred that States bordering an enclosed or semi-enclosed sea are under an obligation to cooperate in good faith in order to deal with common problems. The precise content of the obligation to cooperate is dependent on the peculiar situation of each case. In general terms and beyond its several facets, an obligation to cooperate implies a duty to act in good faith in pursuing an objective and to take into account the requirements of the other interested States. In practice, such an obligation has several concrete aspects (information, consultation, negotiation, joint participation in preparing environmental impact assessments or emergency plans, etc.), depending on the different instances.[328] Countries surrounding the same enclosed or semi-enclosed sea are specially qualified for cooperation.

As regards the relations with non-bordering States, the mere fact of being a State bordering an enclosed or semi-enclosed sea does not confer more extensive rights and obligations than those already attributed to coastal States in general. As an enclosed or semi-enclosed sea is not a *mare clausum*, bordering States cannot deprive other States of rights already established under international law. The contrary is however also true, in the sense that bordering States cannot be deprived of rights that are enjoyed by coastal States in general (for example, the right to establish exclusive economic zones).[329] Under Art. 123, *d*, of the UNCLOS, bordering States shall endeavor "to invite, as appropriate, other interested States or international organizations to cooperate with them in furtherance of the provisions" of Art. 123 itself.

In the specific case of marine protected areas, in 2010 the Conference of the Parties to the CBD took note of

> "the importance of collaboration and working jointly with relevant regional initiatives, organizations and agreements in identifying ecologically or biologically significant marine areas (ESBAs), in accordance with international law, including the United Nations Convention on the Law of the Sea, in particular, in enclosed or semi-enclosed seas, among riparian countries, such as the Caspian and Black Seas, the Regional Organization for the Protection of the Marine Environment (ROPME) region, Baltic Sea, Wider Caribbean Region,

[328] As remarked by the International Court of Justice, "the parties are under an obligation to enter into negotiations with a view to arriving at an agreement, and not merely to go through a formal process of negotiation (...); they are under an obligation so to conduct themselves that the negotiations are meaningful, which will not be the case when either of them insists upon its own position without contemplating any modification of it", judgment of 20 February 1969 relating to the *North Sea Continental Shelf* case (I.C.J., *Reports*, 1969, p. 32).

[329] See *supra*, para. 5.4.

Mediterranean Sea, and other similar sea areas and to promote conservation and sustainable use of biodiversity in those areas."[330]

The two following paragraphs deal with the legal frameworks governing the establishment of marine protected area networks in the Black and Mediterranean Seas, respectively.

7.A. The Black Sea

The present legal condition of the Black Sea waters has been dealt with above, in the paragraph relating to the legal regimes governing different maritime zones as provided for in the UNCLOS.[331] In particular, it is worthwhile to recall that no waters having the legal condition of the high seas do exist in the Black Sea, having all coastal States declared an exclusive economic zone.

As the UNCLOS provisions on straits do not affect "the legal regime in straits in which passage is regulated in whole or in part by long-standing international conventions in force specifically relating to such straits",[332] the waters connecting the Mediterranean and the Black Seas (Dardanelles Strait, Sea of Marmara and Bosphorus Strait) continue to be regulated by the multilateral convention signed in Montreux on 20 July 1936.

The Black Sea is highly sensitive to anthropogenic impacts due to its almost landlocked nature. Every year, about 350 cubic kilometers of river water pours into the basin, causing a high level of pollution from land-based sources. Due to the severe environmental crisis the Black Sea has entered during the last decades, the United Nations Environment Programme (UNEP) considers it one of the most environmentally degraded regional seas on the planet.

Although being part of the UNEP Regional Seas Programme, launched in 1974, the Black Sea Programme is directly administered by the Black Sea Commission, not by UNEP. Financial and budgetary services are also managed by the programme itself. However, the

[330] CBD COP Decision X/29 (Nagoya, 2010), UNEP/CBD/COP/DEC/X/29, para. 11.
[331] See *supra*, para. 5.
[332] Art. 35 of the UNCLOS.

global Regional Seas Programme continues to act as a platform of cooperation and coordination for regional activities.

According to the UNEP-World Conservation Monitoring Centre, some 125 protected areas have been designated in the Black Sea, covering some 1.1 million hectares of coastal and marine areas.[333] Among the most significant sites including marine areas, the following could be recalled: Danube Delta Biosphere Reserve (shared by Romania and Ukraine), Vama Veche (Romania), Kholketi National Park (Georgia), Zernov's Phyllophora Field Botanical Reserve (Ukraine), Chernomorskiy Biosphere Reserve (Ukraine), and Bolshoi Utrish (Russian Federation).

7.A.1. The Bucharest Convention

In 1992, all Black Sea coastal States signed the Convention on the Protection of the Black Sea Against Pollution (Bucharest, 1992; hereinafter "Bucharest Convention"). The Bucharest Convention was ratified by all Black Sea coastal States between 1993 and 1994. It entered into force on 15 January 1994.

The Bucharest Convention applies to the entire Black Sea, with the southern limit constituted by the line joining Capes Kelagra and Dalyan.[334] Its implementation is managed by the Commission for the Protection of the Black Sea Against Pollution (also sometimes referred to as the Istanbul Commission), and its Permanent Secretariat in Istanbul, Turkey.[335]

The States parties to the Bucharest Convention undertake to ensure its application in those areas of the Black Sea where they exercise their sovereignty and jurisdiction and to "take, individually or jointly, as appropriate, all necessary measures consistent with international law and in accordance with the provisions of this Convention to prevent, reduce and control pollution thereof in order to protect and preserve the marine environment of the Black Sea".[336]

The Bucharest Convention is complemented by specific protocols, namely: the Protocol on the Protection of the Black Sea Marine Environment Against Pollution From

[333] See *Black Sea SCENE*, 2013.
[334] Art. I, para. 1, of the Bucharest Convention.
[335] On the mandate and functioning of the Istanbul Commission, see Art. XVIII of the Bucharest Convention.
[336] Art. V of the Bucharest Convention.

Land-based Sources (Bucharest, 1992), the Protocol on the Protection of the Black Sea Marine Environment Against Pollution by Dumping (Bucharest, 1992), the Protocol on Cooperation in Combating Pollution of the Black Sea Marine Environment by Oil and Other Harmful Substances in Emergency Situations (Bucharest, 1992), the Black Sea Biodiversity and Landscape Conservation Protocol to the Convention on the Protection of the Black Sea against Pollution (Sofia, 2002; hereinafter, "the BLC Protocol"), and the Protocol on the Protection of the Marine Environment of the Black Sea from Land-Based Sources and Activities (Sofia, 2009).[337]

7.A.2. The BLC Protocol

The BLC Protocol, which entered into force on 20 June 2011 and is currently binding on four out of the six Black Sea coastal States,[338] deserves a specific analysis in view of its relevance for the subject of this study. It was added to the Bucharest Convention with the explicit aim "to maintain the Black Sea ecosystem in the good ecological state and its landscape in the favourable conditions, to protect, to preserve and to sustainably manage the biological and landscape diversity of the Black Sea in order to enrich the biological resources". Its purpose is "to serve as a legal instrument for developing, harmonizing and enforcing necessary environmental policies, strategies and measures in preserving, protecting and sustainably managing nature, historical, cultural and aesthetic resources and heritage of the Black Sea states for present and future generations".[339]

The BLC Protocol applies to the Black Sea as defined in the Bucharest Convention, i.e. to the north of Capes Kalagra and Dalyan. It includes its seabed and subsoil "up to the fresh water limits". "Landscapes" also refer to terrestrial coastal areas designated by States parties, including wetlands. The Sea of Azov is also included in the BLC Protocol's area of application.[340]

The States parties to the BLC Protocol are bound to take all necessary measures to, *inter alia*: "protect, preserve, improve and manage in a sustainable and environmentally

[337] This instrument was concluded with the aim "to further strengthen and amplify the provisions of the Protocol on the Protection of the Black Sea Marine Environment Against Pollution from Land Based Sources of 21 April 1992".
[338] Bulgaria, Georgia, Ukraine, and Turkey.
[339] Art. 1 of the BLC Protocol.
[340] Art. 3 of the BLC Protocol.

sound way areas of particular biological or landscape value, notably by the establishment of protected areas according to the procedure in Annex I"; "restore and rehabilitate damaged areas of previously high biodiversity and landscape value"; and "restore and maintain in good conditions the landscape of high nature, historical, cultural and aesthetic value".[341] Additionally, States parties are under the obligation to compile inventories of the components of biological and landscape diversity in the area of application of the BLC Protocol and to identify those components important for their conservation and sustainable use within three years from the BLC Protocol's entry into force.[342]

The BLC Protocol has followed the example of the SPA Protocol, as it will be seen,[343] by envisaging the adoption of a List of Landscapes and Habitats of Black Sea Importance (hereinafter, "BSI List"). The BSI List shall be adopted "preferably within 3 years" from the BLC Protocol's entry into force, and shall include sites that "may be destroyed, or important by their nature, cultural or historical value that constitute the natural, historical and cultural heritage or present other significance for the Black Sea region".[344]

A Strategic Action Plan (SAP) for the BLC Protocol shall also be produced within three years from the entry into force of this latter, and reviewed every five years.[345] Moreover, "in the planning process leading to decisions on projects and activities that could significantly affect species and their habitats, protected areas, particularly sensitive marine areas, and landscapes", the parties "shall evaluate and take into consideration the possible direct or indirect, immediate or long term impact, including the cumulative impact of the projects and activities being contemplated according [to] criteria and objectives to be regionally developed and agreed pursuant to the [Bucharest] Convention and international experience in this matter, e.g. the Convention on Environmental Impact Assessment in a Transboundary Context (February 25, 1991, Espoo, Finland)".[346] The planning of offshore wind-energy production is certainly among the activities that would be subject to this provision. In this regard, the objectives of the "sustainable use of natural resources and promotion of

[341] Art. 4, para. 1, of the BLC Protocol.
[342] Art. 4, para. 2, of the BLC Protocol.
[343] See *infra*, para. 7.B.2.
[344] Art. 4, para. 4, of the BCL Protocol.
[345] Art. 4, para. 6, of the BLC Protocol.
[346] Art. 6 of the BLC Protocol.

environmentally friendly human activities in the coastal zone" would also come into consideration.[347]

The BLC Protocol contains a specific provision concerning the duty of public information. It is provided that States parties "shall endeavor to inform the public of the value of protected areas, species and landscapes and shall give appropriate publicity to the establishment of these areas and regulations relating thereto". They "shall also endeavor to promote the participation of all stakeholders including their public in measures that are necessary for the protection of the areas, species and landscapes concerned, including environmental impact assessments".[348]

Annex 1 to the BLC Protocol states the objective of protected areas, which is to safeguard:

> "a) representative types of coastal and marine ecosystems, wetlands and landscapes of adequate size to ensure their long-term viability and to maintain their unique biological and landscape diversity; b) habitats, biocoenoses, ecosystems or landscapes which are in danger of disappearing in their natural area of distribution or distraction in the Black Sea or which have a reduced natural area of distribution or aesthetic values; c) habitats critical to the survival, reproduction and recovery of threatened species of flora or fauna; d) sites of particular importance because of their scientific, aesthetic, landscape, cultural or educational value."

It is provided that within two years from the entry into force of the BLC Protocol, States parties shall produce criteria and guidelines for identifying areas that meet the objective stated above.

It is also envisaged that States parties take "all necessary measures to ensure integrity, sustainability and development of protected areas", namely:

> "a) the strengthening of the application of the other Protocols to the Convention and of other relevant treaties to which they are Contracting Parties; b) the prohibition of the dumping or discharge of wastes and other substances likely directly or indirectly to impair the integrity of the protected area or species; c) the regulation of the passage of ships, any stopping or anchoring; d) the regulation or prohibition of the introduction of alien species, or of genetically modified species; e) the regulation or prohibition of any activity involving the

[347] Art. 7 of the BLC Protocol.
[348] Art. 9 of the BLC Protocol.

exploration or modification of the soil or the exploration of the subsoil of the land part, the seabed or its subsoil; f) the regulations of any scientific research activity; g) the regulation or prohibition of fishing, hunting, taking of animals and harvesting of plants or their destruction, as well as trade in animals (or parts thereof) and plants (or parts thereof) which originate in protected areas; h) the regulation, and if necessary the prohibition, of any other activity or act likely to harm or disturb species or ecosystems, or that might impair the natural or cultural characteristics of the protected area; i) any other measure aimed at safeguarding ecological and biological processes and the landscapes; j) to this end, the Contracting Parties shall provide appropriate legislation to protect and enforce protection of protected areas."[349]

Within their national environmental legislation and policies, States parties to the BLC Protocol are required to take all necessary steps for the harmonization of environmental protection measures in protected areas, including management of transboundary protected areas, coordinated research and monitoring programmes in the Black Sea basin. Such measures should include for each protected area:

"a) the development and adoption of a management plan to a standard format;

b) a comprehensive integrated regional monitoring programme;

c) the active involvement of local communities in both planning and implementation, including assistance to local inhabitants who might be affected by the establishment of such areas;

d) adoption of appropriate financial mechanisms;

e) the regulation of activities including the issuing of permits;

f) training of staff as well as the development of appropriate infrastructure".

The development of national contingency plans incorporating measures for responding to incidents is also envisaged, together with coordinating instruments for the administration and management of specially protected areas covering both land and sea.[350]

7.B. The Mediterranean Sea

[349] Art. 3 of Annex 1 to the BLC Protocol.
[350] Art. 4 of Annex 1 to the BLC Protocol.

The countries bordering the Mediterranean Sea differ greatly as far as their internal political systems and levels of economic development are concerned. The Mediterranean shores also host some areas of sensitive political friction. But despite the differences existing between its riparian States and the present legal complications concerning, for instance, unsettled maritime boundaries, there are also several reasons why the Mediterranean Sea could become a privileged field of international cooperation.[351]

The Mediterranean Sea is connected to the Atlantic Ocean by the strait of Gibraltar, to the Red Sea by the Suez Canal, and to the Black Sea by a system of the straits (Dardanelles Strait, Sea of Marmara and Bosphorus Strait). From the legal point of view, Mediterranean waters fall under different regimes, as provided for in the UNCLOS.[352] It seems that the regime of transit passage, as set forth in Arts. 37-44 of the UNCLOS, applies to the strait of Gibraltar.[353] The same regime applies to several international straits within the Mediterranean, as, for instance, the strait of Bonifacio, located between the French island of Corsica and the Italian island of Sardinia. Other Mediterranean straits are governed by special regimes, different from transit passage. A regime of non-suspendable innocent passage applies to straits formed by an island of a State bordering the strait and its mainland, "if there exists seaward of the island a route through the high seas or through an exclusive economic zone of similar convenience with respect to navigational and hydrographical characteristics".[354] The strait of Messina, where navigation is at present restricted by measures adopted by Italy with the aim of preventing maritime accidents,[355] could be included in this category. On the contrary, it is doubtful whether the strait of Corfu,

[351] The concept of "peace park" network in the Mediterranean could contribute to the strengthening of both the environmental and political aspects of the relations between States in the region.
[352] On the regimes applicable to different maritime zones according to the UNCLOS and the legal condition of the Mediterranean waters see *supra*, para. 5.
[353] However, because of a declaration made on 8 April 1904 by France and the United Kingdom, it could be sustained that the strait of Gibraltar is one of the straits in which passage is regulated by long-standing international conventions (Art. 35 of the UNCLOS). On this question, see Truver, *The Strait of Gibraltar and the Mediterranean*, Alphen aan den Rijn, 1980, p. 256; Scovazzi, *Management Regimes and Responsibility for International Straits: With Special Reference to the Mediterranean Straits*, in *Marine Policy*, 1995, p. 148.
[354] Art. 38 and 45 of the UNCLOS.
[355] See decrees of the Minister of Merchant Marine of 27 March 1985 (*Gazzetta Ufficiale della Repubblica Italiana* No. 76 of 29 March 1985) and 8 May 1985 (*ibidem* No. 110 of 11 May 1985), which prohibit navigation through the strait of Messina to tankers of 50,000 gross tonnage or more carrying oil or other harmful substances.

which has been the subject of a decision of the International Court of Justice in 1949,[356] could qualify for the so-called "Messina exception".[357]

The Mediterranean Sea includes some major islands (Sicily, Sardinia, Corsica, Cyprus, Crete) and a number of smaller islands and islets. Highly populated cities, ports of worldwide significance and extended industrial areas are located along its shores. Important routes of international navigation pass through the Mediterranean waters. Although it covers only 0.8% of the surface of oceans and seas, about 30% of the world marine trade and 20% of the global volume of fuel transport passes in the Mediterranean Sea. Navies of bordering and non-bordering States cruise the Mediterranean, which is an area of major strategic importance. The protection of the Mediterranean environmental balance, which is particularly fragile because of the very slow exchange of its waters through the strait of Gibraltar, is a serious concern.

The Mediterranean became the first region to adopt an action plan in the context of the UNEP Regional Seas Programme. The legal framework developed with respect to the conservation of biological diversity and natural areas in the Mediterranean basin is of particular relevance for this study.

7.B.1. The Barcelona System

The so-called Barcelona System is a notable instance of fulfilment of the obligation to cooperate for the protection of a semi-enclosed sea.[358]

On 4 February 1975 a policy instrument, the Mediterranean Action Plan (MAP), was adopted by an intergovernmental meeting convened in Barcelona by UNEP. One of the main objectives of the MAP was to promote the conclusion of a framework convention, together with related protocols and technical annexes, for the protection of the Mediterranean

[356] In the judgment of 9 April 1949 concerning the *Corfu Channel Case* between Albania and the United Kingdom (I.C.J., *Reports*, 1949, p. 4), the Court found that "the North Corfu Channel should be considered as belonging to the class of international highways through which passage cannot be prohibited by a coastal State in time of peace" (p. 29).

[357] The problem is that the strait of Corfu is formed by an island of a State bordering the strait (Greece) and the mainland of two States (Albania and Greece).

[358] On the Barcelona system see Raftopoulos, *Studies on the Implementation of the Barcelona Convention: The Development of an International Trust Regime*, Athens, 1997; Juste Ruiz, *Regional Approaches to the Protection of the Marine Environment*, in *Thesaurus Acroasium*, 2002, p. 402; Raftopoulos & McConnell (eds.), *Contributions to International Environmental Negotiation in the Mediterranean Context*, Athens, 2004; Scovazzi, *The Developments within the "Barcelona System" for the Protection of the Mediterranean Sea against Pollution*, in *Annuaire de Droit Maritime et Océanique*, 2008, p. 201.

environment. This was done on 16 February 1976 when the Barcelona Convention and two protocols were opened to signature. The Barcelona Convention, which entered into force on 12 February 1978, is chronologically the first of the so-called regional seas agreements concluded under the auspices of the UNEP Regional Seas Programme.

In the years following the United Nations Conference on Environment and Development (Rio de Janeiro, 1992), several components of the Barcelona System underwent important changes. In 1995, the MAP was replaced by the "Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean (MAP Phase II)". Some of the legal instruments were amended. New protocols were adopted either to replace the protocols which had not been amended or to cover new subjects of cooperation. The present Barcelona System includes the following legal instruments:

a) the Convention on the Protection of the Mediterranean Sea against Pollution which, as amended in Barcelona on 10 June 1995, changed its name into Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (the amendments entered into force on 9 July 2004);

b) the Protocol for the Prevention of the Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft (Barcelona, 16 February 1976; in force from 12 February 1978), which, as amended in Barcelona on 10 June 1995, changed its name into Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea;[359]

c) the Protocol Concerning Co-operation in Combating Pollution of the Mediterranean Sea by Oil and Other Harmful Substances in Cases of Emergency (Barcelona, 16 February 1976; in force from 12 February 1978), which has been replaced by the Protocol Concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea (Valletta, 25 January 2002; in force from 17 March 2004);

d) the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources (Athens, 17 May 1980; in force from 17 June 1983), which, as amended

[359] Amendments concern, in particular, the clarification of terms defined by the Protocol, the waste or other matter authorized for dumping subject to the issue of a special permit, the ban on incineration at sea, and the procedure to follow in the event of a critical and exceptional situation.

in Syracuse on 7 March 1996, changed its name into Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities (in force from 11May 2008);

e) the Protocol Concerning Mediterranean Specially Protected Areas (Geneva, 1 April 1982; in force from 23 March 1986), which has been replaced by the SPA Protocol (Barcelona, 10 June 1995; in force from 12 December 1999);

f) the Protocol Concerning Pollution Resulting from Exploration and Exploitation of the Continental Shelf, the Seabed and its Subsoil (Madrid, 14 October 1994; in force from 24 March 2011);

g) the Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal (Izmir on 1 October 1996; in force from 18 December 2007); and

h) the Protocol on Integrated Coastal Zone Management in the Mediterranean (Madrid, 21 January 2008; in force from 24 March 2011).

The updating and the additions to the so-called Barcelona System show that the parties consider it as a dynamic body capable of being subject to re-examination and improvement, whenever appropriate. Each of the new instruments contains important innovations. The protocols even display a certain degree of legal imagination in finding constructive ways to address complex environmental problems, and have served as legal examples in other contexts as well, as seen for instance with regard to the BLC Protocol.

7.B.2. The SPA Protocol

Particularly relevant for the purpose of this study is the SPA Protocol.[360]

While the sphere of application of the previous 1982 Protocol did not cover the high seas, the SPA Protocol applies to all the maritime waters of the Mediterranean, irrespective of their legal condition, to the seabed and its subsoil and to the terrestrial coastal areas designated by each of the parties. The extension of the application of the SPA Protocol to the high seas areas was seen by its parties as necessary to protect those highly migratory

[360] See Scovazzi (ed.), *Marine Specially Protected Areas - The General Aspects and the Mediterranean Regional System*, The Hague, 1999.

marine species (such as marine mammals) which, because of their natural behaviour, do not respect the artificial boundaries drawn by man on the sea.

To overcome the difficulties arising from the fact that different kinds of national coastal zones have been proclaimed and that several maritime boundaries have yet to be agreed upon by the Mediterranean States concerned,[361] the SPA Protocol includes two disclaimer provisions:

> "Nothing in this Protocol nor any act adopted on the basis of this Protocol shall prejudice the rights, the present and future claims or legal views of any State relating to the law of the sea, in particular, the nature and the extent of marine areas, the delimitation of marine areas between States with opposite or adjacent coasts, freedom of navigation on the high seas, the right and the modalities of passage through straits used for international navigation and the right of innocent passage in territorial seas, as well as the nature and extent of the jurisdiction of the coastal State, the flag State and the port State. No act or activity undertaken on the basis of this Protocol shall constitute grounds for claiming, contending or disputing any claim to national sovereignty or jurisdiction."[362]

In other words: on the one hand, the establishment of intergovernmental cooperation in the field of the marine environment shall not prejudice all the different questions which have a legal or political nature; but, on the other hand, the very existence of such questions, whose settlement is not likely to be achieved in the short term, should neither prevent nor delay the adoption of measures necessary for the protection of the marine environment in the Mediterranean.

The SPA Protocol provides for the establishment of a List of Specially Protected Areas of Mediterranean Importance (SPAMI List).[363] The SPAMI List may include sites which "are of importance for conserving the components of biological diversity in the Mediterranean; contain ecosystems specific to the Mediterranean area or the habitats of endangered species; are of special interest at the scientific, aesthetic, cultural or educational levels".[364] The existence of the SPAMI List does not exclude the right of each party to create and manage protected areas which are not intended to be listed as SPAMIs, but deserve to be protected under its domestic legislation.

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[361] See *supra*, para. 5.4, and Annex II to this study.
[362] Art. 2, paras. 2 and 3, of the SPA Protocol. The model of the disclaimer provision was, *mutatis mutandis*, Art. IV of the Convention on the Conservation of Antarctic Marine Living Resources (Canberra, 1980).
[363] As seen above (para. 7.A.2), the idea of a list of areas of regional importance has been retained in Art. 4, para. 5, of the BLC Protocol.
[364] Art. 8, para. 2, of the SPA Protocol.

The procedures for the listing of SPAMIs are specified in detail in the SPA Protocol:

> "Proposals for inclusion in the List may be submitted:
>
> (a) by the Party concerned, if the area is situated in a zone already delimited, over which it exercises sovereignty or jurisdiction;
>
> (b) by two or more neighbouring Parties concerned if the area is situated, partly or wholly, on the high sea;
>
> (c) by the neighbouring Parties concerned in areas where the limits of national sovereignty or jurisdiction have not yet been defined."[365]

Yet the submission of a joint proposal may become a way to promote new forms of cooperation between the States concerned, irrespective of the fact that their maritime boundaries have not yet been defined.

In proposing a SPAMI, the party or parties concerned shall indicate the relevant protection and management measures, as well as the means for their implementation.[366] As paper areas would not comply with the SPA Protocol, protection, planning and management measures "must be adequate for the achievement of the conservation and management objectives set for the site in the short and long term, and take in particular into account the threats upon it".[367]

Once the areas are included in the SPAMI List, all the parties agree "to recognize the particular importance of these areas for the Mediterranean", as well as "to comply with the measures applicable to the SPAMIs and not to authorize nor undertake any activities that might be contrary to the objectives for which the SPAMIs were established".[368] This gives to the SPAMIs and to the measures adopted for their protection an *erga omnes partes* effect, whichis an effect with respect to all the parties to the SPA Protocol.

As to the relationship with third countries, it is provided that the parties shall "invite States that are not Parties to the Protocol and international organizations to cooperate in the implementation" of the SPA Protocol.[369] They also "undertake to adopt appropriate measures, consistent with international law, to ensure that no one engages in any activity

[365] Art. 9, para. 2, of the SPA Protocol.
[366] Art. 9, para. 3, of the SPA Protocol.
[367] Annex 1 to the SPA Protocol, para. D, 2.
[368] Art. 8, para. 3, of the SPA Protocol.
[369] Art. 28, para. 1, of the SPA Protocol.

contrary to the principles and purposes" of the SPA Protocol.[370] This provision aims at facing the potential problems arising from the fact that treaties, including the SPA Protocol itself, can produce rights and obligations only among parties.[371]

The SPA Protocol is completed by three annexes, which were adopted in 1996 in Monaco, namely the Common Criteria for the Choice of Protected Marine and Coastal Areas that Could be Included in the SPAMI List (Annex I),[372] the List of Endangered or Threatened Species (Annex II), the List of Species Whose Exploitation is Regulated (Annex III).[373] Under Annex I, the sites included in the SPAMI List must be "provided with adequate legal status, protection measures and management methods and means" (para. A, *e*) and must fulfil at least one of six general criteria ("uniqueness", "natural representativeness", "diversity", "naturalness", "presence of habitats that are critical to endangered, threatened or endemic species", "cultural representativeness"). The SPAMIs must be awarded a legal status guaranteeing their effective long term, protection (para. C.1) and must have a management body, a management plan and a monitoring programme (paras. from D.6 to D.8). Moreover, "in the case of areas situated, partly or wholly, on the high sea or in a zone where the limits of national sovereignty or jurisdiction have not yet been defined, the legal status, the management plan, the applicable measures and the other elements provided for in Article 9, paragraph 3, of the Protocol will be provided by the neighbouring Parties concerned in the proposal for inclusion in the SPAMI List" (para. C.3).[374]

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[370] Art. 28, para. 2, of the SPA Protocol. Also this provision is shaped on a precedent taken from the Antarctic Treaty System: "Each of the Contracting Parties undertake to exert appropriate efforts, consistent with the Charter of the United Nations, to the end that no one engages in any activity in Antarctica contrary to the principles or purposes of the present Treaty" (Art. X of the 1959 Antarctic Treaty).

[371] See *supra*, para. 5.6.

[372] It has been remarked that "the CBD EBSA criteria provide a helpful supplement to the older SPAMI criteria in that they provide more specific operational guidance" (doc. UNEP/CBD/EW-BCS&IMA/1/2 of 22 December 2009, Annex IV, para. 1, *a*).

[373] Important tasks for the implementation of the SPA Protocol, such as assisting the parties in establishing and managing specially protected areas, conducting programmes of technical and scientific research, preparing management plans for protected areas and species, formulating recommendations and guidelines and common criteria, are entrusted with the UNEP – Mediterranean Action Plan, Regional Activity Centre for Specially Protected Areas ((MAP RAC/SPA).

[374] Under Art. 9, para. 3, of the SPA Protocol, "Parties making proposals for inclusion in the SPAMI List shall provide the Centre with an introductory report containing information on the area's geographical location, its physical and ecological characteristics, its legal status, its management plans and the means for their implementation, as well as a statement justifying its Mediterranean importance; (a) where a proposal is formulated under subparagraphs 2 (b) and 2 (c) of this Article, the neighbouring Parties concerned shall consult each other with a view to ensuring the consistency of the proposed protection and management measures, as well

At the Meeting of the Parties held in 2001, the first group of SPAMIs was inscribed in the list, namely, the island of Alborán (Spain), the sea bottom of the Levante de Almería (Spain), Natural Park of Cape Gata-Nijar (Spain), Mar Menor and the Oriental Mediterranean Zone of the Region of Murcia Coast (Spain), Natural Park of Cape Creus (Spain), Medas Islands (Spain), Columbretes Islands (Spain), Port-Cros National Park (France), the Kneiss Islands (Tunisia), La Galite Archipelago, Zembra and Zembretta National Park (Tunisia) and the French-Italian-Monegasque sanctuary for marine mammals (Pelagos Sanctuary, jointly proposed by the three States concerned).[375]

Other SPAMIs have subsequently been added, namely, the Archipelago of Cabrera National Park (Spain) and Maro-Cerro Gordo Cliffs (Spain) in 2003, Kabyles Bank Marine Reserve (Algeria), Habibas Islands (Algeria) and Marine Protected Area of Portofino (Italy) in 2005, Miramare Marine Protected Area (Italy), Plemmirio Protected Area (Italy), Tavolara – Punta Coda Cavallo Marine Protected Area (Italy) and Marine Protected Area and Natural Reserve of Torre Guaceto (Italy) in 2008, Natural Reserve of Bouches de Bonifacio (France), Marine Protected Area Capo Caccia – Isola Piana (Italy), Marine Protected Area Punta Campanella (Italy) and Al-Hoceima National Park (Morocco) in 2009, Blue Coast Marine Park (France), Embiez Archipelago (France), Porto Cesareo Marine Protected Area (Italy), Capo Carbonara Marine Protected Area (Italy), Marine Protected Area of Penisola del Sinis – Isola di Mal di Ventre (Italy), Tyre Coast Nature Reserve (Lebanon) and Palms Islands Nature Reserve (Lebanon) in 2012.

An extraordinary Meeting of the MAP Focal Points for Specially Protected Areas was held in Istanbul in June 2010.[376] A number of "operational criteria for identifying SPAMIs in areas of open seas, including the deep sea" have been identified.[377] A list of "priority

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as the means for their implementation; (b) proposals made under paragraph 2 of this Article shall indicate the protection and management measures applicable to the area as well as the means of their implementation".

[375] See *infra*, para. 7.B.3.

[376] For the legal aspect see *International Legal Instruments Applied to the Conservation of Marine Biodiversity in the Mediterranean Region and Actors Responsible for the Implementation and Enforcement*, doc. UNEP(DEPI)/MED WG.348/Inf.7 of 14 May 2010.

[377] See Annex 1 to doc. UNEP(DEPI)/MED WG.348/3 of 28 May 2010. It should be borne in mind, as already recalled, that terms such as "open seas" and "deep sea" have no precise meaning in international law. For this reason, when developing legal approaches, it would be preferable to comply with the legal terminology contained in the UNCLOS.

conservation areas lying in the open seas, including the deep sea, likely to contain sites that could be candidates for the SPAMI List" was drafted.[378]

As of today, the SPAMI List includes 32 sites. With the exception of the Pelagos Sanctuary, all the present SPAMIs are however limited to coastal waters. Three basic conditions are needed to achieve the objective of establishing a network of marine protected areas beyond national jurisdiction, namely, scientific foundations, a legal framework, and the political will. In the Mediterranean, a convincing scientific basis already supports such an objective, and priority areas have already been identified on the basis of relevant criteria. The considerations developed so far also show that an adequate international legal framework is also already in place and requires to be strengthened.

7.B.3. The Pelagos Sanctuary

One of the present SPAMIs is the Pelagos Sanctuary for marine mammals, established under an Agreement signed in Rome in 1999 by France, Italy and Monaco.[379] This is the first treaty ever concluded with the specific objective to establish a sanctuary for marine mammals. It entered into force on 21 February 2002.

The sanctuary extends for about 96,000 km² of waters located between the continental coasts of the three countries and the islands of Corsica (France) and Sardinia (Italy). It encompasses waters having the different legal condition of maritime internal waters, territorial sea, ecological protection zone and high seas. They are inhabited by the eight cetacean species regularly found in the Mediterranean, namely the fin whale (*Balaenoptera physalus*), the sperm whale (*Physeter catodon*), Cuvier's beaked whale (*Ziphius cavirostris*), the long-finned pilot whale (*Globicephala melas*), the striped dolphin (*Stenella coeruleoalba*), the common dolphin (*Delphinus delphis*), the bottlenose dolphin (*Tursiops truncatus*) and Risso's dolphin (*Grampus griseus*). In this area, water currents

[378] See Annex 2 to doc. UNEP(DEPI)/MED WG.348/3 of 28 May 2010. The same consideration of note 334 applies.

[379] See LeHardy, *La protection des mammifères marins en Méditerranée – L'accord créant le sanctuaire corso-liguro-provençal*, in *Revue de Droit Monégasque*, No. 3, 2000, p. 95; Scovazzi, *The Mediterranean Marine Mammals Sanctuary*, in *International Journal of Marine and Coastal Law*, 2001, p. 132.

create conditions favouring phytoplankton growth and abundance of krill (*Meganyctiphanes norvegica*), a small shrimp that is preyed upon by pelagic vertebrates.

The parties to the Agreement undertake to adopt measures to ensure a favourable state of conservation for every species of marine mammal and to protect them and their habitat from negative impacts, both direct and indirect.[380] They prohibit in the sanctuary any deliberate "taking" (defined as "hunting, catching, killing or harassing of marine mammals, as well as the attempting of such actions") or disturbance of mammals. Non-lethal catches may be authorized in urgent situations or for *in-situ* scientific research purposes.[381]

As regards the crucial question of driftnet fishing, the parties undertake to comply with the relevant international and European Union regimes.[382] This is an implicit reference to European Council Regulation No. 1239/98 of 8 June 1998, which prohibited as from 1st January 2002 the keeping on board, or the use for fishing, of one or more driftnets used for the catching of the species listed in an annex. The parties to the Agreement undertake to exchange their views, if appropriate, in order to promote, in the competent fora and after scientific evaluation, the adoption of regulations concerning the use of new fishing methods that could involve the incidental catch of marine mammals or endanger their food resources, taking into account the risk of loss or discard of fishing instruments at sea.[383]

The parties undertake to exchange their views with the objective to regulate and, if appropriate, prohibit high-speed offshore races in the sanctuary.[384] They also undertake to regulate whale watching activities for purposes of tourism.[385]

The parties are bound to hold regular meetings to ensure the application of and follow up of the Agreement.[386] In this framework, they are required to encourage national and international research programmes, as well as public awareness campaigns directed at professional and other users of the sea and non-governmental organisations, relating *inter alia* to the prevention of collisions between vessels and marine mammals and the communication to the competent authorities of the presence of dead or distressed marine

[380] Art. 4 of the Agreement.
[381] Art. 7, *a*, of the Agreement.
[382] Art. 7, *b*, of the Agreement.
[383] Art. 7, *c*, of the Agreement.
[384] Art. 9 of the Agreement.
[385] At. 8 of the Agreement. Whale watching for commercial purposes, which is a benign way of exploiting marine mammals, is already carried out in the sanctuary by a certain number of vessels.
[386] Art. 12, para. 1, of the Agreement.

mammals.[387] Criticism has however been addressed towards the lack of a proper management body of the Pelagos Sanctuary.[388]

From the legal point of view, the most critical aspect of the Agreement is the provision on the enforcement on the high seas of the measures agreed upon by the parties. Art. 14 provides as follows:

> "1. Dans la partie du sanctuaire située dans les eaux placées sous sa souveraineté ou juridiction, chacun des Etats Parties au présent accord est compétent pour assurer l'application des dispositions y prévues.
>
> 2. Dans les autres parties du sanctuaire, chacun des Etats Parties est compétent pour assurer l'application des dispositions du présent accord à l'égard des navires battant son pavillon, ainsi que, dans les limites prévues par les règles de droit international, à l'égard des navires battant le pavillon d'Etats tiers."[389]

In the present legal condition of Mediterranean waters,[390] Art. 14, para. 2, of the Agreement gives the parties the right to enforce on the high seas its provisions with respect to ships flying the flag of third States "within the limits established by the rules of international law". This wording brings an element of ambiguity into the picture, as it can be interpreted in two different ways. Under the first interpretation, the parties cannot enforce the provisions of the Agreement in respect of foreign ships, as such an action would be an encroachment upon the freedom of the high seas. The second interpretation is based on the fact that all the waters included in the sanctuary would fall within the exclusive economic zones of one or another of the three parties if they decided to establish such zones. With the creation of the sanctuary, the parties have limited themselves to the exercise of only one of the rights which are included in the broad concept of the exclusive economic zone. This seems sufficient to reach the conclusion that the parties are already entitled to enforce the rules applying in the sanctuary also in respect of foreign ships which are found within its boundaries.

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[387] Art. 12, para. 2, of the Agreement.

[388] Notarbartolo di Sciara, *The Pelagos Sanctuary for the Conservation of Mediterranean Marine Mammals: An Iconic High Sea MPA in Dire Straits*, Paper presented at the 2nd International Conference on Progress in Marine Conservation in Europe (Stralsund, 2009).

[389] "1. In the part of the sanctuary located in the waters subject to its sovereignty or jurisdiction, any of the States Parties to the present agreement is entitled to ensure the enforcement of the provisions set forth by it. 2. In the other parts of the sanctuary, any of the States Parties is entitled to ensure the enforcement of the provisions of the present agreement with respect to ships flying its flag, as well as, within the limits established by the rules of international law, with respect to ships flying the flag of third States" (unofficial translation).

[390] See *supra*, para. 5.4.

7.B.4. Other calls for the establishment of marine protected areas in the Mediterranean Sea

Calls for the establishment of marine protected areas covering areas beyond national jurisdiction in the Mediterranean have been made by a number of other governmental and non-governmental organizations.

The workshop of the International Commission for the Scientific Exploration of the Mediterranean Sea (CIESM), held in Siracusa in 2010, discussed eight "coast-to-coast international marine parks", to be established under a "marine peace park paradigm". They are considered as essential to the proper functioning of large Mediterranean ecosystems.

The meeting of the IUCN Group of Experts for the Improvement of the Governance of the Mediterranean Sea, held in Procida in 2010, stressed the importance, as future MPAs, of three canyon systems located in the Gulf of Lions, the Adriatic Sea and the Aegean-Levantine Sea.

In 2009, Greenpeace International proposed a network of marine reserves covering about 40% of the Mediterranean high seas and including areas around the Balearic Islands and in the Sicilian Channel.[391]

7.C. The Black Sea and the Mediterranean Sea

Two treaties relevant for marine protected areas apply to both the Black and the Mediterranean Seas and their connecting waters.

7.C.1. The General Fisheries Commission for the Mediterranean

The General Fisheries Council for the Mediterranean was established in 1949 as an institution under the auspices of the FAO to coordinate activities related to fishery

[391] Greenpeace, *Mediterranean Marine Governance*, 2009, p. 9.

management, regulation and research in the Mediterranean and Black Seas and connecting waters. In 1998, the institution was reformed and renamed the General Fisheries Commission for the Mediterranean (GFCM). It now has twenty-four members, including one non-Mediterranean State (Japan) and the European Union. The area covered by the GFCM Agreement includes both the high seas and marine areas under national sovereignty or jurisdiction.

The GFCM has the purpose of promoting the development, conservation, rational management and best utilization of all marine living resources, as well as the sustainable development of aquaculture in the area falling under its competence. Particularly notable are the measures on the establishment of fisheries restricted areas in order to protect the deep sea sensitive habitats, namely Recommendation 30/2006/3, adopted in 2006, which prohibits fishing with towed dredges and bottom trawl nets within "Lophelia reef off Capo Santa Maria di Leuca", "The Nile delta area cold hydrocarbon seeps" and "The Eratosthenes Seamount", and recommendation 33/2009/1, adopted in 2009, on the fisheries restricted area in the Gulf of Lions. Among the other measures adopted within the GFCM framework, Recommendation 2005/1 on the management of certain fisheries exploiting demersal and deepwater species can be recalled, insofar as it prohibits the use of towed dredges and trawl nets fisheries at depths beyond 1000m.[392] Under Recommendation 31/2007/2, the GFCM Secretariat is requested to cooperate with the Pelagos Sanctuary Secretariat on the exchange of data.

7.C.2. ACCOBAMS

ACCOBAMS is a regional treaty which applies to both Mediterranean and Black Seas. The main obligations of the parties to ACCOBAMS are to "take co-ordinated measures to achieve and maintain a favourable conservation status for cetaceans" and to "prohibit and take all necessary measures to eliminate, where this is not already done, any deliberate taking of cetaceans".[393] ACCOBAMS provides, *inter alia*, that the parties shall endeavour to

[392] On these measures, see also *supra*, para. 5.5.

[393] Art. II, para. 1, of ACCOBAMS. Under Art. I, para. 3, the term "taking" is to be intended in the very broad meaning as it is defined in Art. I, para. 1, *i*, of CMS, that is: "(…) taking, hunting, fishing, capturing, harassing, deliberate killing, or attempting to engage in any such conduct".

establish and manage specially protected areas for cetaceans corresponding to the areas which serve as their habitats or provide important food resources for them.[394]

In 2007 the Meeting of the parties to ACCOBAMS adopted Resolution 3.22, which recommends to the parties to give full consideration to the creation of eighteen marine protected areas for cetaceans (for example, in the Alboran Sea, in the North-East Adriatic, in the Strait of Sicily, in the Eastern Ionian Sea and the Gulf of Corinth, in the Northern Sporades, in the Northern Aegean Sea, in the Dodecanese). This approach was confirmed in Resolution 4-15 (*Marine Protected Areas of Importance for Cetacean Conservation*), whereby the Meeting of the Parties held in 2010 "encourages the States concerned to promote the institution of the areas of special importance for cetaceans in the ACCOBAMS area, as listed in the Annex to this Resolution and to ensure their effective management" (para. 5).

8. Marine Protected Areas in the Relevant Legislation of the European Union

The European Union is an international organization to which twenty-eight European States are members. The competences of the European Union, which are exclusive in certain fields, are shared with the member States in other fields. For what matters here, the European Union has exclusive competence for fisheries management and conservation of biological resources within European Union waters, and shared competence with its member States in the field of environmental protection, including the marine environment.

On 20 April 2012, the European Parliament adopted a resolution entitled *Our life insurance, our natural capital: an EU biodiversity strategy to 2020*. This instrument follows up on a communication tabled by the European Commission in May 2011.

In this recent instrument, the European Parliament deplored the fact that the European Union failed to meet its 2010 biodiversity target, and expressed its support for the new European Union "Biodiversity Strategy to 2020", including all its targets and actions. In this regard, the Parliament emphasized that the real test for the European Union's commitment to achieving the biodiversity target is not the new strategy, but rather the

[394] Annex 2 to ACCOBAMS, Art. 3.

forthcoming reforms of, *inter alia*, the Common Fishery Policy and the Multiannual Financial Framework. The Parliament also pointed out that the failure of the first strategy had been caused by the inadequate degree to which biodiversity protection was integrated into other European Union policies.[395]

In the resolution, the European Parliament deplored greatly the delay in designating marine sites in the Natura 2000 network, and highlighted the "urgent need to step up efforts to protect oceans and marine environments, both through European Union action and by improving international governance of oceans and areas beyond national jurisdiction". It also stressed the need for international cooperation and coordination, as "no one country can deal with the problem of biodiversity loss, particularly in marine ecosystems".[396]

The European Parliament welcomed the proposal of the European Commission for the reform of the Common Fishery Policy, which should guarantee the implementation of the ecosystem approach, and also called on the Commission and the member States to implement marine protected areas in which economic activities, including fishing, are subject to strengthened ecosystem-based management. Moreover, the Parliament stressed that there are still large gaps in knowledge regarding the state of marine ecosystems and fisheries resources, and called for increased efforts in the area of marine research. The establishment of a "European coastguard" was also called for, in order to boost common monitoring and inspection capacity and ensure enforcement.[397]

Many European Union instruments touch upon the marine environment, in particular those dealing with fisheries, maritime transportation and industry, aquaculture, marine scientific research, energy, as well as important elements of environmental policy such as water. The following paragraphs focus on the establishment of marine protected areas networks in European waters.

8.1. The Natura 2000 Network

[395] Para. 8 of the resolution.
[396] Paras. 28-29 and 80 of the resolution.
[397] Paras. 80-82 and 84 of the resolution.

The Habitats Directive and Directive 79/409 of 2 April 1979 on the conservation of wild birds (hereinafter, "Birds Directive") represent together the foundation of the European Union legislation laying down biodiversity related obligations.[398] The objective of the directives in question is twofold: on the one hand, to protect species in their own right across the European territory through species-based provisions; on the other hand, to conserve the core habitats of certain rare and endangered species through habitat-protection provisions. In order to achieve this second aim, the two directives require the protection of key sites listed in the respective annexes. Together, these sites form part of the Natura 2000 Network.

Under the Habitats Directive, core sites need to be protected for the habitat types listed in Annex I and for the species listed in Annex II. The latter includes several Mediterranean marine animal species, such as seals, cetaceans and the two species of marine turtle known to nest on the beaches of European Union member States and to reproduce in the waters thereof (*Caretta caretta* and *Chelonia mydas*).

Member States are first required to propose their national list of possible Sites of Community Importance (SCIs), based on scientific grounds only, and without taking into account any economic aspect. These proposed SCIs are then examined to ensure that they offer sufficient coverage for the protected species and habitat types concerned, before they are approved by the European Commission. Member States then have six years to designate the approved SCIs as Special Areas of Conservation (SAC), by which time they must also establish the necessary conservation measures to maintain and restore the habitats and species at a favourable conservation status. One criterion for site selection relates to sites that represent outstanding examples of typical characteristics of specific biogeographical regions, including the Mediterranean.

Under the Birds Directive, core sites need to be classified for approximately 190 species of birds listed in Annex I. Member States must also classify sites for other regularly occurring migratory bird species not listed in Annex I, bearing in mind the need to protect

[398] In 2004, a special regime (Directive 2004/35 of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage) was established for compensation of environmental damage, whether direct or indirect, to species and natural habitats protected under the Habitats Directive.

their breeding, moulting and wintering areas and staging posts along their migration routes (for instance, wetlands of national importance under the Ramsar Convention). These sites are called Special Protection Areas (SPAs) and are included directly into the European Natura 2000 Network.

Art. 6 of the Habitats Directive, in paras. 1 and 2, defines how Natura 2000 sites are to be managed and protected. Member States must take appropriate conservation measures to maintain and restore to a "favourable conservation status" the habitats and species for which the site has been designated, as well as avoid damaging activities that could significantly disturb these species or deteriorate the habitats of the protected species or habitat types.

The same provision of the Habitats Directive, in paras. 3 and 4, lays down the procedure to be followed by member States when planning new developments that might affect a Natura 2000 site. This procedure applies to SCIs, SACs and SPAs, and relates also to plans and projects to be implemented outside the Natura 2000 Network, but which could have a significant effect on the conservation of species and habitats within a Natura 2000 site. The procedure essentially requires that a plan or project having a likely significant negative effect on a Natura 2000 site undergoes an "appropriate assessment" to study these effects in detail and to see how they relate to the conservation objectives of the site concerned.[399]

"Guidelines for the Establishment of the Natura 2000 Network in the Marine Environment – Application of the Habitats and Birds Directive" have been adopted by the European Commission in 2007.[400] Legal drafters in the member States of the European Union should be familiar with these guidelines.

The 6th Environmental Action Programme (EAP) of the European Community (2002-2012) identified "nature and biodiversity" as one of the priority themes for action. Objectives and priority areas for action on nature and biodiversity laid down by the European Parliament and the Council in the 6th EAP included, *inter alia*, the establishment of

[399] For a more detailed analysis of the procedure set forth in the Habitats Directive for the planning of new developments in a Natura 2000 site, see *infra*, para. 8.1.
[400] On the scope of application of the Habitats Directive in the marine environment, see *supra*, para. 5.4.

the Natura 2000 network, the implementation of the necessary technical and financial instruments and measures required for the protection, outside the Natura 2000 areas, of species protected under the Habitats and Birds Directives, as well as the protection of marine areas.

A public consultation for the development of the 7th EAP was carried out between 12 March and 1 June 2012, aiming at collecting the views of all stakeholders, at the European Union and national level, and the public at large on the environment policy priorities up to 2020. In its resolution of 20 April 2012 on the review of the 6th EAP and the setting of priorities for the 7th *Environment Action Programme – A Better Environment for a Better Life*, the European Parliament

> "Underlines the importance of acting now, in order to set the EU on the right track to fully meet its own biodiversity 2020 headline target, as well as its global commitments on protecting biodiversity, as we cannot afford to fail again, and of planning sufficient resources for the conservation of the Natura 2000 Network; (…).[401]

8.2. The Marine Strategy Framework Directive

Directive 2008/56/EC of 17 June 2008, establishing a framework for community action in the field of marine environmental policy (hereinafter, Marine Strategy Framework Directive) aims to establish a framework within which European Union member States shall take the necessary measures to achieve or maintain good environmental status[402] in European Union's waters by 2020 at the latest, and to protect the resources based upon which marine-related economic and social activities depend. In view of the dynamic nature of marine ecosystems and their natural variability, and given that the pressures and impacts on them may vary with the evolvement of human activities, the directive acknowledges that "the determination of good environmental status may have to be adapted over time".[403]

[401] Para. 38 of the resolution.
[402] The Marine Strategy Framework Directive defines both "environmental status" and "good environmental status" in its Art. 3, paras. 4-5.
[403] Preambular para. 34 of the Marine Strategy Framework Directive.

The Marine Strategy Framework Directive constitutes the environmental pillar of the Integrated Maritime Policy of the European Union.[404] It applies to the waters, seabed and subsoil on the seaward side of the baseline from which the breadth of the territorial sea is measured, extending to the outmost reach of the areas under the jurisdiction of each European Union member State, in accordance with the UNCLOS,[405] as well as to coastal waters as defined by Directive 2000/60/EC.[406]

According to preambular para. 6 of the Marine Strategy Framework Directive, the establishment of marine protected areas, including areas already designated under the Habitats Directive and under agreements to which the European Union or member States concerned are parties, is an important contribution to the achievement of good environmental status.

Preambular para. 10 of the Marine Strategy Framework Directive acknowledges that "the diverse conditions, problems and needs of the various marine regions or subregions making up the marine environment in the Community require different and specific solutions". The Mediterranean and Black Seas are among the four marine regions identified by Art. 4, para. 1, of the directive. The Mediterranean Sea is further divided into the subregions "Western Mediterranean Sea", "Adriatic Sea", "Ionian Sea and Central Mediterranean Sea" and "Aegean-Levantine Sea". It is provided that each member State shall, in respect of each marine region or subregion concerned, develop a marine strategy for its marine waters in accordance with the following plan of action:

> "a) preparation: (i) an initial assessment, to be completed by 15 July 2012 of the current environmental status of the waters concerned and the environmental impact of human activities thereon, in accordance with Article 8; (ii) a determination, to be established by 15 July 2012 of good environmental status for the waters concerned, in accordance with Article 9(1); (iii) establishment, by 15 July 2012, of a series of environmental targets and associated indicators, in accordance with Article 10(1); (iv) establishment and implementation, by 15 July 2014 except where otherwise specified in the relevant Community legislation, of a monitoring programme for ongoing assessment an regular updating of targets, in accordance with Article 11(1);

[404] See COM(2007) 575 final.
[405] With the exception of waters adjacent to the French Overseas Departments and Collectivities and other territories (see Art. 3, para. 1, *a*, of the Marine Strategy Framework Directive).
[406] On this directive see *infra* in this para.

b) programme of measures: (i) development, by 2015 at the latest, of a programme of measures designed to achieve or maintain good environmental status, in accordance with Article 13(1), (2) and (3); (ii) entry into operation of the programme provided for in point (i), by 2016 at the latest, in accordance with Article 13(10)."[407]

To achieve the coordination needed for the development of marine strategies, European Union member States "shall, where practical and appropriate, use existing regional institutional cooperation structures, including those under Regional Sea Conventions, covering that marine region or subregion".[408]

Programmes or measures established pursuant to the directive "shall include spatial protection measures, contributing to coherent and representative networks of marine protected areas, adequately covering the diversity of the constituent ecosystems such as special areas of conservation under the Habitats Directive, special protection areas under the Birds Directive, and marine protected areas as agreed by the Community of Member States concerned in the framework of international or regional agreements to which they are parties".[409] It is also provided that, "by 2013 at the latest, Member States shall make publicly available, in respect of each marine region or subregion, relevant information on the areas" referred to just above.[410] Member States are under the obligation to notify the European Commission and any other member State concerned of their programmes of measures within three months of their establishment, and such programmes are to be made operational within one year of their establishment.[411] Member States shall also ensure that, in respect of each marine region or subregion concerned, marine strategies are kept up to date.[412]

[407] Art. 5 of the Marine Strategy Framework Directive.
[408] Art. 6, para. 1, of the Marine Strategy Framework Directive. For the policy aspects of the European Union action see, in general, European Commission, *Progress Report on the EU's Integrated Maritime Policy*, doc. SEC(2009) 1343 of 2010, and, as regards the Mediterranean, the Communication from the European Commission to the Council and the European Parliament *Towards an Integrated Maritime Policy for better Governance in the Mediterranean*, doc. COM(2009) 466 final of 11 September 2009. For some general considerations on international cooperation for the Mediterranean, see European Commission – EuropeAid Cooperation Office, *Study on the Current Status of Ratification, Implementation and Compliance with Maritime Treaties Applicable to the Mediterranean Sea Basin*, Part 2, December 2009, para. 10; IUCN, *Towards a better Governance of the Mediterranean*, Gland, 2010.
[409] Art. 13, para. 4, of the Marine Strategy Framework Directive.
[410] Art. 13, para. 6, of the Marine Strategy Framework Directive.
[411] Art. 13, paras. 9-10, of the Marine Strategy Framework Directive.
[412] Art. 17 of the Marine Strategy Framework Directive.

The Marine Strategy Framework Directive has now entered the final, crucial phase of the first cycle of its implementation. On the basis of the information provided by member States by 2013, it is envisaged that the European Commission shall report by 2014 on progress in the establishment of marine protected areas, having regard to existing obligations under applicable European legal instruments and other international commitments of the regional economic integration organization and its member States.[413] The report of the European Commission, which shall be submitted to the European Parliament and to the Council, will serve as an important text of reference in the context of CoCoNet. The Marine Strategy Framework Directive itself will be reviewed by 15 July 2023 by the European Commission, which shall propose, where appropriate, the necessary amendments.[414]

The **Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (so-called Water Framework Directive) is closely linked to the Marine Strategy Framework Directive in so far it sets the goal of achieving good status of all European ground and surface waters, including coastal waters.**[415]

Lastly, Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment (so-called EIA Directive) deserves a mention, since it contains the obligation binding on all European Union member States to carry out environmental impact assessments for projects and activities both on land and sea. The EIA Directive was amended in 1997,[416] **2003**[417] **and 2009.**[418] The initial Directive of 1985 and its three amendments have been then codified in Directive 2011/92/EU of 13 December 2011. In June 2010, the European Commission launched a

[413] Art. 21 of the Marine Strategy Framework Directive.
[414] Art. 23 of the Marine Strategy Framework Directive.
[415] According to Art. 2, para. 7, of the Water Framework Directive, "Coastal water means surface water on the landward side of a line, every point of which is at a distance of one nautical mile on the seaward side from the nearest point of the baseline from which the breadth of territorial waters is measured, extending where appropriate up to the outer limit of transitional waters".
[416] Council Directive 97/11/EC of 3 March 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment.
[417] Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC.
[418] Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006.

public consultation on the review of the instrument, concluded by a Conference for the 25th anniversary of the EIA Directive. As a result of the review process, on 26 October 2012 the European Commission adopted a proposal for a new instrument that would amend the current EIA Directive by, *inter alia*, improving current levels of environmental protection.[419]

8.3. The Marine Spatial Planning and Integrated Coastal Management Draft Directive

Between March and May 2011, the European Commission organized a public consultation to gather input from stakeholders on the status and future of marine spatial planning and integrated coastal management in the European Union. The results of this consultation confirmed that conflicts in the use of sea space are becoming more frequent in European waters. Increasing competition for maritime space – for fishing, renewable energy, aquaculture, and other growth areas – highlights the need for efficient management, to avoid conflict and create synergies between different human activities. Marine spatial planning[420] and integrated coastal management[421] are complementary policy tools which respond to this need, intended for public authorities and stakeholders to apply a coordinated, integrated approach.

The impact assessment conducted by the European Commission on this theme concluded that

> "even though non-binding options offer some advantages, a legally binding approach by means of a Directive is the most appropriate instrument which can ensure predictability, stability, and transparency of maritime spatial planning and integrated coastal management, while safeguarding proportionality and subsidiarity by leaving the flexibility of implementation to Member State and not interfering with Member State competences. A

[419] See COM(2012) 628 final.
[420] In 2008, the European Commission published its *Roadmap for Maritime Spatial Planning – Achieving Common Principles in the EU* (COM(2008) 791 final), followed by a 2010 Communication *Maritime Spatial Planning in the EU – Achievements and Future Development* (COM(2010) 771 final).
[421] See Recommendation of the European Parliament and of the Council of 30 May 2002 concerning the implementation of Integrated Coastal Zone Management in Europe.

> Directive is also the most appropriate option to guarantee that timelines for implementation are coherent with the timeframes of other relevant EU legislation and policy initiatives (…)."[422]

Accordingly, in March 2013, the European Commission proposed a draft Directive to improve the planning of maritime activities at sea and the management of coastal areas. The proposal leaves the planning of details to member States, without interfering with their prerogatives in terrestrial planning. Its aim, however, is very ambitious in scope, since it provides for member States to establish processes that cover the full cycle of problem identification, information collection, planning, decision-making, management, monitoring of implementation, and stakeholder participation.[423]

The proposed instrument does not set new targets, but aims at reflecting, integrating and linking objectives already established under the relevant European Union policies and legislation. The proposed draft also supports the implementation of the Europe 2020 Strategy.

The draft Directive will be considered by the Council of the European Union and the European Parliament. Once adopted, the new initiative will become legally binding on European Union member States. The proposal itself acknowledges that "the timely transposition of the provisions of this Directive is essential since the EU has adopted a number of policy initiatives that are to be implemented by the year 2020 and which this Directive aims to support. The shortest possible deadline for the transposition of this Directive should therefore be adopted".[424]

[422] Para. 2.2 of the Explanatory Memorandum included in the Proposal for a Directive of the European Parliament and of the Council Establishing a Framework for Maritime Spatial Planning and Integrated Coastal Management, COM(2013) 133 final. In particular, regarding the choice of instrument, the Commission clarified that subsidiarity and proportionality considerations led to the conclusion that a Regulation would not be appropriate.
[423] Para. 3.1 of the Explanatory Memorandum.
[424] Preambular para. 28 of the draft Directive.

CHAPTER III

INDICATORS FOR EFFECTIVE NATIONAL LEGAL FRAMEWORKS FOR MARINE PROTECTED AREA NETWORKS

In most cases, marine protected areas are established under a general domestic legislation which covers both the substantial and institutional aspects of the matter. It would be impossible to analyze hereunder all the aspects of the domestic legislation of the Mediterranean and Black Seas coastal States that show a great variety of approaches (for example: in certain cases marine protected areas fall under a specific legislation; in others, they are covered by the legislation on protected areas in general; in certain cases, the competence in this field is granted to national authorities; in others, it is also given to local territorial entities).

It seems more useful to present some general considerations on the factors that are known as being critical in determining the effectiveness of the protective legal regime established at the domestic level. These factors, under a different perspective, can be considered as "indicators" for effective national legal frameworks for marine protected areas networks.[425]

The following paragraphs often use the SPA Protocol as a reference legal tool, in the exercise of identifying the above-mentioned effectiveness' indicators. In fact, compared to other legal instruments in place at the international and regional level, the SPA Protocol sets

[425] See Shine & Scovazzi, *Mediterranean Countries' Needs for Legal, Policy and Institutional Reforms to Strengthen the Management of Existing Marine Protected Areas*, doc. UNEP(DEPI)/MED WG.309/Inf.5 rev. 1 of 27 March 2007.

out in more detail what national legislation should envisage for planning, managing and monitoring a marine protected area in an effective manner. At the same time, this instrument has proved being flexible enough to meet all the peculiarities of the current and future legal conditions of the Mediterranean waters, which constitute one of the focuses of the present study.

9. Identification of Relevant Issues and Definition of Clear Management Objectives

When planning the establishment of a marine protected area, the first step should consist ofidentifying all the issues – environmental, social, economic and institutional – that need to be addressed in a geographically defined area, and their careful assessment. This stage includes the documentation of baseline conditions, the identification of all major local stakeholders and their interests, the employment of a stakeholder-based planning team to review the assessments, and the selection of the issues upon which the management initiative should focus its efforts.

Defining clear goals and management objectives for a given marine protected area is the second key component of the process in question. In fact, management objectives will be used as the guiding statements for all subsequent decisions relating to the regulation of human activities within the protected site and they will also serve to enact international and national priorities in the field of resource usage and conservation. Management objectives that are poorly framed weaken the ability of the management plan to properly address all the issues which have been identified for a particular area. Instead, objectives that are clear, well-defined and adequately framed with respect to the context and status of a marine protected area greatly enhance its chances of success.

Art. 4 of the SPA Protocol lists a series of management objectives for specially protected areas in the Mediterranean:

> "(a) to safeguard representative types of coastal and marine ecosystems of adequate size to ensure their long-term viability and to maintain their biological diversity;

(b) to safeguard habitats which are in danger of disappearing in their natural area of distribution in the Mediterranean or which have a reduced natural area of distribution as a consequence of their regression or on account of their intrinsically restricted area;

(c) to safeguard habitats critical to the survival, reproduction and recovery of endangered, threatened or endemic species of flora or fauna;

(d) to safeguard sites of particular importance because of their scientific, aesthetic, cultural or educational interest".

The examples of management objectives contained in Art. 4 of the SPA Protocol may be used for the development of more specific objectives for each individual marine protected area at the national level. Further objectives may comprise the provision for research and training and for monitoring the environmental effects of human activities, including the effects of coastal infrastructure development and adjacent land-used practices. Based on the objectives to be pursued with the establishment of the marine protected areas, legal provisions should contain guidance or criteria for designating the individual sites, including networks thereof. Where appropriate, testing management at a smaller, pilot scale could be considered before implementing protective strategies in the entire area.

In any event, transparent procedures for planning and adopting management measures should be put in place. Generally speaking, objectives and principles upon which all management decisions should be based can be drawn upon what is stated in the most recent international and regional instruments: procedures for developing management measures and plans should be actually designated in order to be consistent with those instruments. In this connection, it is worthwhile to note that marine protected areas are also to be viewed as practical means through which States can comply with their international obligations relating to the conservation and sustainable use of natural resources.

10. Securing a Consistent Network Through a "List" of Marine Protected Areas

The SPA Protocol provides for the establishment of a List of Specially Protected Areas of Mediterranean Importance (the already recalled SPAMI List).[426] From a management point of view, the creation of a list of areas belonging to the same network and responding to similar necessities arising from the peculiarities of a particular region can be seen as an effective way to secure consistency in management measures throughout the region and to categorize standard baselines against which to measure the progress in conservation, including through the identification of best practices.

Annex I to the SPA Protocol lists "Common criteria for the choice of protected marine and coastal areas that could be included in the SPAMI List". Where it deals with protection, planning and management measures, Annex I provides that conservation and management measures must be clearly defined in the texts relating to each site, and will constitute the basis for assessment of the adequacy of the adopted measures and the effectiveness of their implementation at the revisions of the SPAMI List.

Protection, planning and management measures applicable to each area must be adequate for the achievement of the conservation and management objectives set for the site in the short and long-term, and take in particular into account the threats on it. Furthermore, protection, planning and management measures must be based on an adequate knowledge of the elements of the natural environment and of socioeconomic and cultural factors that characterise each area.

In case of shortcomings in basic knowledge, an area proposed for inclusion in the SPAMI List must have a programme for the collection of the unavailable data and information.[427] Undoubtedly, all these provisions have a general scope of application and can be extended to any kind of marine protected areas – not only SPAMI.

11. Establishment of a Responsible Management Body

[426] See *supra*, para. 7.B.2.
[427] Section D, paras. 1, 2 and 3 of Annex I to the SPA Protocol.

The setting of management objectives must be accompanied with the establishment of a management body. Another key component of the management and monitoring of marine protected areas is the careful setting of the institutional structure responsible for administering the area and monitoring the implementation of the management objectives.

In this regard, Annex I to the SPA Protocol states that the competence and responsibility relating to administration and implementation of conservation measures for areas proposed for inclusion in the SPAMI List must be clearly defined in the texts governing each area. It also provides that, in order to be included in the SPAMI List, a protected area must have a management body, endowed with sufficient powers as well as means and human resources to prevent and/or control activities likely to be contrary to the aims of the protected area.[428] In this connection, the management measures should include for each protected area the training of managers and qualified technical personnel, as well as the development of an appropriate infrastructure.[429]

The management body could have the status of a corporation, either governmental or private. A private sector corporation may be considered if national requirements for governmental corporations prove too onerous to carry out business effectively. In either case, duties of transparent and regular reporting should be included among the responsibilities of the management body. Such reporting duties should be tailored to meet the specific requirements of the review processes of each country, but the level of details and information required should not be less inclusive than international standards.

In the case of Mediterranean specially protected areas, the provision of reporting duties entrusted to the management bodies is also crucial for each State party to the SPA Protocol to be able to comply with Art. 23 thereof. In fact, this article provides that reports by States parties on the implementation of the SPA Protocol be submitted to the ordinary meetings of States parties, in particular on:

> "(a) the status and the state of the areas included in the SPAMI List;
>
> (b) any changes in the delimitation or legal status of the SPAMI's and protected species;

[428] Section D, paras. 4 and 6 of Annex I to the SPA Protocol.
[429] Art. 7.2(f) of the SPA Protocol.

(c) possible exemptions allowed pursuant to article 12 and 18 f the Protocol."

12. Adoption and Implementation of a Management Plan

Each marine protected area should be covered by an *ad hoc* and sufficiently detailed management plan. In this regard as well, the SPA Protocol lists elements for consideration by its parties that have a general scope of application and can be extended also to marine protected areas belonging to other networks or which do not qualify for inclusion in the SPAMI List.

According to Art. 7.2(a) of the SPA Protocol, parties should adopt measures for each protected area that include a management plan specifying the legal and institutional framework and the management protection measures applicable. Annex I to the SPA Protocol, governing marine protected areas included in the SPAMI List, provides that the main rules of the management plan are to be laid down as from the time of inclusion of the site in the list and implemented immediately. A detailed management plan must be presented within 3 years of the time of inclusion. Failure to respect this obligation entails the removal of the site from the list.[430]

The creation of a good management plan is a multi-disciplinary task that takes a substantial amount of time to complete. The management plan should be adaptive. It should be considered as a "living" document that needs to be revised and updated on a regular basis. In this exercise, as mentioned before, the involvement of all local communities and relevant stakeholders should be encouraged, as it contributes to create a sense of ownership of the management plan, leading to its successful implementation.

An effective management plan should prescribe appropriate measures for different zones within the marine protected area. Generally speaking, the size of a marine protected area and its management objectives determine whether an area can be managed as a single entity or whether a system of zoning should be used, permitting different activities in specified zones of the marine site. The zoning plan is normally the primary document from

[430] Section D, para. 7, of Annex I to the SPA Protocol.

which the management plan is derived: it establishes the framework for the management of a given marine protected area, and should look as simple and understandable as possible to all users.

Impacts on marine protected areas arising from activities taking place in the surrounding areas should also be taken into consideration. A system of buffering should be used to minimize sudden transitions, for instance, from a highly protected zone to a general use zone. Annex I to the SPA Protocol provides that, in the respect of the specificity characterizing each protected site, the protection measures for a SPAMI must take into account, *inter alia*, the regulation applicable to the zones surrounding the area in question.[431] More broadly, the integration of marine protected areas into the regional coastal and marine spatial planning policies would ensure a more effective and long-term protection of the marine environment and its components.

Another key component of management, to be reflected in the management plan, is to be found in contingency measures to respond to incidents. For instance, an oil spill contingency plan should be developed where there is major vessel traffic through a marine protected area, or where the marine site has port facilities (including those for tourist vessels). The contingency plan should provide clear instructions on what should be done in the event of an incident, and should be prepared by experts in collaboration with the management body of the protected site. In this regard, the SPA Protocol provides that its parties should ensure that national contingency plans incorporate measures for responding to incidents that could cause damage or constitute a threat to the specially protected areas.[432]

13. Coordinated Implementation of International and Regional Commitments and Institutional Coordination

Management objectives and measures established under national legislation must fully comply with general obligations under international law and the specific obligations set

[431] Section D, para. 5(d), of Annex I to the SPA Protocol.
[432] Art. 7.3 of the SPA Protocol.

forth in the relevant global and regional instruments. Coordination in this regard should not represent a problem, as basically there are no contradictions between the two legal frameworks, the only difference being the level of detail of the relevant provisions.

Focal points should be identified at the national level to serve as liaison with the secretariats of the relevant international or regional legal instruments and ensure that all domestic activities are informed by the most recent principles and provisions adopted at the international level.[433]

In order to achieve an effective management, there should also be institutional coordination. Often, in domestic legislation, competencies overlap between various State authorities with regards to the numerous aspects involved in the management of a marine protected area. International instruments do not specify how their parties should distribute responsibilities among their respective national entities when managing marine protected areas. This would be an unwarranted invasion of the sphere of domestic jurisdiction of the parties. It is therefore left to each party to determine whether the obligation to take all appropriate measures with a view to protecting those marine areas which are important for the safeguard of the natural resources and sites can be better fulfilled at the central or regional level, or at both levels.

It is advisable that, when more than one administration is involved in the management of a protected site, special measures to ensure cooperation, coordination and accountability be envisaged. For instance, the SPA Protocol provides that, when specially protected areas covering both land and marine areas have been established, the parties should endeavor to ensure the coordination of the administration and management of the specially protected area as a whole.[434] Regulations and procedures in this respect should be adopted, as well as procedures for the resolution of any administrative conflicts. To ensure policy consistency, appropriate regulatory instruments could specify, for instance, that the provisions of the management and zoning plans override any inconsistent provisions in local land-use and sectorial plans.

[433] In this regard, see Art. 24 of the SPA Protocol.
[434] Art. 7.4 of the SPA Protocol.

14. Stakeholder Involvement

The management body of a marine protected area should not administer the site in isolation from local communities and relevant stakeholders. Another key component of an effective management of marine protected areas is that measures adopted by managers provide for an active involvement of local communities and populations, including assistance to local inhabitants who might be affected by the establishment of the area.[435]

Also, traditional knowledge of local communities can prove very important in the planning process of a marine protected area, as it might include knowledge that could take scientists a long time, and considerable expenditures, to accumulate. In addition to enhancing the understanding of the physical nature of the site, traditional knowledge may help to identify local currents and tidal patterns, navigation hazards, weather patterns, migration routes of marine animals, changes in the behavior or in the populations of fish over the years, habitats used by commercially important or threatened species, and so on. Community mapping could provide an excellent means to capture local communities' knowledge, and ethnographic studies of local knowledge throughout the region could prove an effective decision-making tool for networks of marine protected areas.

Constructive working relationships with fisheries and tourism operators, local authorities, scientists, nature conservation interests and other interested parties are conducive to better-informed adoption of collective goals and more efficient and clear decision-making and may reduce instances of non-compliance. Creating public awareness and fostering public participation may certainly involve extra time and effort before decisions can be taken. However, the alternative – perceived lack of transparency and

[435] See Art. 7.2(c) of the SPA Protocol.

accountability, loss of confidence by local people in management decisions and the regulatory process – can create serious impediments to the long-term acceptability and effectiveness of a marine protected area. It is advisable that domestic legislation enumerate key stakeholder groups to be involved and consulted prior to the establishment of a marine protected area as well as during the following stages of its management and monitoring. Advisory committees of representatives of such groups could be set up, in order to provide a structured mechanism ensuring their ongoing input in the process.

Public participation procedures could include disclosure of relevant and accessible information without having to request it, convening meetings at the local level and reimbursement of expenses incurred by individuals and non-governmental organizations (NGOs). In particular, States should recognize the positive contribution that NGOs active in the field of the environment can make through their educational, campaigning and monitoring activities. NGOs which contribute to the wider acceptance of marine protected areas should be allowed to work in close cooperation with the responsible management bodies.

In this regard, the SPA Protocol explicitly provides that its parties should endeavor to promote the participation of their public and their conservation organizations in measures that are necessary for the protection of the areas and species concerned, including environmental impact assessments.[436] The possibility to entrust NGOs, under appropriate contracts, with the administration of certain aspects related to the management of marine protected areas could also be considered.

As marine protected areas are usually established to achieve multiple objectives, it is likely that conflicts arise in the way areas are used throughout a given zone or region. Resolving these conflicts is a crucial task of managers, and requires, in addition to consultative strategies, conflict resolution techniques. Specific dispute settlement procedures and legislation on the right of individuals and NGOs to bring actions to courts for the protection of the marine environment should therefore be envisaged at the national level.

[436] Art. 19.2 of the SPA Protocol.

15. Financing Mechanisms

The financial constraints which affect the full operation of marine protected areas should be addressed by the States concerned. In several countries of both the Mediterranean and Black Seas, for understandable policy choices, budgetary funding of protected areas is significantly lower than necessary Also international financial assistance is often insufficient or not available on a long-term basis.

Consequences of inadequate or insecure funding could delay in the recruitment of sufficient staff, the purchase of equipment for performing basic tasks (which can be more costly in the marine field) and the promotion of research.

Appropriate funding should be granted, wherever possible, by the States or the public institutions involved to meet the needs of marine protected areas. Fundraising mechanisms involving the private sectors may also be put into effect as an alternative source of financing. Donors may be encouraged to support marine protected area projects.

Financial mechanisms should be included in the management plan, clarifying the strategies for the development of those activities which ensure that management is compatible with, and sufficient for, the objectives of a given marine protected area.[437]

An important consideration relates to benefit-sharing. If local communities do not benefit in the medium- to long-term from the establishment of marine protected areas, it is unlikely that they will cooperate in sustaining management efforts. Economic expectations of local communities should be addressed. For instance, through compensation mechanisms, and by adjusting the timeframe of expected benefits against the timeframe of any losses that may occur as a consequence of the creation of the protected site.

16. Monitoring, Compliance and Enforcement

Once established, marine protected areas require effective monitoring of ecological processes, habitats, population dynamics, and the impacts of human activities.[438] This information is essential for a periodic updating of regulations and management plans.

[437] See Art. 7.2(d) of the SPA Protocol.

Wherever possible, incentives and non-regulatory approaches should be considered to encourage voluntary compliance and a culture of self-enforcement of rules by user groups. This is particularly important at sea, where monitoring and detection are often harder than on land. Such approaches are likely to work best within a context that encourages informed public participation, education and awareness-building.

The management body, in any event, must have the authority to delegate and enforce the rules and regulations it promulgates. Relevant regulations should provide adequate powers for personnel to take enforcement action, backed by meaningful penalties. Under appropriate circumstances, coastal or marine conservation officers should have the authority to impose on-the-spot fines for minor offences. For more serious violations, their authority should extend to the gathering of evidence, impounding and confiscation of equipment, imposing a court summons, and when appropriate, arrest and detention powers.

Annex I

Maritime Delimitations in the Black Sea

1) Bulgaria – Romania. Not delimited.
2) Bulgaria – Turkey. Delimitation of all maritime boundaries: treaty signed in Sofia on 4 December 1997 and entered into force on 4 November 1998.
3) Georgia – Russian Federation. Not delimited.
4) Georgia – Turkey. Delimitation of the territorial sea: treaty signed in Ankara on 17 April 1973 and entered into force on 27 March 1975; delimitation of the continental shelf: treaty signed in Moscow on 23 June 1978 and entered into force on 15 May 1981; delimitation of the exclusive economic zone: treaty concluded through exchange of notes, the first of which signed on 23 December 1986 by Turkey and entered into force as binding between the parties on 6 February 1987 upon note of exchange signed by the Soviet Union.[439]

Romania – Bulgaria. See No.1.

[438] See Art. 7.2(b) of the SPA Protocol.
[439] Georgia has succeeded to the Soviet Union in these treaties concluded with Turkey.

5) Romania – Ukraine. Delimitation of the territorial sea: treaty signed in Cernauti on 17 June 2003 and entered into force on 27 May 2004; delimitation of the exclusive economic zone and continental shelf: judgment of the International Court of Justice on the Case Concerning Maritime Delimitation in the Black Sea (Romania/Ukraine) of 3 February 2009.[440]

Russian Federation – Georgia. See No. 3.

6) Russian Federation – Turkey. Delimitation of the continental shelf: treaty signed in Moscow on 23 June 1978 and entered into force on 15 May 1981; delimitation of the exclusive economic zone: treaty concluded through exchange of notes, the first of which signed on 23 December 1986 by Turkey and entered into force as binding between the parties on 6 February 1987 upon note of exchange signed by the Soviet Union.[441]

7) Russian Federation – Ukraine. Not delimited.

Turkey – Bulgaria. See No. 2.

Turkey – Georgia. See No. 4.

Turkey – Russian Federation. See No. 6.

8) Turkey – Ukraine. Delimitation of the continental shelf: treaty signed in Moscow on 23 June 1978 and entered into force on 15 May 1981; delimitation of the exclusive economic zone: treaty concluded through exchange of notes, the first of which signed on 23 December 1986 by Turkey and entered into force as binding between the parties on 6 February 1987 upon note of exchange signed by the Soviet Union.[442]

Ukraine – Romania. See No. 5.

Ukraine – Russian Federation. See No. 7.

Ukraine – Turkey. See No. 8.

Annex II

[440] *Maritime Delimitation in the Black Sea (Romania/Ukraine)*, judgment of 3 February 2009, I.C.J., *Reports*, 2009.
[441] The Russian Federation has succeeded to the Soviet Union in these treaties concluded with Turkey.
[442] Ukraine has succeeded to the Soviet Union in these treaties concluded with Turkey.

Maritime Delimitations in the Mediterranean Sea[443]

1) Albania – Greece. Not delimited (delimitation of all marine boundaries: treaty signed in Tirana on 27 April 2009 and not yet entered into force).

2) Albania – Italy. Delimitation of the continental shelf: treaty signed in Tirana on 18 December 1992 and entered into force on 26 February 1999.

3) Albania – Montenegro. Not delimited.

4) Algeria – Italy. Not delimited.

5) Algeria – Morocco. Not delimited.

6) Algeria – Spain. Not delimited.

7) Algeria – Tunisia. Not delimited (provisional delimitation of all marine boundaries: treaty signed in Algiers on 11 February 2002, entered into force on 11 February 2002, and expired on 10 February 2008; delimitation of all marine boundaries: treaty signed in Algiers on 11 July 2011 and not yet entered into force).

8) Bosnia-Herzegovina – Croatia. Not delimited (delimitation between the territorial sea of Bosnia-Herzegovina and the internal waters of Croatia: treaty signed in Sarajevo on 30 July 1999 and not yet entered into force).

Croatia – Bosnia-Herzegovina. See No. 8.

9) Croatia – Italy. Delimitation of the territorial sea: treaty signed in Osimo on 10 November 1975 by the predecessor State (Yugoslavia) and entered into force on 3 April 1977; delimitation of the continental shelf: agreement signed in Belgrade on 8 January 1968 by the predecessor State (Yugoslavia) and entered into force on 21 January 1970.

10) Croatia – Montenegro. Not delimited

[443] The Mediterranean maritime boundaries may be more than those indicated in this annex, if the claims advanced by some States are taken into account.

11) Croatia – Slovenia. Not delimited.

12) Cyprus – Egypt. Delimitation of the exclusive economic zone: agreement signed in Cairo on 17 February 2003 and entered into force on 7 April 2004.

13) Cyprus – Israel. Delimitation of the exclusive economic zone: agreement signed in Nicosia on 17 December 2010 and entered into force on 25 February 2

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14) Cyprus – Lebanon. Not delimited (delimitation of the exclusive economic zone: agreement signed in Beirut on 17 January 2007 and not yet entered into force).

15) Cyprus – Syria. Not delimited.

16) Cyprus – Turkey. Not delimited.

17) Cyprus – United Kingdom (Akrotiri, Dhekelia). Delimitation of the territorial sea: treaty concerning the establishment of the Republic of Cyprus, signed in Nicosia on 16 August 1960 and entered into force on 16 August 1960.

Egypt – Cyprus. See No. 12.

18) Egypt – Greece. Not delimited.

19) Egypt – Libya. Not delimited.

20) Egypt – Palestine. Not delimited.

21) France – Italy. Delimitation of the territorial sea in the area of the Mouths of Bonifacio: convention signed in Paris on 28 November 1986 and entered into force on 15 May 1989.

22) France – Monaco. Delimitation of all marine boundaries: agreement signed in Paris on 16 February 1984 and entered into force on 22 August 1985.

23) France – Spain. Not delimited.

Greece – Albania. See No. 1.

Greece – Egypt. See No. 17.

24) Greece – Italy. Delimitation of the continental shelf: agreement signed in Athens on 24 May 1977 and entered into force on 12 November 1980.

25) Greece – Libya. Not delimited.

26) Greece – Turkey. Not delimited.

Israel – Cyprus. See No. 13.

27) Israel – Lebanon. Not delimited.

28) Israel – Palestine. Not delimited.

29) Israel – Syria. Not delimited.

Italy – Albania. See No. 2.

Italy – Algeria. See No. 4.

Italy – Croatia. See No. 9.

Italy – France. See No. 20.

30) Italy – Libya. Not delimited.

31) Italy – Malta. Not delimited (provisional and partial delimitation of the continental shelf: exchange of notes concluded on 31 December 1965 – 29 April 1970 and entered into force on 29 April 1970).

32) Italy – Montenegro. Delimitation of the continental shelf: agreement signed in Belgrade on 8 January 1968 by the predecessor State (Yugoslavia) and entered into force on 21 January 1970.

33) Italy – Slovenia. Delimitation of the territorial sea: treaty signed in Osimo on 10 November 1975 by the predecessor State (Yugoslavia) and entered into force on 3 April 1977.

34) Italy – Spain. Delimitation of the continental shelf: agreement signed in Madrid on 19 February 1974 and entered into force on 16 November 1978.

35) Italy – Tunisia. Delimitation of the continental shelf: agreement signed in Tunis on 20 August 1971 and entered into force on on 6 December 1978.

Lebanon – Cyprus. See No. 14.

Lebanon – Israel. See No. 27.

36) Lebanon – Syria. Not delimited.

Libya – Egypt. See No. 19.

Libya – Greece. See No. 25.

Libya – Italy. See No. 30.

37) Libya – Malta. Delimitation of the continental shelf: agreement signed in Valletta on 10 November 1986 and entered into force on 11 December 1987[444].

38) Libya – Tunisia. Delimitation of the continental shelf: agreement signed in Benghazi on 8 August 1988 and entered into force on 11 April 1989[445].

Malta – Italy. See No. 31.

Malta – Libya. See No. 37.

39) Malta – Tunisia. Not delimited.

Monaco – France. See No. 22.

Montenegro – Albania. See No. 3.

Montenegro – Croatia. See No. 10.

Montenegro – Italy. See No. 32.

[444] The agreement was concluded following the judgment taken by the International Court of Justice on 3 June 1985.
[445] The agreement was concluded following the judgment taken by the International Court of Justice on 24 February 1982.

Morocco – Algeria. See No. 5.

40) Morocco – Spain. Not delimited.

Palestine – Egypt. See No. 20.

Palestine – Israel. See No. 28.

Slovenia – Croatia. See No. 11.

Slovenia – Italy. See No. 33.

Spain – Algeria. See No. 6.

Spain – France. See No. 23.

Spain – Italy. See No. 34.

Spain – Morocco. See No. 40.

41) Spain – United Kingdom (Gibraltar): Not delimited.

Syria – Cyprus. See No. 15.

Syria – Lebanon. See No. 36.

42) Syria – Turkey. Not delimited.

Tunisia – Algeria. See No. 7.

Tunisia – Italy. See No. 35.

Tunisia – Libya. See No. 38.

Tunisia – Malta. See No. 39.

Turkey – Cyprus. See No. 16.

Turkey – Greece. See No. 26.

Turkey – Syria. See No. 42.

United Kingdom (Akrotiri, Dhekelia) – Cyprus. See. No. 17.

United Kingdom (Gibraltar) – Spain. See No. 41.

Chapter 3a - Analysis and Inventory of National Legislation regarding Marine Protected Areas and Marine Spatial Planning / Black Sea Region

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Introduction:

Placing Marine Protected Areas in a Broader Perspective – The Beginnings of Marine Spatial Planning in the Black Sea

I. Marine Spatial Planning – Definition:

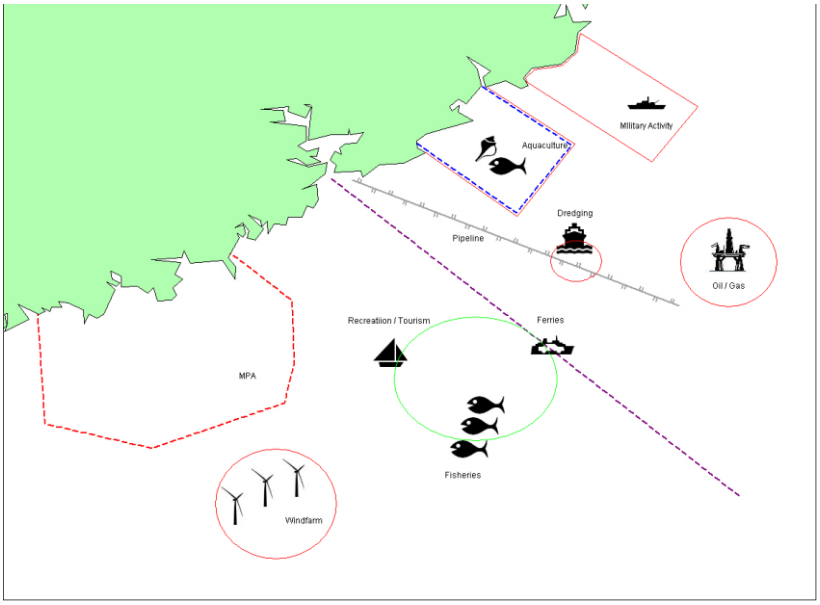
In its broadest sense, Marine Spatial Planning (MSP) is "a public" process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that have been specified through a political process" (IOC-UNESCO).

II. An inventory of possible conflicts:

In many parts of the world, combined demands for human use of ocean space exceed already several times the available space. Space itself has therefore become a valuable resource.
Possible Conflicts:

User-user conflicts
User-environment conflicts

Example:
A single use can be the cause of several conflicts. The establishment of offshore wind farms can conflict with the protection of endangered seabirds if their flight path crosses the turbines (user – environment conflict). The wind farm can be in the way of a shipping lane (user – user conflict). And, potentially, several companies compete for the permit to construct a wind farm, there is thus a conflict within the same sector.



Red zones: Permanent conflicts / Green zones: Temporary conflicts
Figure 1:
http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/legal_aspects_msp_report_en.pdf

III. The benefits of a look at the "bigger picture":

- a fair and equitable access to resources
- strategic conflict resolution on a regional level, not only on a project level
- increase of investor confidence (planning security)
- cost reduction
- a tool to give spatial priority to the protection of important ecological areas and to create a network of Marine Protected Areas (MPAs)
- a management framework for new scientific information
  guidance for decision-makers in every sector

However, MSP cannot control the quality of uses – other instruments like Environmental Impact Assessment need to be employed alongside MSP. Not all conflicts can be "planned away".

IV. Differences and interaction between land use planning and Marine Spatial Planning:

Well-proven land use planning concepts and techniques can in many cases be translated to the marine environment.

However, there are some differences:

- the dynamic, three-dimensional nature of marine environments
- far reaching spill-over effects
- no private land ownership
- little knowledge on the marine environment
- the particular difficulty to control sea uses and to enforce spatial plans at sea

Besides, MSP is not independent from land use planning since sea uses may have far reaching impacts on spatial use on land. Offshore wind farms, for example, depend on regular servicing. People need to be employed, additional houses and transport facilities provided. All those consequences have to be considered in land-based spatial plans.

V. Key approaches to Marine Spatial Planning:

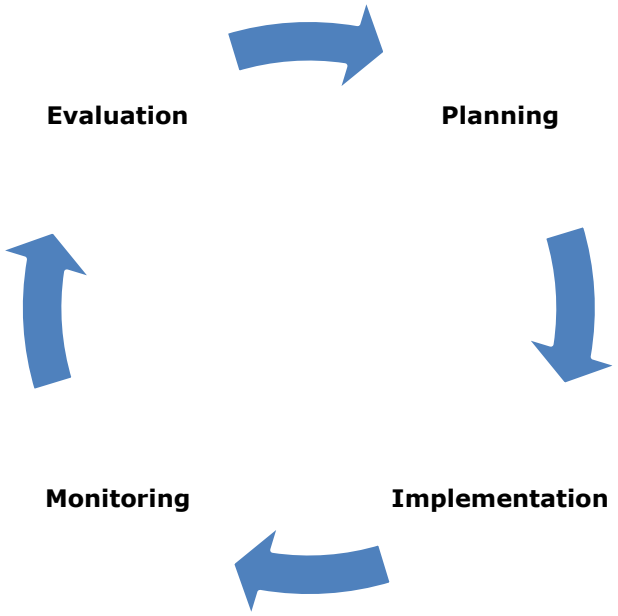
- from a project-by-project, permit by permit approach towards comprehensive planning
- the genuine implementation of the ecosystem approach
- achieving the best possible mix between using and protecting marine resources:

1. through the sparing use of space
2. through the combination of uses
3. through the concentration of uses in industrial parks
4. through zoning

VI. The planning process – Getting the right balance of interests:

- priority should be given to uses that are bound to certain places (for example: NATURA 2000 sites)
- top-down planning: the more specific plan has to be consistent with the more general plan
- bottom-up planning: feedback on the effectiveness of the plan is essential
- participation: planning future sea uses is a matter of continuous societal choice and requires the active participation of all stakeholders
- cross-border co-operation

It is important to understand planning as an adaptive and participatory process:



VII. Finding answers to future challenges:

An important tenet for MSP is to consider possible future developments and in this way to not only respond to undesired impacts, but to prevent conflicts in advance.
Driving forces that shape future forms of use:

Examples of external drivers: EU Directives, climate change, social developments

Examples of internal drivers: national or regional policies

Internal and external drivers can reinforce one another. A good example here is the rapid growth of offshore renewable energies. This sector is promoted by international and national policies and by economic incentives and it benefits from a broad support within the society.

VIII. Dealing with uncertainty:

Different types of options are available to decision-makers when the future is uncertain, for example:

incremental management
Since it is impossible to collect all relevant data at once, the use of processes that allow managers to incrementally develop their understanding is necessary.

adaptive management
Learning, experimenting and evaluation are essential in an adaptive management approach and should actively be planned for in the decision-making process.

scenario planning
Scenario Planning means that different plausible future conditions are considered. Then, it is analysed how well alternative policy decisions perform under those different future conditions and which trade-offs will have to be made.

robust strategies

To develop a robust strategy, first the possible future circumstances have to be identified. A robust strategy then has to perform reasonably well over a very wide range of those alternative futures.

IX. Networks of MPAs and Marine Spatial Planning:

Ideally, a network of MPAs is designed as a synergistic system where the "whole is greater than the sum of the parts". Because the movement of organisms and nutrients connects them, the effectiveness of single MPAs is increased. Despite the many benefits that a network of MPAs has for the resilience of ecosystems, the lack of a broader and holistic approach puts the success of the conservation and management efforts at risk:

1. The problem of unintended consequences of a MPA network

Not all activities in the sea are compatible with the protection goals of a network of Marine Protected Areas. For that reason, activities like fishing are restricted in most MPAs. Those activities are then often concentrated at the edge of the protected area, benefiting from increased fish stocks, or have to be shifted to another place further away —a phenomenon known as displacement. Thus, one major concern with MPAs and also with networks of MPAs are the negative environmental, economic and social consequences of an area closure on its surroundings.
Marine Spatial Planning, undertaken at a broader regional scale, can help to ensure that MPAs and MPA networks are planned in a way to protect the most significant ecological areas, while, at the same time, avoiding areas of high-use, where possible. MSP can thus help to maximize the ecological benefit of networks of MPAs and to minimize socio-economic costs.

2. The effects of degradation of the surrounding environment

MPAs and even networks of MPAs are only islands of protection, strongly influenced by their surrounding environment. For example, pollution doesn't respect the boundaries of MPAs and therefore endangers habitats and species within the protected area. Also, the state of the neighbouring ecosystems can influence the health and productivity of the MPA ecosystem.
Thus, MPAs and other local management measures are important, but they alone cannot sufficiently protect ecosystems from the damaging effects of human activities. MPA networks should thus be embedded in a broader planning framework that fully utilizes the strengths of the MPA tool while avoiding the shortcomings.

The example of Canada:
In Canada, the National Framework for Canada's Network of Marine Protected Areas (2011) provides the strategic directions for the establishment of a national network of marine protected areas that "conforms to international best practices and helps to achieve broader conservation and sustainable development objectives identified through Integrated Oceans Management and other marine spatial planning processes".

8. Guiding principles:
All stages in the development of Canada's network of marine protected areas will be guided by the following principles:

1. **Coherent approach**. Where possible, ensure that networks of marine protected areas are linked to broader Integrated Oceans Management initiatives, including those in adjacent marine and terrestrial areas. Capitalize on the potential of established and proposed MPAs and other spatial conservation measures to achieve marine protected area network goals...

The example of South Africa:
Only 0.4 % of South Africa's mainland marine territory is protected and most offshore habitat types are unprotected. The offshore expansion of South Africa's MPA network is thus a national priority. A

collaborative five-year Offshore Marine Protected Area project was undertaken to support the identification of a network of potential offshore spatial management measures including MPAs. The key elements of the planning approach included integrated spatial planning based on spatial data for all sectors. A set of priority areas has been developed that comprised large, unfragmented areas of high importance in which the most offshore biodiversity targets can be met with the least impact on offshore industries.

Rather than implementing MPAs or other spatial management measures one by one, it has been recommended that a combined set (i.e. a network) of offshore MPAs and other spatial management measures are implemented simultaneously. The aim was to accelerate the expansion of South Africa's MPA network that way, to minimize cumulative impacts on the industry through ad-hoc implementation of individual spatial management measures, and to achieve a spatially efficient network that meets multiple objectives.

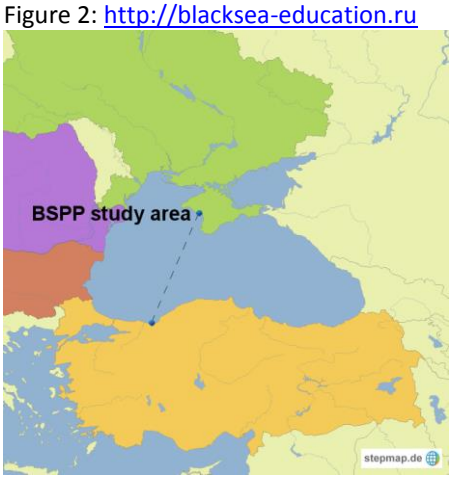
The legal framework for Marine Spatial Planning in the Black Sea

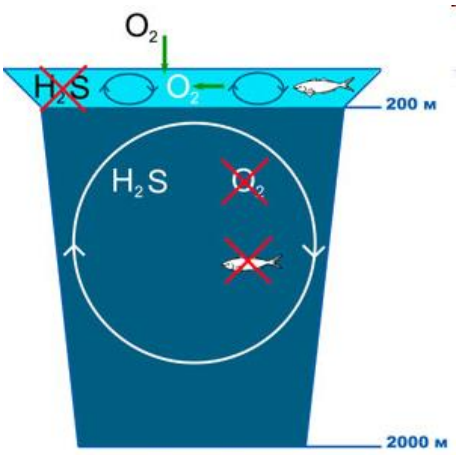
I. The Characteristics of the Black Sea:

The Black Sea is surrounded by six countries. The countries of the east coast, Bulgaria and Romania, form part of the European Union. Turkey, located on the south coast, is a candidate country. The states on the north-east and south-east coasts (Ukraine, Russian Federation and Georgia) arose following the break-up of the Soviet Union. Therefore, they still have fragile national institutions.

Despite its anoxic zone below 180 m, the Black Sea is relatively rich in biological resources. The sea and its coastal wetlands provide spawning grounds for various fish species and breeding and resting places for many endangered birds. Also, four species of marine mammals live in the Black Sea. Eutrophication, pollution and irresponsible fishing, however, brought the environment of the Black Sea to the edge of collapse.

Figure 2: http://blacksea-education.ru



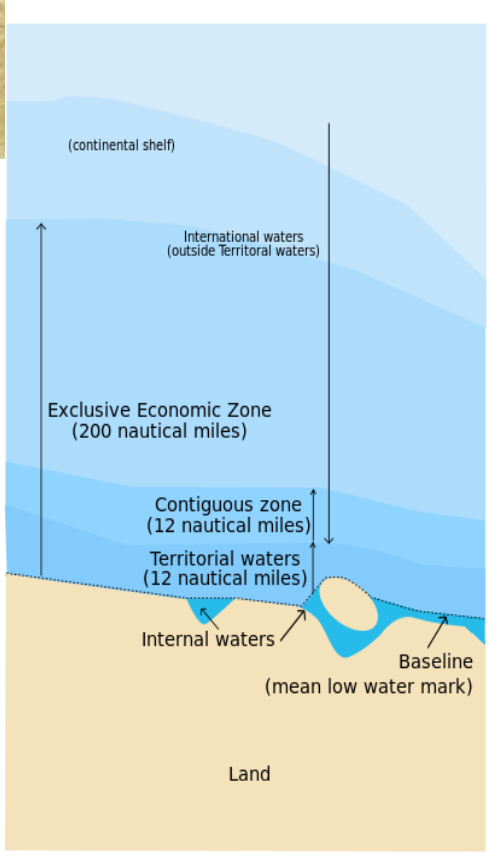


II. Marine Spatial Planning and the United Nations Convention on the Law of the Sea (UNCLOS):

There is no international convention that exclusively determines the legal requirements of spatial planning at sea. Some relevant regulations, however, can be found in UNCLOS. With the exception of Turkey, all states of the Black Sea area have signed and ratified UNCLOS.

And, the Black Sea is completely divided between its riparian States, since it is quite small and all the riparian States have declared EEZs. Thus, there are no areas that lie beyond national jurisdiction ("high seas").

Figure 3: Wikipedia (author: tentotwo)



Internal Water

Art. 2 (1) of UNCLOS states that the sovereignty of a coastal State covers its land territory and internal waters. UNCLOS does not limit the right of the coastal State to restrict entry into or transit of persons, ships and goods through its internal waters and ports (apart from an exceptional right of innocent passage conferred by Art. 8 (2) of UNCLOS to ships of other States). The coastal State is thus free to set laws, to regulate any use, to use any resource and, therefore, to submit its internal waters to MSP.

Territorial Sea

According to Art. 2 (1) of UNCLOS, the sovereignty of the coastal State extends to its territorial sea (up to 12 nautical miles from the baseline). That sovereignty derives from the sovereignty over the land territory. Consequently, the coastal State can undertake spatial planning activities in that part of the sea.

Ships of all States, however, enjoy the right of innocent passage through the territorial sea. The limits are set by Art. 17 et seq. of UNCLOS that confers to the coastal State the right to regulate the passage, for example to ensure the safety of navigation, or to establish sea lanes and traffic separation schemes. Thus, UNCLOS explicitly regulates some elements of spatial planning.

Contiguous Zone
Within a zone adjacent to the territorial sea whose outer limit may not exceed 24 nautical miles from the baseline, the coastal State that claims such a zone has limited crime prevention and enforcement powers for the purpose of customs, fiscal, immigration and health issues (Art. 33 of UNCLOS). Those rights play a minor role in MSP.

Exclusive Economic Zone
Beyond its territorial sea, a coastal State may claim an exclusive economic zone (EEZ) that extends up to 200 nautical miles from the baseline. Here, the coastal State exercises sovereign rights only for the purposes of exploring and exploiting, conserving and managing the natural resources (Arts. 55, 56 and 57 of UNCLOS). UNCLOS furthermore subjects the exercise of these rights to various conditions, such as the respect of the right of any State to lay submarine pipelines and cables, and the freedom of navigation of other States' vessels.

Figure 4: Wikipedia (author: historicair)

Art. 56 (1) of UNCLOS does not expressly assign to the coastal state a sovereign right or jurisdiction to undertake planning activities in the EEZ. This, however, does not necessarily mean that Marine Spatial Planning there is unlawful. Under Art. 60 (1) of UNCLOS, for example, the coastal State has the exclusive right to construct, to authorize and to regulate the construction, operation and use of artificial islands, installations and structures. It is left to the coastal State to determine if and how these rights are to be executed. Therefore, it seems to be justified to conclude that Marine Spatial Planning is allowed to the extent to which the planning activities are directly linked to the sovereign rights and jurisdiction expressly assigned to the coastal state by Part V of UNCLOS.

However: in enclosed or semi-enclosed seas like the Black Sea, contracts between all riparian States could effectively regulate marine spatial planning measures that go beyond the scope of measures allowed by UNCLOS. Of course, then, only the contracting States are bound by the contract.

Continental Shelf
The continental shelf is the natural prolongation of a coastal State's submarine territory to the outer edge of the continental margin, or to a distance of 200 miles (Art. 76 of UNCLOS). The sovereign rights of the coastal State here include the exploitation of living organisms belonging to sedentary species, drilling, tunnelling and the use of artificial islands, installations and structures. It follows that coastal States may also take the appropriate planning measures to regulate these activities.

High Seas
The high seas are free for all states and reserved for peaceful purposes (Art. 88 of UNCLOS). States are only allowed to enforce spatial plans for land and sea areas that are under their jurisdiction. It follows that States cannot just make any area of the high seas subject to MSP, though they may regulate the activities of their own nationals, including vessels flying their flag.

A fresh impetus to marine spatial planning – EU instruments

I. Integrated Coastal Zone Management – Recommendation:

The European Parliament and the Council adopted on 30 May 2002 a Recommendation on Integrated Coastal Zone Management (2002/413/EC) that outlines the steps that the Member States should take to promote ICZM along their shorelines and defines the principles of sound coastal planning and management. Those principles include the need to base planning on in-depth knowledge, to take a long-term and cross-sectoral perspective, to involve stakeholders and to take into account both the terrestrial and the marine component of the coastal zone.

II. Maritime Spatial Planning – Directive:

Is a MSP-Directive the most effective tool to implement MSP in the EU?

A detailed Directive or Regulation reduces the possibilities of the Member States to use already existing processes and could thereby lead to higher administrative costs. A more "framework-type" Directive, however, could guarantee predictability, stability and transparency in the MSP-process and, at the same time, provide flexibility by setting only general obligations and by allowing the Member States to develop their own national policies.

The content of the Proposal for a Directive of the European Parliament and of the Council establishing a framework for maritime spatial planning and integrated coastal management / 2013/0074 (COD)

Approach:
"Maritime spatial planning and integrated coastal management should apply the ecosystem-based approach as referred to in Article 1(3) of Directive 2008/56/EC so as to ensure that the collective pressure of all activities is kept within levels compatible with the achievement of good environmental status and that the capacity of marine ecosystems to respond to human-induced changes is not compromised, while enabling the sustainable use of marine goods and services by present and future generations" (preamble / item 15).

Objectives:
The objectives of the proposal include securing the energy supply of the Union, promoting the development of maritime transport, fostering the sustainable development and growth of the fisheries and aquaculture sector, ensuring the preservation, protection and improvement of the environment as well as the prudent and rational use of natural resources and ensuring climate resilient coastal and marine areas (Art. 5).

Minimum requirements:
The proposal sets out common minimum requirements for maritime spatial plans and integrated coastal management strategies of the Member States. Thus, they shall be at least mutually coordinated, ensure effective trans-boundary cooperation and identify their trans-boundary effects (Art. 6).

As a specific minimum requirement, maritime spatial plans shall contain at least a mapping of marine waters which identifies the actual and potential spatial and temporal distribution of all relevant maritime activities and shall notably take into consideration installations for the extraction of energy and the production of renewable energy, oil and gas extraction sites and infrastructures, maritime transport routes, submarine cable and pipeline routes, fishing areas, sea farming sites and nature conservation sites (Art. 7).

The proposed Directive has been adopted in July 2014 and has to be transposed into national law by the EU Member States until September 2016.

Evaluation of the progress at regional level

I. The Bucharest Convention and the Commission on the Protection of the Black Sea Against Pollution:

The Convention on the Protection of the Black Sea against Pollution (also referred to as "the Bucharest Convention") was signed in Bucharest in April 1992, and ratified by all legislative assemblies of the six Black Sea riparian States in the beginning of 1994.

Acting on the mandate of the Black Sea countries, the Commission on the Protection of the Black Sea Against Pollution (the Black Sea Commission) implements the provisions of the Convention, its Protocols and the Black Sea Strategic Action Plan with the support of its Permanent Secretariat located in Istanbul, Turkey.

Four Protocols complement the Convention:
1. The Protocol on the Protection of the Black Sea Marine Environment against Pollution from Land Based Sources (LBS Protocol)
2. The Protocol on Cooperation in combating Pollution of the Black Sea Marine Environment by Oil and Other Harmful Substances (Emergency Protocol)
3. The Protocol on the Protection of the Marine Environment against Pollution by Dumping
4. The Black Sea Biodiversity and Landscape Conservation Protocol (CBD Protocol)

II. The first efforts towards Integrated Coastal Zone Management and Marine Spatial Planning:

Provisions on ICZM already in place:

Activity Center ICZM / Advisory Group ICZM
A Regional Activity Center on Development of Common Methodologies for Integrated Coastal Zone Management (AC ICZM) was established in 1993 in Krasnodar (Russia). There is also an Advisory Group ICZM.

Protocols:
The Black Sea Biodiversity and Landscape Conservation Protocol (2002)
Particularly relevant to ICZM is Art. 7 that says that "the Contracting Parties shall encourage introduction of intersectoral interaction on regional and national levels through the introduction of the principles and development of legal instrument of integrated coastal zone management seeking the ways for sustainable use of natural resources and promotion of environmentally friendly human activities in the coastal zone."

The Protocol on the Protection of the Marine Environment of the Black Sea from Land-Based Sources and Activities (2009) (Entry into force pending)
To achieve the purpose of the Protocol, the Contracting Parties "shall, in particular: endeavour to apply the integrated management of coastal zones and watersheds" (Art. 4 (2) f)).

"Soft Law" Instruments:
Odessa Declaration (1993)
In the Odessa Declaration of 1993 (Ministerial Declaration on the Protection of the Black Sea), the Ministers responsible for the protection of the marine environment of the Black Sea coastal states decided under point 15 "to elaborate and implement national coastal zone management policies, including legislative measures and economic instruments, in order to ensure the sustainable development in the spirit of Agenda 21".

Sofia Declaration (2009)
In the Sofia Declaration of the Ministers of Environment of the Contracting Parties to the Convention on the Protection of the Black Sea Against Pollution on Strengthening the Cooperation for the Rehabilitation of the Black Sea Environment, the Ministers have, under point 9, agreed to "incorporate up-to-date environmental management approaches, practices and technologies, with particular attention to integrated coastal zone management, introduction of green technologies, sustainable human development and ecosystem based management of human activities".

Strategic Action Plan for the Protection and Rehabilitation of the Black Sea (1996)
"In order to ensure proper management of the coastal zone, coordinated integrated coastal zone management strategies shall be developed for the Black Sea region" (point III C of the BSSAP).

Strategic Action Plan for the Environmental Protection and Rehabilitation of the Black Sea (2009)
Key environmental management approaches are listed under 3.1:

- Integrated Coastal Zone Management (ICZM);
- The Ecosystem Approach; and
  Integrated River Basin Management (IRBM).

Furthermore, the SAP determines certain Ecosystem Quality Objectives (EcoQO). Each EcoQO is assigned a number of short-, mid- and/or long-term management targets that address the main environmental problems. EcoQO 2b is, for example, to conserve coastal and marine habitats and landscapes and under 3.3 is specified that one corresponding overall management target is "to further recognise and implement integrated coastal zone management principles" (point 15).

Conclusion:
The currently existing legal framework for ICZM under the Bucharest Convention system, including binding and non-binding instruments, shows that the importance of ICZM has been more and more recognized. However, it still seems to be a piecemeal and unsystematic approach to the concept. The question is thus if the time has come to think about a comprehensive regional instrument on ICZM.

III. An ICZM / MSP Protocol for the Black Sea – the logical next step?

The Black Sea Commission plans to initiate consultations in order to develop an ICZM Protocol for the Black Sea region. Marine Spatial Planning is planned to be introduced in close integration with ICZM (Black Sea Outlook, Odessa 2011).

The example of the Mediterranean Sea:

The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) entered into force 12 February 1978. The European Community as well as all the EU Mediterranean Member States are Contracting Parties to the Convention. In the framework of this convention, a draft protocol on ICZM has been prepared, and, after a lengthy negotiation process, adopted on 21 January 2008.
The protocol aims to minimize the impact of economic activities on the environment and to guarantee a sustainable use of resources (Art. 9), to protect coastal ecosystems, landscapes, islands and cultural heritage (Art. 10 - 13), to ensure participation and to raise awareness. In order to ensure that those measures are consistently fulfilled, the text requires that they are made part of a broader planning system. Art 18 (1) says that "each Party shall further strengthen or formulate a national strategy for integrated coastal zone management and coastal implementation plans and programmes…".

Since it has, in contrast to the ICZM Recommendation of the EU, binding power, the protocol significantly advances the ICZM process. However, even if the protocol is binding, some of its provisions are rather recommendations than strict obligations.

Benefits of an ICZM Protocol:
A legally binding ICZM protocol can help to fill the gaps in the existing national legal frameworks. But the biggest advantage of an ICZM protocol lies in its legally binding nature. States can thus be obligated by a protocol to undertake certain measures.

And, considering the new EU Directive on MSP, the problems that will result from different stages of development ("two speeds") in the Black Sea countries should be taken into account. An ICZM Protocol could help to harmonise the national regulatory regimes in the EU Member States and the other Black Sea countries.

Disadvantages of an ICZM Protocol:
The legally binding nature of a protocol can also be seen as a disadvantage, especially if there is a need for a fast and efficient response to a pressing problem. Until a protocol enters into force, there is usually a lengthy process of drafting and negotiating the text. As a consequence, there is often a regulatory vacuum for a long period of time.

Conclusion with regard to the Black Sea region:
The Black Sea Commission doesn't yet seem to be organised effectively enough or adequately staffed and funded to draft and implement an additional protocol. Therefore, the "Feasibility Study for the Black Sea ICZM Instrument" of 2007 has favoured a two-step-approach. As a first step, it recommends a combination of "soft law" instruments, of guidelines and an Action Plan. Depending on the success of those instruments, it recommends the adoption of a binding protocol as a second step.

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http://ec.europa.eu/environment/iczm/ia_reports.htm
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http://www.blacksea-commission.org/
http://www.pegasoproject.eu/

Analysis:

BULGARIA

Protected Areas

I. History of protected areas in Bulgaria[446]:

At the beginning of the 1970's, the interest towards nature protection started to increase in Bulgaria. In 1976, the Committee for the Preservation of the Environment and the Scientific Coordination Centre for the Preservation of the Environment were established. Furthermore, Bulgaria joined a number of international conventions concerning the protection of the environment including the Ramsar Convention, the World Heritage Convention and the Man and the Biosphere Programme of the UNESCO.

These international agreements have been an incentive for Bulgaria to declare more protected areas. Between 1976 and 1991, the area that was protected has doubled, amounting to 2 % of its territory. Thus, Bulgaria became the country with the third largest coverage of protected areas in Europe, in relation to its size.

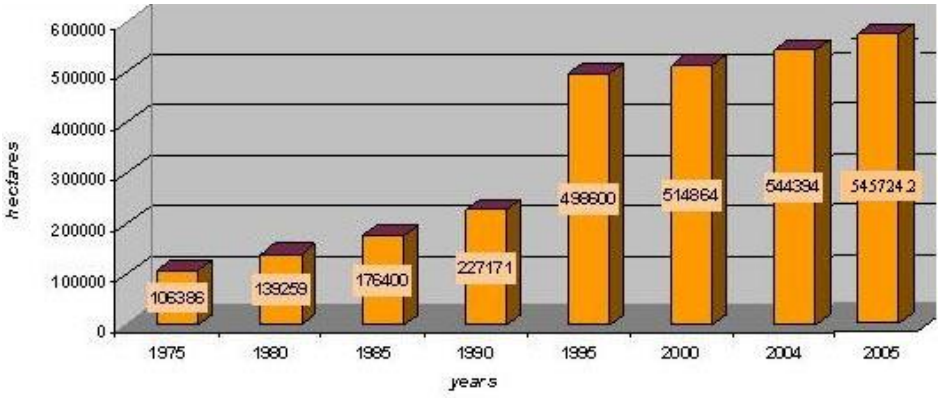

Figure 2: Coverage of protected areas in Bulgaria (http://chm.moew.government.bg)

In 1990, the Ministry of Environment has been created. It was renamed as Ministry of Environment and Water (MOEW) in 1997[447]. The National Nature Protection Service has been established as a specialized department of the MOEW in 1994.

In 1992, the Environmental Protection Act was adopted. During the 1990's, Bulgaria ratified the Bern Convention and the Convention on Biological Diversity and, in 1998, Bulgaria adopted the Protected Areas Act (PAA).

Currently, there are 1,355 protected areas and zones (declared under the Protected Areas Act and the Biological Diversity Act)[448]. The National Ecological Network extends over about 35 % of the territory, compared to about 5 % in 2005[449].

[446] National Nature Protection Service / Information: http://chm.moew.government.bg/nnps/IndexDetailsE.cfm?vID=19 (12.06.2014)
[447] Ministry of Environment and Water / History: http://www.moew.government.bg/?show=15 (12.06.2014)

II. Key legal framework:

- Protected Areas Act (11 November 1998)
- Regulation on the Elaboration of Protected Area Management Plans (8 February 2000)
- Biological Diversity Act (9 August 2002)

National Plans and Strategies for Biodiversity Conservation[450]:

- National Strategy for Biodiversity Protection
- National Strategy for the Environment and Action Plan
- National Plan for Priority Actions for the Protection of the Most Important Wetlands in Bulgaria
- Strategy for the Protection and Restoration of the Floodplain Forests on the Bulgarian Danube Islands (2001) and Action Plan for the Protection and Restoration of the Floodplain Forests on the Bulgarian Danube Islands 2003-2007, developed to implement the Declaration for the Creation of the Green Corridor "Lower Danube"
- National Ecotourism Strategy
- National Forestry Policy and Strategy "Sustainable Development of the Forest Sector in Bulgaria, 2003-2013"

III. Competencies[451]:

The Ministry of Environment and Water (MOEW)

The Ministry implements the state policy for environmental protection. The Minister of Environment and Water is also responsible for designating and modifying protected areas (Art. 35 PAA).

In 1994, the National Nature Protection Service has been established to manage the protection of biodiversity, to develop the system of protected areas, to elaborate strategies, programs and plans and to draft regulations. It has departments for protected areas, NATURA 2000 and Biodiversity. In 1999, three Directorates have been created for the National Parks of Rila, Pirin and Balkan[452].

The Executive Environment Agency (ExEA) works under the MOEW and is responsible for the National System for Environmental Monitoring and for collecting information on the state of the environment[453].

The Ministry of Agriculture and Food (MAF)[454]

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[448] Executive Environment Agency / Register of protected areas in Bulgaria: http://pdbase.government.bg/zpo/en/index.jsp (11.06.2014)

[449] "National Concept for Spatial Development for the period 2013-2025", National Centre for regional development, Sofia, 5 November 2012: http://www.bgregio.eu/media/files/Programirane%20&%20ocenka/Programirane%202014-2020/NKPR_28012013_Last_en.pdf (17.06.2014) p. 88

[450] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 30 / Ministry of the Environment and Water / Strategic Documents (12.06.2014)

[451] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 33

[452] National Nature Protection Service / Information: http://chm.moew.government.bg/nnps/IndexDetailsE.cfm?vID=19 (12.06.2014)

[453] Executive Environment Agency: http://eea.government.bg/en (12.06.2014)

The MAF implements the state policy for agriculture, forestry and the hunting and fishing industry. The Ministry and its National Forestry Administration are responsible for the protection, recovery and use of protected areas in state owned forests and for the management of Natural Parks.

The Ministry of Regional Development (MRD)
The Ministry, in cooperation with other state bodies, aims to ensure the effective use of land, energy and other resources and a sustainable regional and local development.

IV. Categories:

According to the Protected Areas Act of 1998[455], there are six categories of protected areas (Art. 5 PAA). The PAA repeals the section on protected natural sites of the Nature Protection Act of 1967 and its categories "reserves" and "people's parks", introducing a modern categorization of protected areas[456]. Protected Areas shall incorporate forests, terrestrial and aquatic areas (Art 6 I PAA).

1. Strict Nature Reserve (IUCN Category Ia)

Strict Nature Reserves are designated to preserve examples of natural ecosystems, hosting typical and/or remarkable wild plant and animal species and the habitats thereof (Art. 16 I PAA).

Only few activities such as scientific research, hiking on marked trails and activities that help to preserve the site are allowed in those reserves (Art. 17 PAA).

2. National Park (IUCN Category II)

National Parks are areas which host ecosystems of high biological diversity and valuable plant and animal species and habitats. They are characterized by typical and remarkable landscapes and natural features. Settlements should not to be located in those parks (Art. 18 I PAA).

National Parks are divided into different zones: strict and managed reserves, tourist zones, zones for chalets, the park management and sport facilities and other zones, depending on the purpose of the park (Art. 19 PAA).

Activities such as construction works, pollution, disturbing the natural state of water basins or the collection of rare or endemic species are not allowed (Art. 21 PAA). The different zones are to be determined by management plans that also regulate all activities in the park (Art. 22 PAA).

3. Natural Monument (IUCN Category III)

Natural Monuments comprise typical or remarkable non-living natural features such as caves, rock formations, waterfalls or sand dunes which are rare or representative or which have aesthetic, scientific or cultural significance (Art. 23 PAA). Activities that disturb their natural state or impair the aesthetic value of the site are prohibited (Art. 24 PAA).

4. Managed Nature Reserve (IUCN Category IV)

Managed Nature Reserves aim to protect rare and/or endangered wild plant and animal species and their habitats (Art. 26 I PAA). Only activities like scientific research, hiking on marked trails and activities that help to preserve the site are allowed. Those activities are to be specified in a management plan (Art. 27 PAA).

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[454] Ministry of Agriculture and Food: http://www.mzh.government.bg/MZH/Home.aspx (12.06.2014)
[455] Ministry of Environment and Water: Protected Areas Act No. 133 / 11.11.1998: http://www3.moew.government.bg/files/file/PNOOP/Acts_in_English/Protected_Areas_Act.pdf (11.06.2014)
[456] Republic of Bulgaria / National Audit Office, "Management of the Protected Areas in the Republic of Bulgaria – National and Nature Parks", Performance Audit (Sofia, July 2004), p. 27

5. Natural Park (IUCN Category V)

Natural Parks are described in Art. 29 I PAA. Those parks host various ecosystems with diverse plant and animal species and their habitats and typical and remarkable landscapes and non-living natural features. Settlements and resorts may be located in the park as well as activities non-detrimental to the environment (Art. 30 I PAA).

6. Protected Site (IUCN Category VI)

Protected Sites are either areas with typical or remarkable landscapes, including examples of harmonious interaction between humans and nature or habitats of endangered, rare or vulnerable plant and animal species and communities (Art. 33 I PAA). Activities not compatible with the protection objective are prohibited in those sites.

V. The process of designation[457]:

According to Art. 35 of the PAA, the designation of protected areas and their changes are carried out by the Minister of Environment and Water.

Proposals for the designation of National and Nature Parks can be initiated by ministries, municipalities and regional governors, scientific and academic institutes and public organisations. The designation of the other categories of protected areas can also be initiated by interested natural and legal entities (Art. 36 I PAA).

The MOEW compiles a dossier with information on the area and organises a public discussion of the proposal if National Parks, Nature Parks, Strict Nature Reserves or Managed Nature Reserves are concerned. Within one year after submission of a proposal for the designation of a National or Nature park and within six months after submission of a proposal for the designation of a protected area of any other category, the Minister of Environment and Water appoints a commission. The commission includes representatives of the MOEW, the MAF, the MRD, of the municipalities, the owners of forests, land tracts and aquatic areas and the respective regional governors. In case of a positive decision of the commission, the Minister of Environment and Water issues an order to designate the protected area.

VI. Networks:

The creation of networks of protected areas is encouraged by the Biological Diversity Act (9 August 2002):

Art. 3:

(1) The State shall develop a National Ecological Network which shall comprehend:
   1. special areas of conservation, which may incorporate protected areas;
   2. protected areas outside special areas of conservation;
   3. buffer zones around protected areas.

(2) CORINE Biotopes sites, Ramsar Convention sites and Important Bird Areas shall be incorporated into the National Ecological Network on a priority basis.

Art.: 4

The National Ecological Network shall have the following purposes:

1. long-term conservation of biological, geological and landscape diversity;

[457] Republic of Bulgaria / National Audit Office, "Management of the Protected Areas in the Republic of Bulgaria – National and Nature Parks", Performance Audit (Sofia, July 2004), p. 27

2. provision of sufficiently spacious and high-quality sites for wild animals to breed, feed and rest, including during the period of migration, moulting and wintering;
3. creation of conditions for genetic exchange between geographically separated populations and species;
4. participation of the Republic of Bulgaria in the European and world ecological networks;
5. containment of the adverse impact of human activities on protected areas.

VII. Management plans[458]:

The Ministry of Environment and Water is responsible for the management and control of protected areas (Art. 46 I PAA). It is supported by regional authorities, namely by the National Parks Directorates and the Regional Inspectorates of Environment and Water (Art. 48 PAA).

The Protected Areas Act:

- introduces management plans as a mandatory instrument for the regulation of activities in Strict Nature Reserves, National and Nature parks;
- assigns to management plans the role of a statutory instrument;
- places the management plan on top of the planning hierarchy; and
- requires that other plans and projects do not contradict the regulations determined by the management plan.

Management plans shall conform to the requirements of the respective category of protected area and of international treaties (Arts. 56-57 PAA).

According to the provisions of Art. 57 PAA, the management plans must contain:

1. a general description of the protected area;
2. the management objectives;
3. the standards, regimes, conditions or recommendations for the performance of activities in forests, land tracts and aquatic areas, the development of infrastructure and other constructions and for management measures and other activities that aim to achieve the objectives of the plan;
4. short-term and long-term action programmes for scientific research and monitoring, for the maintenance of endangered species, communities and habitats, for environmental awareness and education, etc.

The procedure for the preparation of management plans is regulated by Council of Ministers' Decree No. 7 of 8 February 2000, promulgated in the State Gazette No. 13 of 15 February 2000.

Management plans are developed for (Art. 2 I):

- National and Nature Parks;
- Strict Nature Reserves and Managed Nature Reserves;
- Natural Monuments and Protected Sites, at the discretion of the MOEW.

Priority is given to the development of management plans for areas protected under international conventions or of European importance to the conservation of biological diversity.

Management plans are developed within (Art. 55 II PAA):

[458] Republic of Bulgaria / National Audit Office, "Management of the Protected Areas in the Republic of Bulgaria – National and Nature Parks", Performance Audit (Sofia, July 2004), p. 30-31

- three years after the designation of any new National and Nature parks or after a re-categorisation;
- two years after the designation of any new Strict Nature Reserves or Managed Nature Reserves;
- five years after the entry into force of the Regulation, applicable to any Strict Nature Reserve and Managed Nature Reserve which serves to meet public needs of nation-wide importance;
- ten years after a re-categorisation, applicable to any Nature Parks.

Management plans are developed for a ten-year period and are to be updated at the end of the ten years (Art. 4 of the Decree). The development of management plans for protected areas is commissioned by the MOEW or by other governmental organs, municipalities, owners, non-governmental organisations or through international projects, with the written consent of the MOEW.

Subject to a mandatory public discussion are the draft management plans for the National and Nature Parks and for the Managed Nature Reserves.

The development of management plans for Strict Nature Reserves, Natural Monuments and Protected Sites includes a public discussion only if:

- this is indicated as a requirement in the terms of reference;
- a favourable decision has been made by the MOEW following a request by municipalities, non-governmental organisations or owners of land tracts, forests and aquatic areas within the protected area.

Within three months after the submission of a draft management plan for a National or Nature Park, the MOEW arranges a meeting of the Supreme Environmental Expert Council (SEEC) to discuss the plan. The SEEC decisions are endorsed by the Minister of Environment and Water who then submits the draft to the Council of Ministers for adoption. Its decision has to be promulgated in the State Gazette.

Within two months after the submission of a draft management plan for a Strict Nature Reserve, a Managed Nature Reserve, a Natural Monument or a Protected Site, the MOEW forwards a written request for examination of the draft to the MAF, the MRD, the respective regional governors and municipalities, as well as to the Ministry of Culture, in case cultural assets are located within the boundaries of the protected area. The management plans for these four categories of protected areas are endorsed by the Minister of Environment and Water with an order which is promulgated in the State Gazette.

Despite these regulations, the Marine Protected Areas of Bulgaria have no management plans yet[459].

Structure of a Protected Area Management Plan in Bulgaria (Annex to Art. 5 I of the Decree):

- Plan title
- Plan contents
- Summary

Part O: Introduction

[459] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 55

0.1. Legal basis for elaboration of plan

0.2. Elaboration process: participants, public discussions

0.3. Intended purpose and peculiarities of plan

Part 1: Description and assessment of protected area

General information / Characteristics of abiotic factors / Biological characteristics / Cultural and socio-economic characteristics / First assessment

Part 2: Long-term objectives and restrictions

Second assessment

Part 3: Standards, regimes, conditions and recommendations as to performance of activities

Part 4: Day-to-day tasks and prescriptions for conservation and use

Part 5: Review of attainment of objectives and tasks

Annexes

Example of a management plan: Poda Protected Site (2002-2012)[460]
For Poda Protected Site, also with regard to the international importance of the site, a management plan (MP) has been considered crucial to ensure its conservation (p. 9 MP).

The Poda Protected Site is a marshy wetland of 100.7 ha. It is located close to the southern industrial zone of the city of Bourgas. The Protected SIte has been declared on 20 April 1989 (Order No. 433), is an Important Bird Area also since 1989 and a CORINE site (thus a site considered of major importance for nature conservation by the European Commission) since 1994 (p. 7 MP).

The owner of the site is the state, the Manager of the site is the Bulgarian Society for the Protection of Birds (BSPB / p. 7 MP). This is thus one of the few protected areas in Bulgaria managed by a non-governmental organization (p. 8 MP). However, in 2002, BSPB supported only a two-member administration for Poda Protected Site, clearly insufficient for the management of the area (p. 12-13 MP).

The management plan consists of Part 0: Introduction, Part 1: Description and Evaluation of the Protected Territory, Part 2: Objectives, Part 3: Zoning, Regimes and Norms, Part 4: Programs and Projects and Part 5: Three-Year Action Plan based on the management plan.

VIII. Protected areas in the marine and coastal zone:
The first two MPAs that have been designated in Bulgaria are the Kaliakra Nature Reserve and the Koketrays sand bank. They have been designated under the Protected Areas Act and cover only 0.2 % of the Bulgarian Black Sea territorial sea and only 0.1% of the Bulgarian continental shelf area up to a depth of 100 m[461].

[460] Poda Protected Area Management Plan 2002-2012, Bulgarian Society for the Protection of Birds, Bulgarian-Swiss Biodiversity Conservation Programme, Ministry of Environment and Waters (June 2002): http://chm.moew.government.bg/nnps/IndexDetailsE.cfm?vID=36 (12.06.2014)
[461] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 46

1. **Cape Kaliakra:**

Cape Kaliakra has been declared a National Park as early as 1941 (Decree No. 16295 of 25 September 1941). In 1966, it was designated as Strict Nature Reserve (Order No. 356 of 5 February 1966), covering an area of 53 ha. In 1980 (Order No. 231 of 4 April 1980), the reserve was extended to its current size of 687.5 ha and in 1983, a buffer zone of 109 ha has been declared (Order No. 390 of 25 April 1983). The reserve covers a marine area of 400 ha and a terrestrial area of 287.5 ha. It is situated at the end of a long and narrow peninsula. The entire terrestrial part of the reserve is covered by uncultivated land and, at the coast, limestone cliffs fall up to 70 m to the sea. Many flora species growing in the area are considered rare, threatened or endemic. Furthermore, the autumn migration route of 220 birds leads over Kaliakra[462] and, in 1981, the monk seal has still been spotted in the area[463].

Most activities are strictly prohibited in the reserve, for example fishing, hunting, collecting flowers, construction works or pollution with chemicals or litter. The human pressure exerted in the thinly populated area was long limited due to a lack of industry and harbours and to only minor touristic developments[464].

However, recently, Bulgaria has authorised thousands of wind turbines and some 500 other projects "without adequate assessments of their effect on Kaliakra's unique habitats and species, and on the thousands of birds and bats that fly over the site each year on their way to and from Africa. Up to 100 % of the global population of the world's most endangered goose species – the red breasted goose - spends the winter in a small number of sites in and around Kaliakra. No account is being taken of the cumulative effect of the authorised projects, which is also a requirement under the Birds, Habitats and Environmental Impact Assessment Directives.[465]" Because of its failure to sufficiently protect unique habitats and important species, Bulgaria will be taken to the EU Court of Justice by the European Commission.

Picture: Eva Schachtner

[462] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 46-47

[463] Draft Management Plan, Bulgarian-Swiss Biodiversity Conservation Programme, Dobrudja Project, Ministry of Environment and Water / Swiss Agency for Development & Co-operation SDC: http://www.bbf.biodiversity.bg/files/doc/do_en_mplan_kaliakra.PDF, (11.06.2014), p. 5

[464] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 47

[465] European Commission IP/13/966, Press Release Database, Environment: Commission takes Bulgaria to Court for failing to protect endangered species (17 October 2003) http://europa.eu/rapid/press-release_IP-13-966_et.htm (12.06.2014)

Draft management plan[466]:
A draft management plan has been developed for the Kaliakra Reserve in 1997 by the Bulgarian – Swiss Biodiversity Programme. It contains in Part I a description and evaluation of the Site, in Part II the ideal objectives and constraints and in Part III the operational objectives and the management strategy with concrete programs, projects and work plans. It also proposes to enlarge the protected territory and to protect the largest part of the steppe habitats between Kavarna and Kamen Brjag Yailata as well as the adjacent sea territories. However, the plan has not been implemented yet.

2. **Kolketrays:**
The Protected Site Koketrays sandbank covers 760 ha and was designated in 2001 (Order No. RD54 / 1 February 2001). The purpose of this site is to conserve the benthic fauna diversity, which is exceptionally high in the area. Activities like mining, dredging and bottom trawling and the pollution with oil or litter are prohibited[467].

After the designation of Kolketrays as a Protected Site, the ecological state of the benthic invertebrate fauna has slightly improved, for example the population of some sensitive species increased by about 27 %[468].

3. **Protected Areas in the Black Sea coastal zone designated under the Protected Areas Act[469]:**

	Name	Category	Date of designation	Area (ha)
1.	Kaliakra	Nature Reserve (NR)	27.09.1941	687.5
2.	Kamchia	NR	29.06.1951	842.1
3.	Ropotamo	NR	07.05.1992	1,000.7
4.	Boaza	Natural Monument (NM)	13.03.1978	0.1
5.	Kuza Skoza	NM	26.07.1961	1
6.	Sini vir	NM	11.01.1968	4
7.	Blato Alepu	NM	22.07.1986	166.7
8.	Atanasovsko ezero	Managed Reserve (MR) Management Plan No. RD-1379 / 17.11.2003	12.08.1980	1002.3

[466] Draft Management Plan, Bulgarian-Swiss Biodiversity Conservation Programme, Dobrudja Project, Ministry of Environment and Water / Swiss Agency for Development & Co-operation SDC: http://www.bbf.biodiversity.bg/files/doc/do_en_mplan_kaliakra.PDF, (11.06.2014)
[467] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 47 / http://www.kakvo.org/ptext/sand-bank-koketrays-is-declared-a-protected-site-by-order-no-6fd3f086e7b7325d18ce6918488f8df9bgen (11.06.2014)
[468] *Konsulova*, Tsenka H., *Trayanova*, Antoaneta T., *Todorova*, Valentina R.: "Sandbank Koketrays – a Case Study on the Effect of Marine Protected Area Designation as a Key Approach to Black Sea Biodiversity and Habitats Conservation", Acta Zoologica Bulgarica (2010): http://new.med.wanfangdata.com.cn/Paper/Detail?id=PeriodicalPaper_JJ0215788615 (11.06.2014)
[469] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 47-48 / Wikipedia / Golden Sands Nature Park: http://en.wikipedia.org/wiki/Golden_Sands_Nature_Park (11.06.2014) / MOEW: http://www.moew.government.bg/?show=top&cid=129 (11.06.2014)

9.	Velyov vir – vodnite lilyi	MR	24.07.1962	13.06
10.	Peshtera I izvory na reka Mladejka	MR	29.12.1973	8.3
11.	Baltata	MR	20.04.1978	205.6
12.	Yatata	Protected Site (PS)	23.07.1987	154
13.	Parorya	PS	31.10.1991	988.6
14.	Moryane	PS	08.07.1994	102.7
15.	Orlov kamyk	PS	11.10.1965	0.4
16.	Kamchiiski piasutsy	PS	14.02.1980	372.6
17.	Kazashko	PS	15.02.1995	125.1
18.	Liman	PS	12.06.1979	5.2
19.	Kalpunar – blatno kokiche	PS	03.07.1970	12
20.	Blatno kokiche – Osmar	PS	23.08.1979	19
21.	Vaya	PS	04.12.1997	379.4
22.	Poda	PS Management Plan No. RD-919 / 08.10.2002	20.04.1989	100.7
23.	Blatoto – blatno kokiche	PS	03.07.1970	33.9
24.	Ustie na reka Yzvorska	PS	16.02.1990	170
25.	Marina reka	PS	16.05.1991	47.3
26.	Kazakov vir	PS	04.08.2003	35.5
27.	Blatno kokiche – Chairite	PS	03.07.1970	2
28.	Taukliman	PS	04.04.1980	89.5
29.	Ustie na reka Veleka	PS	01.09.1992	1,511.2
30.	Koketrays	PS	01.02.2001	760
31.	Pomoriisko ezero	PS	23.01.2001	760.83
32.	Blatno kokiche – Kalinata	PS	03.07.1970	63.1
33.	Durankulashko ezero	PS	21.02.1980	446.54
34.	Shablensko ezero	PS Management Plan No. RD-167 / 26.02.2004	24.01.1995	531.24
35.	Blatoto Stamopolu	PS	16.05.1991	40
36.	Chengene skele	PS	14.11.1995	160
37.	Sylystar	PS	01.09.1992	773.3
38.	Zlatni pyasatsi	Nature Park	1943	1,320.7

4. Planned: Black Sea Coast National Park

Bulgarian eco activists proposed on 15 January 2013 to establish a "Black Sea National Park" in order to stop construction in coastal areas. The activists from several organizations such as the Greens party wanted the National Park to include 10 resort beaches and adjacent terrains up to a distance of 350 m from the coastline as well as all coastal lakes and wetlands[470].

[470] Sofia News Agency, "Bulgarian Eco Activists Call for Declaring Black Sea Coastal National Park", 15 January 2013:

A proposal for the park was put forth in 2013 by Members of the Parliament from the Bulgarian Socialist Party (BSP).The proposed park would cover an area of 52,000 ha, from Durankulak to Rezovo[471].

According to the following decision of the Bulgarian Parliament, promulgated in the State Gazette on 19 July 2013, the Ministry of Environment and Water has to conduct a survey and to prepare a concrete proposal for the establishment of a "Bulgarian Black Sea Coast" National park[472]. A public discussion of the project started at the Burgas Municipality on 17 June 2014[473].

5. Protected Areas included in the European NATURA 2000 network in the Black Sea coastal and marine zone[474]:

Figure 6: http://chm.moew.government.bg

1. **Strandzha**
   This area is characterized by a high variety of underwater habitats. It is almost undisturbed by human activities and could therefore even become a habitat for the monk seal again, considered extinct at the moment.

2. **Gradina Zlatna ribka‖**
   This beach is situated near Sozopol town. It covers a terrestrial and a marine area, in total 1,153 ha. The marine part covers 82 % of the MPA. The site is endangered by sand extraction, construction works and tourism developments.

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http://www.novinite.com/articles/146885/Bulgarian+Eco+Activists+Call+for+Declaring+Black+Sea+Coast+National+Park (18.06.2014)

[471] Sofia News Agency, "Burgas Holds Public Discussion of Black Sea Coast Park Project", 17 June 2014: http://www.novinite.com/articles/161354/Burgas+Holds+Public+Discussion+of+Black+Sea+Coast+Park+Project?utm_source=twitterfeed&utm_medium=facebook (18.06.2014)

[472] Boteva & Kantutis Law Office, Newsletter July 2013 http://bklegal.com/2013/08/06/newsletter-july-2013/ (17.06.2014)

[473] Topix Bulgaria: http://www.topix.com/world/bulgaria (18.06.2014)

[474] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 50-55

3. **Ropotamo**
   The area covers 12,815.82 ha. Only 23 % of the area comprises marine ecosystems. Habitat types include sand banks, coastal lagoons, reefs and caves.

4. **Islands Saint Ivan and Saint Petar**
   The area is located close to Sozopol town. It has been designated to protect coastal and marine habitats and covers 1,170 and 1,240 ha, respectively.

5. **Chengene skele**
   The protected area is 191.19 ha big, the marine area covers 54 %. Many endangered bird and fish species live in the area and are threatened by pollution, industrial activities, shipping and tourism around the city of Burgas.

6. **Mandra-Poda**
   The protected area comprises a marine area of 3 % of its total size. Across the Mandra Lake passes the big European bird migration flyway, the Via Pontica.

7. **Pomorie**
   The marine territory of this area amounts to 54 %. Many birds live in the Pomorie Lake and its wetlands.

8. **Ravda-Aheloy-Nesebar**
   The area covers 3.928,38 ha with a marine area of 81 %.

9. **Cape Emine-beach**
   Its territory covers 11,282.80 ha, 19 % of it is marine. The rocky coast is marked by sandstone and marl layers.

10. **Kamchia**
    The protected area covers 12,919.94 ha, with a marine area of 6 %.

11. **Shkorpilovtsi**
    The area is 51,256.53 ha big, the marine part amounts to 22 %. Many fish and bird species as well as mammals live in the area.

12. **Galata**
    The surface of the Galata protected area covers 16,237.19 ha, its marine area 76 %. The area is under strong pressure from tourism, industry and shipping.

13. **“Complex Kaliakra”**
    The area covers 44,128.26 ha, the marine part 90 % of it. The ecosystem here is in a good condition. However, the nutrient enrichment of the close Danube River can be noticed.

14. **Ezero Shabla-Ezeretz**
    The area covers 26,235.30 ha with a marine territory part of 65 %.

15. **Ezero Durankulak**

This area covers 5,050.79 ha with a marine territory part of 75 %.

New proposals:
The European Commission considered Bulgaria did not protect an area sufficient to meet the requirements of the Habitats Directive with regard to certain habitat types and species. For that reason, proposals have been made to protect three more sites[475]:

1. BG0001500 Aladja banka

669.64 ha (100 % marine) / Date site proposed as SCI: July 2012

2. BG0001501 Emona

55,345.28 ha (100 % marine) / Date site proposed as SCI: July 2012

3. BG0001502 Otmanli

8.83 ha (100 % marine) / Date site proposed as SCI: July 2012

Also, the enlargement of six already existing sites has been proposed:

1. BG0000103 Galata / 1,842.97 ha (79 % marine)

2. BG0000146 Plaj Gradina – Zlatna ribka / 1,245.85 ha (82.95 % marine)

3. BG0000573 Complex Kaliakra / 48,291.61 ha (90.5 % marine)

4. BG0001001 Ropotamo / 98,099.76 ha (89.9 % marine)

5. BG0001004 Emine – Irakly / 16,794.59 ha (45.7 % marine)

6. BG0001007 Strandzha / 15,3541.2 (25.5% marine)

These extensions would ensure a protection up to a depth of 50 m and thus the inclusion of mussel beds, rocky reefs and beds of the red seaweed *Phyllophora nervosa* as well as oyster reefs[476].

IX. Recommendations[477]:

1. Improve coordination and inter-sectoral integration of biodiversity conservation policies;

2. Ensure the consideration of the conservation needs of protected areas in municipal and district plans;

[475] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 56-59 / National Biodiversity Council: http://www.moew.government.bg/?show=top&cid=530 (11.06.2014)
[476] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 60
[477] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 61 / Poda Protected Area Management Plan 2002-2012, Bulgarian Society for the Protection of Birds, Bulgarian-Swiss Biodiversity Conservation Programme, Ministry of Environment and Waters (June 2002): http://chm.moew.government.bg/nnps/IndexDetailsE.cfm?vID=36 (12.06.2014) p. 44

3. Ensure stable financing for conservation activities;

4. Improve administrative capacity;

5. Create economic incentives for biodiversity conservation;

6. Mobilise support of the local community for nature protection;

7. Create an effective network of MPAs;

8. Promote a network of MPAs within the whole Black Sea basin.

Integrated Coastal Zone Management

I. Characteristics of the Bulgarian coastal zone:

Bulgaria is located in south-eastern Europe, its coastline measures 378 km and comprises the provinces Dobrich, Varna and Burgas[478].

The Balkan Mountains reach the edge of the Black Sea at Cape Emine, dividing the coastline into a southern and northern part. Parts of Bulgaria's northern Black Sea Coast feature rocky headlands with cliffs up to 70 m high, whereas the southern coast is known for its wide sandy beaches.

The two largest cities and main seaports on the Bulgarian coast are Varna in the north and Burgas in the south[479].

Main threats to the environment:

The increasing urbanization of the coast as well as industrial activities, shipping, pollution and wastewater discharge put valuable territories, protected areas, dunes and beaches in danger. Also, the vast beaches along the Bulgarian Black Sea coast, the favourable temperate-continental climate and clean sea waters favour the tourist industry, which constitutes another risk factor for the ecosystems of the coastal zone[480].

II. Key legal framework:

- Territorial, Urban and Rural Development Act (April 1973)
- Spatial Development Act (2 January 2001)
- Black Sea Coast Spatial Planning Act (promulgated in State Gazette (SG) No. 48/2007)
- Regional Development Act (promulgated in the State Gazette No. 50/2008)
- Law of the Forests (29 December 1997)
- Soils Act (6 November 2007)

Bulgaria has only recently become an EU member state and has also just started the ICZM process. To harmonize its legislation with the "aquis communautaire", many laws have been issued concerning environmental protection and spatial planning and development.

Moreover, several plans and programmes have been adopted, both at national and local level: River Basin Management Plans (Varna region), Environmental Plans (National Environmental Strategy, Biodiversity Conservation Action Plan, Protected Areas Management Plan etc.) and Sustainable Development Plans (National Strategy for Sustainable Development of Tourism)[481].

[478] County overview and assessment of climate change adaptation: Bulgaria / European Commission: http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/bulgaria_climate_change_en.pdf (13.06.2014), p. 1

[479] Wikipedia "Bulgarian Black Sea Coast": http://en.wikipedia.org/wiki/Bulgarian_Black_Sea_Coast (18.06.2014)

[480] *Palazov*, Atanas, *Stanchev*, Hristo, "Human population pressure, natural and ecological hazards along the Bulgarian Black Sea Coast", SENS' 2006, Varna: http://www.space.bas.bg/astro/ses2006/Cd/E23.pdf (14.06.2014), p. 1

[481] European Commission – DG Environment "Analysis of Member States progress reports on Integrated Coastal Zone Management (ICZM)", Final Report: http://ec.europa.eu/environment/iczm/pdf/Final%20Report_progress.pdf (13.04.2013), p. 36

However, the Republic of Bulgaria has neither developed a strategy nor an action plan for Integrated Coastal Zone Management (ICZM) and there is no authority competent to implement the ICZM principles.

III. Competencies:

The Ministry of Regional Development / Ministry of Investment Planning

The Ministry of Regional Development and Public Works was responsible for managing the implementation of the relevant State Policy and for regulations with regard to spatial planning and land use in Bulgaria[482].

Following the new structure of the Council of Ministers adopted by the new government of Bulgaria in May 2013, the Ministry of Regional Development and Public Works has been divided in two new ministries – the Ministry of Regional Development and the Ministry of Investment Planning.

The Minister of Regional Development shall now manage the implementation of the state policy with regard to spatial planning, co-ordinate the activity of the central and regional bodies, of the local governments and administrations and provide guidance for and exercise control over spatial planning activities.

- The District Governor implements the State Policy at the district level.
- The Municipal Councils and mayors implement the State Policy at the district level.
- The Black Sea Basin Directorate is responsible for the management of the Black Sea coastal waters.

The Investment Planning Minister shall manage and control investment activities and shall also be responsible for the issuance of construction permits[483].

The Ministry of Environment and Waters

The Ministry of Environment and Waters is responsible for water, biodiversity protection and climate change and also for the collection, publication and dissemination of information about the environment. The Executive Environment Agency (EEA) and the Regional Inspectorates of Environment and Water (RIEW) support the Ministry. The RIEW of Varna and the RIEW of Burgas are responsible for the Black Sea coast[484].

The Basin Directorate for Water Management in the Black Sea

The Basin Directorate for Water Management in the Black Sea Region - Varna was established by the Minister of Environment and Water in 2002, to comply with the Water Framework Directive 60/2000 of the European Union and national legislation.

The Black Sea Basin Directorate is responsible for the management, planning, monitoring and collection of information on water, including 100 % of the Bulgarian territorial sea waters[485].

Municipalities

[482] Report on the current policies, procedures, legal basis and practice in Varna district coastal zones spatial planning, PlanCoast Project, p. 13

[483] Boteva & Kantutis Law Office, Newsletter July 2013 http://bklegal.com/2013/08/06/newsletter-july-2013/ (17.06.2014)

[484] Water Quality Management in Bulgaria, the regional and country context, Coast Learn Black Sea: http://www.coastlearn.org/water_quality_management/case-studies/wqm_bulgaria_context.pdf (13.06.2014) p. 2

[485] Basin Directorate for Water Management in the Black Sea Region / About us: http://www.bsbd.org/uk/about.html (18.06.2014)

Municipal bodies play an important role with regard to the protection of the environment[486]. They are, for example, responsible for the safe disposal of municipal waste and for urban wastewater treatment plants. They are also responsible for the information of the public on the state of the environment, for controlling compliance with environmental legislation and for the adoption of local spatial development plans.

Weaknesses with regard to the division of responsibilities:
Competencies are not yet organised in Bulgaria[487]. The Ministry of Environment and Water and the Ministry of Regional Development are together responsible for Integrated Coastal Zone Management and sustainable development, the Ministry of Environment and Water and the Ministry of Trade and Tourism for the protection of the coastal environment. However, recently, coordination between the Ministries has been improved and the many initiatives to improve the existing legal framework reflects the will of the Bulgarian authorities to implement ICZM principles and to bring the Bulgarian law in line with the EU recommendations[488].

IV. Public participation:
Involving the public in the decision-making process is implemented through various policies in Bulgaria[489]. For example, the environmental impact assessment procedure includes public discussions as well as the River Basin Management Plan and the protected areas and NATURA 2000 sites assessment procedure. Also, data has been made available to the public, with information on coastal uses, protected sea and land areas and coastal erosion.

V. Recommendations[490]:

- to develop a set of indicators to be able to evaluate the progress on ICZM;
- to create a GIS based information system for coastal and marine areas;
- to better monitor natural processes;
- to further promote public participation;
- to foster cross-border and cross-sectoral cooperation;
- to promote an agreement on ICZM at Black Sea basin level.

VI. Spatial planning

1. Evolution of the spatial planning system for the Black Sea coastal zone[491]:

[486] European Commission – DG Environment "Analysis of Member States progress reports on Integrated Coastal Zone Management (ICZM)", Final Report: http://ec.europa.eu/environment/iczm/pdf/Final%20Report_progress.pdf (13.04.2013) p. 37
[487] European Commission – DG Environment "Analysis of Member States progress reports on Integrated Coastal Zone Management (ICZM)", Final Report: http://ec.europa.eu/environment/iczm/pdf/Final%20Report_progress.pdf (13.04.2013), p. 36
[488] Ministry of Environment and Water / Basin Directorate for Water Management in the Black Sea Region: Member State Report on ICZM 2010: Bulgaria_MS_Report_2010_Summary_EN.pdf (15.04.2013) p. 1
[489] European Commission – DG Environment "Analysis of Member States progress reports on Integrated Coastal Zone Management (ICZM)", Final Report: http://ec.europa.eu/environment/iczm/pdf/Final%20Report_progress.pdf (13.04.2013) p. 37
[490] European Commission – DG Environment "Analysis of Member States progress reports on Integrated Coastal Zone Management (ICZM)", Final Report: http://ec.europa.eu/environment/iczm/pdf/Final%20Report_progress.pdf (13.04.2013) p. 37/38
[491] Report on the current policies, procedures, legal basis and practice in Varna district coastal zones spatial planning, PlanCoast Project, p. 8-13

Spatial planning in Bulgaria started in the 70s to facilitate orderly urban and economic development. In 1994, the need for a special policy for the Black Sea coastal zone was recognized, to restrict construction works and to protect valuable nature.

Regulation No. 2 (24 January 1995) on territorial planning of the Black Sea coast regulates:

1. the social, economic and environmental development of the coast;

2. the protection of the coast.

2 zones (Zone "I" and "II") with different levels of protection have been defined.

Between 1996 and 1997, for all Black Sea municipalities, a five year territorial plan has been developed with information on the environment, economic activities, infrastructure, water resources etc. However, the management of the sea has been neglected in those plans and, after their expiry, some municipalities have relaxed the regulations to attract new investments.

In 2001, a new Spatial Planning Act has been adopted to regulate the use of land and the content requirements for development plans at national, district or municipality level, the planning competencies and the procedure for public participation.

Through the amendment of Regulation No. 7/2005 on the rules on spatial planning, a special chapter on the Black Sea coast has been introduced, abrogating the Regulation No. 2 of 24 January 1995. The Regulation concerns the territory of all municipalities that border the Black Sea as well as the seawater up to a distance of 200 m from the shore.

The Regulation No. 7 defines again two zones with a different level of protection, Zone A and Zone B.

In 2006, the regime of the zones has been included in a new draft Law on spatial planning on the Bulgarian Black Sea Coast. This Law deals with the land use, coastal protection and natural resources exploitation regulations as well as competencies, procedures etc.

2. Key legal framework:

- Spatial Planning Act (promulgated in State Gazette (SG) No. 1/2001)
- Regional Development Act (promulgated in SG No. 50/2008)
- Black Sea Coast Spatial Planning Act (promulgated in SG. No. 48/2007)

3. The National Concept for Spatial Development:

The National Concept for Spatial Development for the period 2013 -2025 establishes a series of principles for spatial planning[492]:

- Integrated planning
- The scientific approach in planning
- The priority protection of public interests
- Publicity, transparency, partnership and citizens' involvement in the decision-making process
- Consistency, coordination and continuity of the planning process
- Inter-disciplinarity, trans-disciplinarity and synergy

[492] "National Concept for Spatial Development for the period 2013-2025", National Centre for regional development, Sofia, 5 November 2012: http://www.bgregio.eu/media/files/Programirane%20&%20ocenka/Programirane%202014-2020/NKPR_28012013_Last_en.pdf (17.06.2014) p. 17-18

- Concentration

It also sets a number of strategic objectives, for example Strategic Objective 5: "Promoted development of specific areas"[493]:

The following priorities have been identified as significant for attainment of this strategic objective:

5.1. "Integrated management and sustainable development of the Black Sea coastal municipalities, including through cross-border cooperation with neighbouring countries from the Black Sea Region, for introduction of an Integrated Maritime Policy".

4. **Types of plans**[494]:
   - National Complex Development Scheme (NCDS)
   - Regional Development Schemes (RDS): for one or more districts or several municipalities
   - General Development Plans
   - Detailed Development Plans / Specialized Development Plans

The Specialized Development Scheme for the Black Sea coast determines inter alia[495]**:**
- The general spatial structure
- Places for infrastructure of national and regional significance
- Measures for environmental protection
- The territories and water areas where development is restricted
- The zones for economic activities

General Development Plans for the municipalities along the Black Sea coast determine inter alia[496]**:**
- the capacity limit for in-resort settlements, resorts, holiday settlements and villa zones
- the necessary measures for beach protection and reclamation, for the improvement of the aesthetical qualities of the territories, for the protection of landscapes and monuments of cultural and historical heritage
- the zones in which new buildings are allowed as well as the boundaries of urbanized territories
- the regulations for building activities
- the boundaries of the coastal beach strip, including the boundaries of zone A and zone B

5. **The Black Sea Coast Spatial Planning Act**[497]**:**

The main policy action undertaken in Bulgaria to protect the coastal zones was the adoption of the Black Sea Coast Spatial Planning Act by the Council of Ministers, approved in 2008 with the objectives to (Art. 2):

[493] "National Concept for Spatial Development for the period 2013-2025", National Centre for regional development, Sofia, 5 November 2012: http://www.bgregio.eu/media/files/Programirane%20&%20ocenka/Programirane%202014-2020/NKPR_28012013_Last_en.pdf (17.06.2014) p. 44

[494] Report on the current policies, procedures, legal basis and practice in Varna district coastal zones spatial planning, PlanCoast Project, p. 17

[495] Report on the current policies, procedures, legal basis and practice in Varna district coastal zones spatial planning, PlanCoast Project, p. 17

[496] Report on the current policies, procedures, legal basis and practice in Varna district coastal zones spatial planning, PlanCoast Project, p. 17-18

[497] The Black Sea Coast Spatial Planning Act: www.cadastre.bg (18.06.2014)

- create conditions for the stable and integrated development, spatial planning and protection of the Black Sea coastline;
- provide free public access to the coast;
- ensure a sustainable use of the natural resources;
- prevent or decrease pollution;
- protect the coast against erosion; and to
- restore and protect the natural landscape and the cultural and historical heritage.

The law distinguishes two development zones for which specific restrictions with regard to the density of buildings, the maximal building height as well as the minimal space for green areas have been stipulated[498].

Zone A
Zone A covers the Black Sea waters up to a distance of 200 m and 100 m of the coast, measured from the shoreline.

The following activities are prohibited or restricted in Zone A (Art. 10):

The construction of fences, access restrictions, the exploitation of resources, the discharge of wastewater, the treatment of waste, the use of insecticides and fertilizers and polluting industries.

The construction of ports, coastal protection measures and technical infrastructure are allowed outside the beaches. For other constructions, a density limit of 10 % has been set. On beaches, only some tourist facilities are allowed.

Zone B
Zone B covers the zone up to 2 km, measured from the border of Zone A, but not determined urban territories. Activities here are regulated, but less strictly than in Zone A (Art. 11).

The regime of protected areas within the borders of Zone A or B is not affected by the Black Sea Coast Spatial Planning Act (Art. 10 VI and Art. 11 III).

Promulgated in the State Gazette of 19 July 2013, the Bulgarian Parliament adopted a decision imposing a moratorium on deals, change of use and construction works involving state property in the territory of development zones “A” and “B” under the Black Sea Coast Spatial Planning Act. Exceptions shall only be allowed for infrastructure projects of highest national or municipal importance.

These restrictions shall apply for a period not longer than 12 months. During this period, the Council of Ministers has to propose a program for the preparation of maps of the islands and the sand dunes on the Bulgarian Black Sea Coast and to submit a report on the plots – public or private property of the State – located in zones “A” and “B” [499].

[498] County overview and assessment of climate change adaptation: Bulgaria / European Commission: http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/bulgaria_climate_change_en.pdf (13.06.2014), p. 4-5
[499] Boteva & Kantutis Law Office, Newsletter July 2013 http://bklegal.com/2013/08/06/newsletter-july-2013/ (17.06.2014)

GEORGIA

Protected Areas

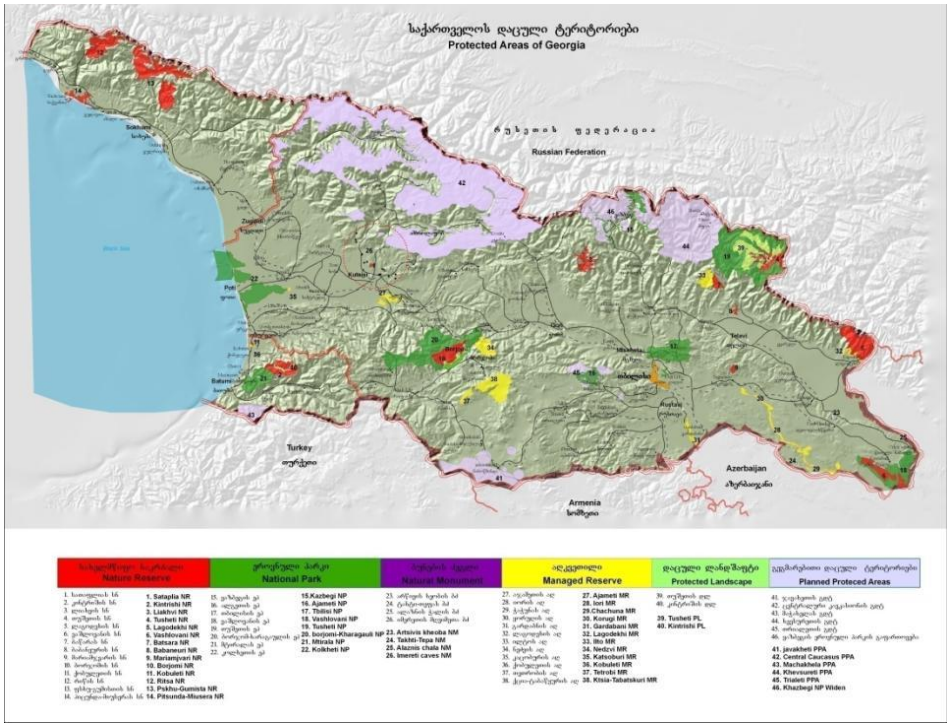


Figure 7: Map of Georgia protected areas (NEAP-2: National Environmental Action Plan of Georgia 2011-2015, p. 63)

I. History of protected areas in Georgia:

The Caucasus is one of the WWF Global 200 Ecoregions, one of the 34 Conservation International Global Hotspots and one of the World's 221 Endemic Bird Areas. The region is characterized by a high plant and animal diversity and by a high level of endemism. Georgia's biodiversity, however, is threatened by the logging of forests, the poaching of wildlife, the cultivation of wetlands and by mining, quarrying and mass tourism[500]. The main strategy to respond to those threats is the development and efficient management of a network of protected areas.

Georgia has a long history of protected areas. The first protected area, the Lagodekhi Strict Nature Reserve, was established as early as 1912[501]. In recent years, Georgia has made a significant progress towards efficient biodiversity conservation. Thus, since 2002, the total number of protected areas has more than doubled and their territory has increased by 75 %[502]. Besides, the Parliament has adopted a law establishing a new protected areas system that is based on the IUCN

[500] Twinning Project Fiche „Strengthening Management of Protected Areas of Georgia": https://webgate.ec.europe.eu, p. 2

[501] http://www.conservation.org/where/priority_areas/hotspots/europe_central_asia/Caucasus/Pages/conservation.aspx (17.02.2014)

[502] Twinning Project Fiche „Strengthening Management of Protected Areas of Georgia": https://webgate.ec.europe.eu, p. 2

recommendations, and the president pledged to protect 15 % of the country's total forest area as Georgia's "Gift to the Earth"[503].

At present, the total area of protected areas amounts to about 7 % of the country's territory. About 75 % of those protected areas are covered by forests[504]. There are 14 Strict Nature Reserves, 9 National Parks, 18 Managed Nature Reserves, 14 Natural Monuments and 2 Protected Landscapes in Georgia, established to protect the natural heritage of the country[505].

II. Key legal framework:

Law on environmental protection (10 December 1996)
Wildlife Act (25 December 1996)
Law on protected areas (7 March 1996)
Law No. 2209 on the protection of cultural heritage (25 June 1999)

III. Competencies[506]:

The establishment and management of protected areas are governed by the Law "On Protected Areas" (1996).

Parliament of Georgia:

The Parliament of Georgia decides on the establishment of new protected areas and on changes of their boundaries upon a proposal of the Government.

Ministry of Environment Protection and Natural Resources (MoEPNR):

The MoEPNR is responsible for the development and implementation of environmental policies and legislation. The MoEPNR's agreement is needed for any proposal to establish a new protected area or to change the boundaries or revoke the protected status of an existing protected area.

Especially relevant to protected areas are the following units of the ministry:

The Biodiversity Protection Division

This department is responsible for the development and implementation of policies and legislation for biodiversity conservation inside and outside protected areas.

The Department of Environmental Policy and International Relations

This department is responsible for environmental policy development and long-term planning, as well as for the cooperation with international partners and donors.

Agency of Protected Areas (APA):

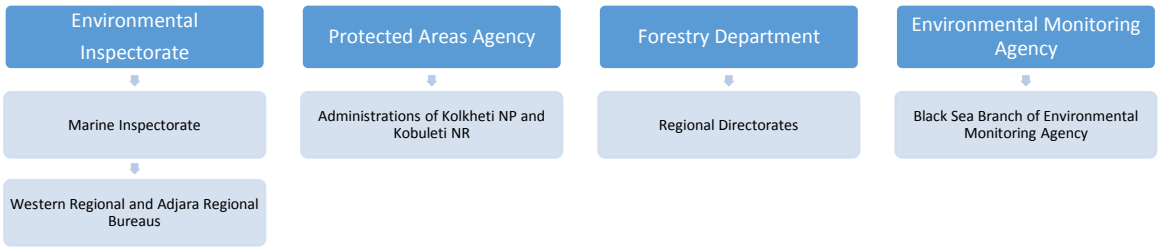
[503] http://www.conservation.org/where/priority_areas/hotspots/europe_central_asia/Caucasus/Pages/conservation.aspx (17.02.2014)
[504] The Intergovernmental Conference TBILISI +35: http://www.tbilisiplus35.ge/index.php?option=com_content&view=article&id=110&Itemid=170&lang=en#.UxmbtBDNDcu (07.03.2014)
[505] The Intergovernmental Conference TBILISI +35: http://www.tbilisiplus35.ge/index.php?option=com_content&view=article&id=110&Itemid=170&lang=en#.UxmbtBDNDcu (07.03.2014)
[506] Ministry of Environment Protection and National Resources and German Financial Cooperation: Eco-regional Nature Conservation Programme for the Southern Caucasus (ENCP), Phase III (2011), Annex 3, p. 1-2

The APA is a legal entity of public law (LEPL). The mandate of the APA is laid down in the Regulation for the Agency of Protected Areas (1 February 2008). It has 19 subordinated territorial units.

The Agency works under the supervision of the MoEPNR and has the following key functions: (a) to manage protected areas (PAs); (b) to maintain PAs and to supervise the administration of PAs; (c) PA system and capacity development; and (d) the development of plans and the draft of laws and guidelines for the management of PAs. The Agency also has some additional functions, such as ensuring the compliance with laws, the planning and development of new protected areas and the development of ecotourism and infrastructure. As a legal entity of public law, the APA is entitled to conduct certain economic activities and to collect the revenue of these activities for its re-investment in the PA system development. One of the main sources of such revenues is ecotourism.

According to the Implementation Completion and Results Report of the GEF/World Bank project of Protected Areas Development, "at this time, APA is a dynamic organization with a vision to expand on the Project's achievements. It has secured Government resources and is working hard to broaden revenue sources for the PAs, from visitors, international donors, and the private sector" [507].

The following departments are present within the ministry[508]:



Ministry of Internal Affairs:
The Ministry of Internal Affairs is an associated competency body due to its responsibilities with the Border Police and Coast Guard.

IV. Categories[509]:

In March 1996, the Georgian Parliament adopted the law "On Protected Areas" that determines the different categories of protected areas in Art. 3. The law introduced the internationally accepted categories based on the IUCN recommendations and allows the creation of protected areas under international designations, including Ramsar sites, Biosphere Reserves and World Heritage Sites.

Summary[510]:

[507] Twinning Project Fiche „Strengthening Management of Protected Areas of Georgia": https://webgate.ec.europe.eu, p. 13
[508] *Goradze*, Irakll, The Black Sea Coastal Wetland Vision / Georgia (2008): http://www.econatura.nl/wp-content/uploads/2012/10/National-Part-of-the-Black-Sea-vision-GEORGIA.pdf, p. 20
[509] Agency of Protected Areas: www.apa.gov.ge (07.03.2014)
[510] National Biodiversity Strategy and Action Plan – Georgia / Tbilisi 2005: https://www.cbd.int/doc/world/ge/ge-nbsap-01-en.pdf, p. 21-22

Type of protected area	Permitted activities	IUCN Category
Strict Nature Reserve	Strict protection	I
National Park	Ecosystem conservation, recreation	II
Natural Monument	Conservation of natural features	III
Managed Nature Reserve	Preservation through active management	IV
Protected Landscape	Ecosystem conservation, recreation	V
Multiple-purpose Use Area	Sustainable use of ecosystems	VI

Strict Nature Reserves (IUCN Category I)
There are 14 Strict Nature Reserves in Georgia with a total area of 140,672 ha. Strict Nature Reserves are established in order to maintain nature, natural processes and genetic resources in a favourable condition. It is only allowed to enter a protected area of this category for educational purposes or for conducting non-manipulative scientific research.

National Park (IUCN Category II)
The first National Park in Georgia, the Saguramo National park, was established in 1973. A National Park is created in order to protect large ecosystems that are of national and international importance and to conserve their biodiversity. In addition, National Parks play an important role in the development of eco-tourism and in making the natural and cultural heritage of Georgia known at international level.

In 1995**,** the first National Park that complies with international standards was established, the Borjomi-Kharagauli National Park. Kolkheti National Park was established in 1998. Currently, Georgia has 10 National Parks with a total area of 276,723.7 ha.

Natural Monument (IUCN Category III)
Those areas are rather small and their aim is to protect a specific natural monument.

Managed Nature Reserve (IUCN Category IV)
The category of Managed Nature Reserve did not exist in Georgia until 1996. Instead, forest and hunting farms have been created since 1957. In Managed Nature Reserves, maintenance measures and the use of certain renewable resources are permitted under strict supervision and control. There are 18 Managed Nature Reserves in Georgia that cover about 66,665 ha.

Protected Landscape (IUCN Category V)
The first Protected Landscape in Georgia, the Tusheti Protected Landscape, was established in 2003**.** In this type of protected area, the sustainable use of natural resources and the development of eco-tourism compatible with the conservation objectives are allowed. The total area of Protected Landscapes in Georgia amounts to 37,708 ha.

Multi-purpose Use Area (IUCN Category VI)
According to current Georgian legislation, it is allowed to establish Multi-purpose Use Areas. Such protected areas, however, do not yet exist.

In Multi-purpose Use Areas, economic activities compatible with the protection of the environment are permitted as well as the use of renewable natural resources. These areas are planned to be

relatively large and should include waters, forests or pastures and a high diversity of flora and fauna. They can also include settlements. However, because of the relatively low protection level, unique natural formations of national importance shall not be located in those areas.

V. System of Protected Areas:

The key provision of the system of protected areas is Art. 13 of the law "On Protected Areas"[511]:

1. The planning of the System of Protected Territories is a part of Georgia's Development Strategy and is closely linked with both different (national, regional) levels of territorial planning and various programs of sectorial planning (environmental protection and preservation, science, education, health care, tourism, recreation, forestry, hunting, energy sector, agriculture, transport, housing and construction, protection of the monuments of history and culture, etc.).

2. The planning of the System of Protected Territories specifies planning regions, natural and natural/historical sites and complexes which should be protected; defines recommended categories, boundaries, and zones of protected territories, as well as permitted activities; develops priorities and phases of establishing the protected territories.

3. The planning of the System of Protected Territories shall be the responsibility of the Ministry of Environment and Natural Resources, the Ministry of Urbanization and Construction, and the Central Department of Protected Territories, State Reserves and Hunting Areas (hereinafter referred to as the "Protected Territory Service").

VI. Management:

1. Key provision

The key provision on the management of protected areas is Art. 15 of the law "On Protected Areas"[512]:

Protected Territory Management Plan

1. The first stage of the protected territory planning (system planning at national and regional levels) shall be managed in conformity with the obligatory Protected Territory Management Plan.

2. The Management Plan, which should establish exact boundaries, zones and territorial organization of the protected territories and their support zones (buffer zones), as well as integrated programs and budgets of the protection, scientific research, monitoring, education, recreation, tourism, administration and other activities related to such territories and zones, shall be developed by the Central Department of Protected Territories, State Reserves and Hunting Areas upon the establishment of protected territories and, in exceptional cases (where there is neither an urgent need of establishing a protected territory, nor available budget resources, and where there is a need of accumulating funds of donors or other non-budgetary agencies) within three years after their establishment.

[511] http://faolex.fao.org/ (10.03.2014)
[512] http://faolex.fao.org/ (10.03.2014)

3. In the view of peculiarities of each protected territory, the Management Plan shall set out specific steps aimed at generating adequate local financial resources, required for the functioning of protected territories. The Management Plan shall be developed for a different period of time; after the expiration of such a period a renewed Management Plan shall be developed.

4. The Management Plan, within one month after its submission, shall be subject to Presidential approval (the same rule applies to a renewed Management Plan). To the Management Plan there shall be attached private regulations of the protected territory and appropriate resolution.

2. Evolution

Initially, management planning in Georgia focused only on one aspect of the protected area. For example, the Vashlovani Reserve was designed for the protection of relict vegetation, whereas the other components of the ecosystem, including the local wildlife, have not been taken into consideration, and no detailed ecological surveys have been carried out prior to the planning of the reserve. As a result, certain sites important for wildlife have not been included in the reserve and populations have begun to decline. Similar single-species or vegetation based approaches have been applied to the planning of many other reserves. Thus, the integrity of the ecosystems has not always been preserved effectively.

Since 1990, however, with the support of the international donor community, Georgia has begun to develop a more modern protected areas system and to introduce new integrated approaches for management, administration, financing, public relations and protection and prevention measures[513].

3. Procedure

According to the law "On Protected Areas", the elaboration and adoption of management plans for protected areas is mandatory. The management plans are to be prepared by the Protected Areas Agency. In the plans, the borders of the protected area, its territorial organization as well as programs for its development and measures for environmental protection are specified. Besides, the plans regulate scientific research and monitoring, education, recreation, tourism and other activities.

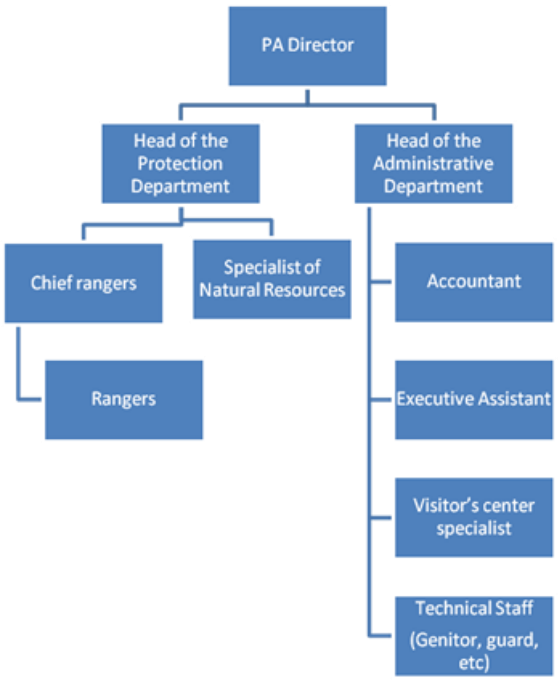
After the completion of a management plan, the Protected Areas Agency submits it to the Ministry of Environment Protection for approval. Any update of a management plans has to be approved as well. The guidelines that determine the procedure for the elaboration of management plans have been adopted on 22 August 2011 (Order No. 39 issued by the Minister of Environment Protection of Georgia)[514].

In spite of this clear regulation, a main problem in Georgia is still a general lack of management plans. Currently, only three protected areas have updated management plans. Management plans are usually adopted for five years. Protected areas that do not have a management plan are managed on the basis of temporary regulatory documents issued by the Minister of Environmental Protection and Natural Resources[515]. Thus, the vast majority of protected areas are managed without prior adoption of comprehensive objectives and policies that can be communicated to the staff, communities and

[513] National Biodiversity Strategy and Action Plan – Georgia / Tbilisi 2005: https://www.cbd.int/doc/world/ge/ge-nbsap-01-en.pdf, p. 21
[514] Twinning Project Fiche „Strengthening Management of Protected Areas of Georgia": https://webgate.ec.europe.eu, p. 4
[515] Twinning Project Fiche „Strengthening Management of Protected Areas of Georgia": https://webgate.ec.europe.eu, p. 3

other stakeholders. Consequently, stakeholders have few opportunities to participate in the planning and management of the Protected Areas[516].

4. **Typical organisational chart[517]:**



5. **Recommendations[518]:**
   - Develop management planning guidelines;
   - Partner with international organizations to train the staff of protected areas in management planning;
   - Develop new management plans;
   - Update existing plans;
   - Develop and implement a revision schedule.

VII. Examples of protected areas in the coastal zone of Georgia:

1. **Kolkheti Protected Areas[519]:**

In 1998, the Law on the "Establishment and Management of the Kolkheti Protected Areas" was adopted to establish the Kolkheti National Park and the Kobuleti Protected Area. The process has been initiated under the World Bank funded Georgian Integrated Coastal Management Project. Priority actions of the project included the conservation of biodiversity at sites of international significance on Georgia's Black Sea coast, such as the Kolkheti and Kobuleti wetland Ramsar sites,

[516] Twinning Project Fiche „Strengthening Management of Protected Areas of Georgia": https://webgate.ec.europe.eu, p. 3
[517] Twinning Project Fiche „Strengthening Management of Protected Areas of Georgia": https://webgate.ec.europe.eu, p. 30
[518] Twinning Project Fiche „Strengthening Management of Protected Areas of Georgia": https://webgate.ec.europe.eu, p. 29
[519] *Goradze*, Irakll, The Black Sea Coastal Wetlands Vision / Georgia (2008): http://www.econatura.nl/wp-content/uploads/2012/10/National-Part-of-the-Black-Sea-vision-GEORGIA.pdf, p. 12-14, 16, 18

and the restoration of degraded habitats and resources within the Black Sea Large Marine Ecosystem.

The following activities have been implemented:
- Establishment of Kolkheti National Park and Kobuleti Nature Reserve
- Adoption of management plans
- Development of park infrastructure
- Delineating and marking of the boundaries
- Support to administration and management
- Professional training
- Establishment of the Kolkheti Protected Area Advisory Council
- Biodiversity monitoring and research

The management plans for these areas include measures for biodiversity protection and management and also measures for regional development, for example for the development of tourism or the protection against flooding. Recently, a significant modernisation of the parks administration and tourist infrastructure took place. Tourism is widely promoted, inter alia to finance the management of the parks.

Kolkheti National Park:
The Kolkheti National Park lies on the Black Sea coast, bordered to the south by the Supsa River and the Guria Foothills, to the north by the Inguri River gorge and, to the west, by the Black Sea. The National Park stretches for 18-28 km to the east inland and spreads over the administrative districts of Zugdidi, Khobi, Lanchkhuti, Senaki and Abasha. The Park covers an area of 28,940 ha of land and includes 15,742 ha of marine territory. The National Park comprises the Kolkheti State Nature Reserve established in 1947 (500 ha) and the adjacent wetlands, including the Paliastomi Lake.

The marine area of the Kolkheti National Park is considered one of the most important sections of the Georgian Black Sea coast for biodiversity, being an important wintering, feeding and breeding ground for many valuable fish species, including sturgeon, anchovy, flounder and red mullet. It also provides a comparatively undisturbed habitat for dolphins.

Kobuleti Nature Reserve:
The Kobuleti Nature Reserve covers an area of 603.5 ha adjacent to the Black Sea coast. It is situated close to the town of Kobuleti and within the administrative district of Kobuleti.

Administration of Kolkheti Protected Areas:
The administration of the Kolkheti Protected Areas was performed by the administrations of the Kolkheti National Park and the Kobuleti Nature Reserve until 2008, under the authority of the Protected Areas Department of the Ministry of Environment. Now, the Agency for Protected Areas is responsible for their administration.

2. **Bichvinta-Miusera Nature Reserve**[520]**:**
Bichvinta-Miusera Nature Reserve with a size of 3,600 ha[521] was established in 1966. The main aim of the establishment of the reserve was the protection of the relict forests of Bichvinta and the

[520] Tushetiland Travel: http://tushetilanden.wordpress.com/georgia/protected-areas/bichvinta-miusera-protected-areas/ (10.03.2014)
[521] Nature Worldwide: National Parks of the World (WICE): http://www.nationalparks-worldwide.info/georgia.htm (10.03.2014)

deciduous forests of Kolkheti. The reserve is located on the Black Sea coast of Apkhazeti.

As the name of the Nature Reserve already suggests, it consists of two parts. The section of Bichvinta is located near the city of Gagra, on the Black Sea coast, on the Bichvinta cape. The Miusera section is also located on the Black Sea coast, at a distance of 15 km south from Bichvinta.

3. **Planned protected areas:**
New protected areas, for example Javakheti, Machakhela, Pshav-Khevsureti and the Central Caucasus, are planned in the draft National Environmental Action Plan as well as the expansion of current ones (Kazbegi and Algeti). Additionally, the establishment of trans-boundary protected areas – Javakheti (bordering Armenia) and Machakhela (bordering Turkey) – is considered. Those trans-boundary protected areas would have a dual benefit: in addition to the primary purpose of protecting an ecosystem, they will promote cooperation between the neighbouring countries. If the planned projects are added, approximately 15 % of Georgia's territory would have a protected area status[522].

VIII. Difficulties[523]:

- Degradation of habitats, loss of endangered species, ineffective fishing and hunting practices;
- Insufficient representation of unique ecosystems in the protected areas;
- Ineffective management of protected areas;
- A lack of management plans;
- Absence of a unified protected areas network;
- Absence of a proper data bases for biodiversity conservation and sustainable management;
- Insufficient knowledge about species and habitats;
- An ineffective Environmental Impact Permitting System, which doesn't include an Environmental Impact Assessment (EIA) as an integral part;
- Absence of a monitoring system;
- A lack of qualified staff and equipment;
- Insufficient funding of the protected areas system;
- Illegal use of natural resources;
- A low awareness of the population towards environmental issues;
- Low participation of the public in the decision-making process;
- Conflicts between the interests of the local population and the needs of the protected areas.

IX. Recommendations[524]:

- Provide for the protection of all especially valuable marine areas;
- Assess the ecological impacts of human activities on protected areas;
- Provide for adequate mitigation measures;
- Identify and promote alternative and environmentally friendly means of income for local people;
- Create modern eco-tourism facilities;
- Increase public awareness;

[522] National Environmental Action Plan of Georgia 2011-2015, Full Draft 1 (December 23, 2010): http://moe.gov.ge/index.php?lang_id=ENG&sec_id=69&info_id=1386, p. 48

[523] *Goradze*, Irakll, The Black Sea Coastal Wetlands Vision / Georgia (2008): http://www.econatura.nl/wp-content/uploads/2012/10/National-Part-of-the-Black-Sea-vision-GEORGIA.pdf, p. 23-24 / National Environmental Action Plan of Georgia 2011-2015, Full Draft 1 (December 23, 2010): http://moe.gov.ge/index.php?lang_id=ENG&sec_id=69&info_id=1386, p. 44-46

[524] *Goradze*, Irakll, The Black Sea Coastal Wetlands Vision / Georgia (2008): http://www.econatura.nl/wp-content/uploads/2012/10/National-Part-of-the-Black-Sea-vision-GEORGIA.pdf, p. 25 / National Environmental Action Plan of Georgia 2011-2015, Full Draft 1 (December 23, 2010): http://moe.gov.ge/index.php?lang_id=ENG&sec_id=69&info_id=1386, p. 51

- Develop a database for environmental information;
- Develop a monitoring and progress evaluation system;
- Ensure financial sustainability of the protected areas;
- Build capacities for protected areas management;
- Coordinate the different protected areas, adopt a unified policy[525];
- Ensure the consideration of protected areas in spatial planning and development projects;
- Develop an effective network of protected areas as well as eco-corridors, based on the principles that have been developed for effective ecological networks (adequate, representative, resilient and connected);
- Ensure that MPA networks are established within a broader spatial planning and ecosystem-based management framework;
- Develop a Georgian marine biodiversity strategy and action plan[526].

[525] National Biodiversity Strategy and Action Plan – Georgia / Tbilisi 2005: https://www.cbd.int/doc/world/ge/ge-nbsap-01-en.pdf, p. 23-24

[526] National Environmental Action Plan of Georgia 2011-2015, Full Draft 1 (December 23, 2010): http://moe.gov.ge/index.php?lang_id=ENG&sec_id=69&info_id=1386, p. 45

Integrated Coastal Zone Management

I. Problems in the coastal zone of Georgia:

Georgia's coastline stretches approximately 315 km along the Black Sea, across 12 administrative districts and 3 port cities: Batumi, Poti and Sokhumi[527]. The coastal zone is dominated by wetland ecosystems. On the north and the south end of the coast, there are also steep cliffs and mountains.

Human activities put increasing pressure on the ecosystems of the coastal zone[528]:

Areas of forest and vegetation have significantly decreased, mainly because the space was needed for agricultural fields. There is a progressive erosion of the coast, due to inter alia the rerouting of the Rioni River system at Poti, the construction of the port facilities at Batumi[529], the decreased amounts of sediments that are transported to the sea through the Chorokhi river and an intensive sediment extraction from the coast for construction purposes. This is now one of the key problems in the Georgian coastal zone[530]. The situation is particularly severe on the coastal zone of the Apkhazia region. To meet the infrastructural needs for the preparation of the Sochi Olympic Games 2014, vast amounts of construction materials have been extracted there[531].

The Black Sea coastal zone is also a prime location for tourism. Infrastructure projects and the creation of a free trade zone close to the city of Poti significantly contributed to the economic development of the region. At the same time, however, those developments have further increased the pressure on the Black Sea[532].

Another problem for marine ecosystems is pollution. The main port of Georgia, the Poti sea port, is not equipped with disposal and treatment facilities for ballast and oily waters. Additionally, numerous dumping sites located close to the sea, the discharge of untreated municipal wastewater and the run-off of nutrients from agricultural works pollute the seawater and cause its eutrophication[533].

The consequences of the lack of an efficient planning instrument for the coastal zone have also become apparent by the many examples of unsustainable developments, like unnecessary infrastructure projects or the illegal construction of dachas[534].

An example of environmental mismanagement:

[527] Integrated Coastal Zone Management in Georgia: http://momxmarebeli.ge/images/file_926216.pdf (11.03.2014), p. 1
[528] Implementation Completion and Results Report / On a Credit to Georgia for an Integrated Coastal Management Project (2007): http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/03/07/000333038_20080307012345/Rendered/PDF/ICR4430ICR0P051losed0March0502008.0.pdf p. 46
[529] Integrated Coastal Zone Management in Georgia: http://momxmarebeli.ge/images/file_926216.pdf (11.03.2014), p. 2
[530] National Environmental Action Plan of Georgia 2011-2015, Full Draft 1 (December 23, 2010): http://moe.gov.ge/index.php?lang_id=ENG&sec_id=69&info_id=1386, p. 36
[531] National Environmental Action Plan of Georgia 2011-2015, Full Draft 1 (December 23, 2010): http://moe.gov.ge/index.php?lang_id=ENG&sec_id=69&info_id=1386, p. 37
[532] National Environmental Action Plan of Georgia 2011-2015, Full Draft 1 (December 23, 2010): http://moe.gov.ge/index.php?lang_id=ENG&sec_id=69&info_id=1386, p. 38
[533] National Environmental Action Plan of Georgia 2011-2015, Full Draft 1 (December 23, 2010): http://moe.gov.ge/index.php?lang_id=ENG&sec_id=69&info_id=1386, p. 37
[534] Integrated Coastal Zone Management in Georgia: http://momxmarebeli.ge/images/file_926216.pdf (11.03.2014), p. 3

An example of particularly serious environmental mismanagement is the construction of the Kulevi Oil Terminal that caused the loss of 90 ha of wetlands protected under the Ramsar Convention on the Protection of Wetlands. This had major negative environmental and social impacts for the coastal zone. The operation of Kulevi oil terminal further affects the marine part of the Kolkheti National Park.

In spite of that, the Kulevi oil terminal was declared to be of paramount economic and geopolitical importance by the government. As a result, construction started without an environmental permit and without a formal delisting of the construction site from the Ramsar List of Wetlands of International Importance. Only later a permit was issued and an action plan for addressing oil spills has been developed. Since a new government had been elected, steps towards the mitigation of the environmental damage have been taken, such as protecting alternative wetland sites[535].

The construction of the Kulevi oil terminal without a prior plan to address environmental issues has been clearly inconsistent with Integrated Coastal Zone Management (ICZM) principles. There are already plans to double the capacity of the terminal, turning it into the largest oil terminal in South Caucasus[536].

Thus, even though Georgia has already implemented some significant coastal conservation measures, for example by the establishment of the Kolkheti National Park, more efforts towards an integrated approach to coastal management have to be made, considering the importance of its coastal zone.

As a step in the right direction, the Target 2 Point 5 of the draft National Environmental Action Plan (2011-2015) for Georgia is to "introduce ICZM approaches, as stated in regional LBSA protocol through adopting and implementing the national strategy and enacting draft ICZM law" [537].

II. The formation of a legal and institutional framework for ICZM[538]:

In October 1998, the State Consultative Commission for Integrated Coastal Zone Management (ICZM) was established by the Presidential Decree No. 608 in order to develop the institutional framework for an integrated planning and management of the coastal resources of Georgia. This inter-agency representative body, co-chaired by the Minister of Environment and the Minister of Urbanization and Construction, served as a forum for coordinating existing policies between the various sectors and stakeholders involved in coastal and marine resource use.

In April 2002, the Georgia Integrated Coastal Management Project was launched to provide assistance to Georgia in building ICZM capacity. As a result of the project, an ICZM law has been drafted. This draft law contained provisions on inter-sectoral cooperation and consultation, as well as on public consultation and stakeholder involvement.

[535] Implementation Completion and Results Report / On a Credit to Georgia for an Integrated Coastal Management Project (2007): http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/03/07/000333038_20080307012345/Rendered/PDF/ICR4430ICR0P051losed0March0502008.0.pdf, p. 8

[536] http://en.portnews.ru/news/10559/

[537] National Environmental Action Plan of Georgia 2011-2015, Full Draft 1 (December 23, 2010): http://moe.gov.ge/index.php?lang_id=ENG&sec_id=69&info_id=1386, p. 41

[538] Implementation Completion and Results Report / On a Credit to Georgia for an Integrated Coastal Management Project (2007): http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/03/07/000333038_20080307012345/Rendered/PDF/ICR4430ICR0P051losed0March0502008.0.pdf, p. 7-8 and 46-47

The ICZM law has not been adopted, however. One reason was that the law was considered not to be consistent with the wish of the government to improve investment climate by reducing the time required for the authorization of business initiatives. The planned ICZM councils have not been founded either. Such national and local consultative bodies for ICZM have also been considered an additional administrative hurdle, not in line with Georgia's liberalization and de-regulation policies.

Now, the Law of Georgia on Spatial Planning and Urban Development, adopted in 2005, regulates planning at local, regional and national levels. The Law requires that, in the planning process, the interests of all affected stakeholders are taken into account, as well as the conservation of the ecosystems and the natural and cultural resources. After the adoption of this law, the government did not see the need anymore for the adoption of additional ICZM legislation.

The draft ICZM law was reworked into Guidelines for ICZM, issued by the MoEPNR in 2006 to complement the Law on Spatial Planning and Urban Development. The Guidelines were forwarded to the local governing bodies of the coastal zone as well as to relevant units of the central government, NGOs and other stakeholders as a non-binding planning tool[539].

The ICZM Guidelines recommend the creation of temporary consultative commissions whenever there is a need for the development of plans for the coastal zone. Additionally, a new institutional unit for ICZM was created in January 2007, as a part of the Monitoring and Forecasting Centre of the MoEPNR. This unit is not a consultative body representing various interest groups, but an information and knowledge base.

Overall, the institutional and legal framework for ICZM is still in its initial phase[540].

III. Key legal framework:

Draft Law on ICZM
Forest Code of the Republic of Georgia (22 June 1999)
Law No. 599 IIs on tourism and health resorts (6 March 1997)
Law No. 1296-IIs on protective sanitary zones of health resorts and resort localities (20 March 1998)

IV. Competencies:

At the national level, the Ministry of Environment Protection and Natural Resources is mainly responsible for the protection of the Black Sea. The Ministry of Economy and Sustainable Development (MESD), the Ministry of Health, Labour and Social Protection (MLHSP), the Ministry of Education and Science (MES), the Ministry of Agriculture (MA) and the Ministry of Regional Development and Infrastructure (MRDI) also play an important role in addressing problems related to the protection of the Black Sea and the coastal zone[541].

[539] Implementation Completion and Results Report / On a Credit to Georgia for an Integrated Coastal Management Project (2007): http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/03/07/000333038_20080307012345/Rendered/PDF/ICR4430ICR0P051losed0March0502008.0.pdf, p. 18

[540] Implementation Completion and Results Report / On a Credit to Georgia for an Integrated Coastal Management Project (2007): http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/03/07/000333038_20080307012345/Rendered/PDF/ICR4430ICR0P051losed0March0502008.0.pdf, p. 7-8

[541] National Environmental Action Plan of Georgia 2011-2015, Full Draft 1 (December 23, 2010): http://moe.gov.ge/index.php?lang_id=ENG&sec_id=69&info_id=1386, p. 37

V. The Tskaltsminda ICZM Pilot project[542]:

An ICZM Pilot Project has been implemented in the Tskaltsminda coastal community with about 1,350 inhabitants (p. 3 of the plan), in the Province of Guria, on the Georgian Black Sea shore, to test at the local level approaches that have been elaborated at national level. The Pilot Project is an outcome of the EU-funded project Environmental Collaboration for the Black Sea (ECBSea).

The community of Tskaltsminda started to develop the plan for the Pilot Project in spring 2008. At the beginning, a community survey was conducted to determine who is presently living in Tskaltsminda, what are the living conditions and the typical sources of income. Also, information on land use and ecological hotspots were collected, analysed and visualised with the help of GIS maps. In a workshop involving all kind of stakeholders, a vision for the future development of the community was elaborated (p. 2 of the plan).

Vision:
"Tskaltsminda has turned into a beautiful, attractive village with content citizens, good municipal (communal) infrastructure and a well-developed processing sector. Its produce is ecologically clean and of high quality and sold on the near-by markets to locals and tourists. Tourism is developing and provides income to people while protecting the environment. The local population is well educated and has professional skills" (p. 16 of the plan).

Then, the objectives have been prioritized and possible difficulties described. The plan also provides for the establishment of a Coastal Council and for the development of renewable energy projects as an additional source of income (p. 26 of the plan). Zones are also planned to be established to regulate conflicting activities.

For example, wetland protection, tourism development or industrial activities zones are planned (p. 27 of the plan).
At the end of the plan, an "Implementation Action Plan" is presented.

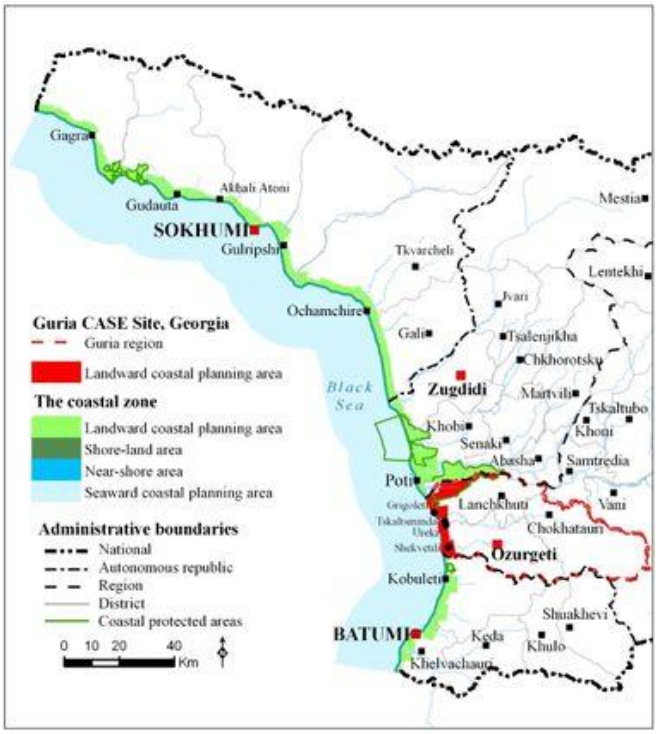


Figure 8 http://www.pegasoproject.eu/wi 1

VI. Summary of the ICZM process in Georgia[543]:

- 1995: National Integrated Coastal Zone Management Program
- 1999: Georgia ICZM Project (World Bank/GEF funded)
  Results, inter alia: State Consultative Committee (Presidential Decree No 608), Draft ICZM Law, Kolkheti Protected Areas established and managed in an integrated way
- 2007: EuropeAid project: Environmental Collaboration for the Black Sea

VII. Evaluation:

Existing legal and institutional structures for managing coastal development in an environmentally sustainable manner are still fragmented in Georgia. The decision-making process has to become more transparent to enhance the confidence in the system and an efficient ICZM policy framework is

[542] Integrated Plan for Sustainable Development of Tskaltsminda Coastal Community, Georgia, EU funded ECBSea Project, April 2009
[543] http://documents.blacksea-commission.org:88/ecbsea/files_/up_Developing_ICZM_Strategy_for_GEORGIA.pdf (15.04.2013) p. 8

needed to balance competing interests and claims. To attract financial support from national and international investors would also help to protect Georgia's coastal zone[544].

VIII. Recommendations:

The Integrated Coastal Zone Management concept, as explained in the "Policy Note on the Development of an Integrated Coastal Zone Management (ICZM) Concept for Georgia" of the Government of Georgia, developed under the Auspices of the Ministry of Environment with Assistance of the World Bank, should be implemented:

Vision: "To develop in a sustainable manner, the land and water resources on the Black Sea coast of Georgia, in order to create a more prosperous economy and a healthy environment for the benefit of all who live, work and visit the coastal zone".

To achieve this, the following actions should be implemented, according to the policy note:

- a cohesive, cross-sectoral National Coastal Strategy;
- cross-sectoral coastal plans for the Guria and Samegrelo Regions, and the Autonomous Republics of Achara and Apkhazeti;
- institutional arrangements that facilitate ICZM, for example a National Coastal Management Authority;
- a framework law on ICZM, if appropriate followed by a more comprehensive legislation in the future;
- adequate funding.

[544] Policy note on the development of an integrated coastal zone management (ICZM) concept for Georgia, The Government of Georgia, p. 1

ROMANIA

Protected Areas

I. History of Protected Areas in Romania:

In 1930, the first law on the protection of natural monuments was adopted in Romania. The first Natural Reserves were declared in 1932 by the Council of Ministers (No. 1148 and 1149). The first National Park in Romania, the Retezat National Park (about 10,000 ha), was founded in 1935 (Council of Ministers / No. 593) to protect the specific flora and fauna and the landscape of high mountains[545].

The scientist E. Racoviţă prepared the first handbook of principles to classify, organize and regulate natural reserves in 1937. In his opinion, "geographical reserves (or stations) are preferable to the protection of isolated species" [546].

In 1945, the territory of Romania still comprised only the Retezat National Park and 39 Nature Reserves. However, two decades later, 130 Nature Reserves with a total area of about 75,000 ha[547] had been established.

Recently, increasing coverage of protected areas in Romania has become a priority due to its accession to the European Union and the corresponding obligations. Thus, a series of decisions extending the number of protected areas were adopted by the Romanian Government, especially between 2004 and 2010 (No. 2151/2004, 1581/2005, 1143/2007, 1066/2010 and 1217/2010) [548].

In 2010, Romania had:

- 998 Protected Areas
- 79 Scientific Reserves
- 13 National Parks
- 230 Natural Monuments
- 661 Natural Reserves
- 15 Parks
- 3 Biosphere Reserves
- 5 Ramsar Sites: Danube Delta
- 1 World Heritage Site

II. Key legal framework:

Law on environmental protection / No. 137 (29 December 1995)

Law No. 462 (18 July 2001) concerning the approval of the Emergency Ordinance No. 236 / 2000 on the regime of natural protected areas and the conservation of natural habitats

[545] *Hălăştăuan,* Florin, "Natural protected areas. Definition, classification and some examples", Romanian Rangers Association, p. 2 / *Geacu*, Sorin, *Dumitraşcu,* Monica, *Maxim*, Iurie, "The Evolution of the National Protected Areas Network in Romania", Rev. Roum. Géogr./Rom. Journ. Geogr., 56, (1), p. 33–41 (2012) Bucureşti, p. 34

[546] *Geacu*, Sorin, *Dumitraşcu,* Monica, *Maxim*, Iurie, "The Evolution of the National Protected Areas Network in Romania", Rev. Roum. Géogr./Rom. Journ. Geogr., 56, (1), p. 33–41 (2012) Bucureşti, p. 35

[547] *Geacu*, Sorin, *Dumitraşcu,* Monica, *Maxim*, Iurie, "The Evolution of the National Protected Areas Network in Romania", Rev. Roum. Géogr./Rom. Journ. Geogr., 56, (1), p. 33–41 (2012) Bucureşti, p. 35

[548] *Geacu*, Sorin, *Dumitraşcu,* Monica, *Maxim*, Iurie, "The Evolution of the National Protected Areas Network in Romania", Rev. Roum. Géogr./Rom. Journ. Geogr., 56, (1), p. 33–41 (2012) Bucureşti, p. 37-38

III. Competencies[549]:

Ministries relevant for biodiversity conservation:

Ministry of Environment and Climate Change

Ministry of Agriculture and Rural Development

Ministry of Administration and Internal Affairs / General Police Border Inspectorate

Ministry of Transport

Ministry of Economy, Trade and the Business Environment

Ministry of National Defence / Research Centre for Navigation

Relevant Institutes:

National Institute for Marine Research and Development "Grigore Antipa" (NIMRD)

National Research and Development Institute for Marine Geology and Geoecology – GeoEcoMar

National Institute for Danube Delta Research and Development (INCDDD)

National Institute for Research and Development in Tourism

National Institute for Environmental Protection

Relevant Governmental Agencies:

Environmental Protection Agency Constanta

Romanian National Water Administration (RNWA)

Romanian Water Administration – Dobrogea Litoral (ABADL)

National Company "Maritime Ports Administration"

Romanian Naval Authority (ANR)

National Agency for Fishery and Aquaculture

Danube Delta Biosphere Reserve Authority (ARBDD)

Environmental Protection Agency Tulcea

National Environmental Protection Agency

National Environmental Guard

IV. Categories[550]:

[549] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 39

National Parks (IUCN Category II):
This type of protected area aims to protect extensive valuable ecosystems that are exposed to minimal human pressure. In the core zones of the National Parks, the only activity permitted is scientific research.

Natural Monuments (IUCN Category III):
These are areas that comprise one or more natural or cultural features with outstanding or unique value due to rarity, representativeness, aesthetic value or cultural significance.

Natural Reserves (IUCN Category IV):
Natural Reserves comprise important habitats or species and can have various purposes. They can thus be ornithological, botanical, zoological, palaentological, geological, speleological or mixed reserves. All Natural Reserves are state owned. In addition to the reserves at national level, local authorities can establish local reserves.

Natural Park (IUCN Category V):
A Natural Park is an area of land, coast or sea with significant aesthetic, ecological or cultural value, often also with a high degree of biodiversity.

Protected Landscapes:
A Protected Landscape is a natural or man-made area that has been reserved for conservation or for scientific, educational and/or recreational purposes[551].

Bird Sanctuaries:
Bird Sanctuaries are small areas that aim to protect breeding, wintering and passage birds.

Protected Forestry Areas:
Protected Forestry Areas are large areas of woodland protected from exploitation by local forestry authorities.

Scientific Reserve (IUCN Category Ia):
Scientific Reserves are areas of land or sea that comprise outstanding or representative ecosystems or possess outstanding geological features. These areas are in their natural state and significant permanent settlements are not permitted in them.

Geopark:
A Geopark is a territory with one or more sites of scientific importance for geological, archeological, ecological or cultural reasons.

Biosphere Reserve:
Biosphere Reserves aim to reconcile the conservation of biodiversity with its sustainable use[552]. A Biosphere Reserve can consist of terrestrial, coastal and marine ecosystems.

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[550] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 61-62 / *Toncea*, Vladimir, EGEA Alumni Bucharest, President on NGO Echilibru: "Sustainable Management of Natural Protected Areas in Romania" / *Appleton*, Michael R., "Protected Area Management Planning in Romania – A Manual and Toolkit", Fauna & Flora International: http://www.ceeweb.org/wp-content/uploads/2012/01/Protected-Area-Management-Planning-Toolkit-ROMANIA.pdf (20.05.2014), p. 15

[551] EIONET: http://www.eionet.europa.eu/gemet/concept?ns=1&cp=6743 (19.05.2014)

Wetland of International Importance (Ramsar sites):
A site is included in the List of Wetlands of International Importance because of its international significance in terms of ecology, botany, zoology, limnology or hydrology (Art. 2.2 Ramsar Convention).

Natural World Heritage Site:
A Natural World Heritage Site must be of outstanding universal value and meet at least one out of the ten selection criteria. An area can, for example, be selected if it contains "the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation" (criterion (x))[553].

Special Area of Conservation:
A special area of conservation means a site of Community importance "designated by the Member States through a statutory, administrative and/or contractual act where the necessary conservation measures are applied for the maintenance or restoration, at a favourable conservation status, of the natural habitats and/or the populations of the species for which the site is designated" (Art. 1 l) European Union Habitats Directive). These sites belong to the European NATURA 2000 network.

Special Protection Area:
A Special Protection Area (SPA) is an area of land, water or sea important for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds. The most suitable territories are designated as SPAs by the Member States of the EU and afforded special protection (Art. 4 I Birds Directive). These sites then automatically become part of the European NATURA 2000 network[554].

Site of Community Importance:
A "site of Community importance means a site which, in the biogeographical region or regions to which it belongs, contributes significantly to the maintenance or restoration at a favourable conservation status of a natural habitat type in Annex I or of a species in Annex II and may also contribute significantly to the coherence of Natura 2000 referred to in Article 3, and/or contributes significantly to the maintenance of biological diversity within the biogeographic region or regions concerned" (Art. I k) EU Habitats Directive).

V. Protected Areas in the Black Sea Area[555]:
The Romanian Black Sea coastline is 245 km long (6 % of the total Black Sea coast) and its Exclusive Economic Zone (EEZ) covers about 30,000 km². The Romanian marine protected areas network

[552] UNESCO: Biosphere Reserves: http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/ (20.05.2014)
[553] UNESCO : The criteria for selection : http://whc.unesco.org/en/criteria/ (20.05.2014)
[554] European Commission / NATURA 2000: http://ec.europa.eu/environment/nature/natura2000/sites_hab/biogeog_regions/index_en.htm (20.05.2014)
[555] *Zaharia*, Tania, *Maximov*, Valodia, *Radu*, Gheorghe, *Anton*, Eugen, *Spinu*, Alina, *Nenciu*, Magda,"Reconciling fisheries and habitat protection in Romanian coastal marine protected areas", Lleonart J., Maynou F. (eds), The Ecosystem Approach to Fisheries in the Mediterranean and Black Seas, Sci. Mar. 78S1: 95-101. doi: http://dx.doi.org/10.3989/scimar.04028.25B, p. 97 / *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 64-65

consists of eight sites, covering 4.65 % of the EEZ. However, the marine part of the Danube Delta Biosphere Reserve alone accounts for 88.57 % of the whole network's area[556].

The first designation of a marine protected area took place in 1980, through the Decision No. 31 of the Constantza County Council on the designation of the "Vama Veche - 2 Mai Marine Reserve" (5,000 ha). In 1990, the Danube Delta Biosphere Reserve was designated, including a "marine buffer area" (about 103,000 ha).

In the coastal region of Dobrogea, there are 39 protected areas.

The NATURA 2000 Network:
NATURA 2000 is an ecological network of protected areas in the European Union that aims to maintain or achieve a favourable conservation status of the most important habitat types and species in Europe.

The European integration was thus the most important driver of reforms with regard to protected areas in Romania. Romania has transposed the Habitats Directive (92/43/CEE) and the Birds Directive (79/409/CEE) by the Government Emergency Ordinance No. 57/2007 regarding the regime of natural protected areas, the conservation of natural habitats and of wild fauna and flora, as amended by the Government Emergency Ordinance No. 154/2008[557].

Because of its high degree of biodiversity, Romania can contribute valuable areas to the European Ecological Network.

Initially, 273 Sites of Community Importance (SCIs) have been declared by the Order of Ministry No. 1964 of 2007 and 108 Special Protection Areas (SPAs) by the Government (No. 1284 of 2007). In 2011, the network was extended to 408 SCIs (39,952 km²) and 148 SPAs (35,542 km²) by the Order of the Ministry of Environment and Forests No. 2387 of 2011 and the Government Decision No. 971/2011, respectively. After these declarations, the total area of NATURA 2000 areas in Romania amounted to 54,067 km², which represents 22.68 % of the national territory. The process of declaring NATURA 2000 areas in Romania is due to be completed in 2016[558].

After Romania's EU accession in 2007, six marine sites have been protected. The European Commission, in agreement with the Member States, adopted the proposed list of marine sites by its Decision 2009/92/EC. The MPA network in Romania was complemented in 2012 by two additional marine sites. Now, there are nine sites designated under the Habitats and Birds Directive's respectively.

In compliance with the Habitats Directive, the designated sites shall provide for the protection of species such as *Phocoena phocoena* (harbour porpoise / conservation status U2, Unfavourable – Bad), the *Delphinus delphis* (common dolphin / conservation status U1, Unfavourable - Inadequate and deteriorating) and the *Acipenser gueldenstaedti* (Russian sturgeon / conservation status U2+, Unfavourable – Bad) and habitats such as sandbanks and coastal lagoons. The conservation status

[556] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 64
[557] Mareş, Cristian, Mătuşescu, Constannţa, Gilia, Claudia, "Implementation of Natura 2000 Network in Romania", Development, Energy, Environment, Economics: http://www.wseas.us/e-library/conferences/2010/Tenerife/DEEE/DEEE-01.pdf (01.02.2013) p. 34
[558] *Geacu*, Sorin, *Dumitraşcu,* Monica, *Maxim*, Iurie, "The Evolution of the National Protected Areas Network in Romania", Rev. Roum. Géogr./Rom. Journ. Geogr., 56, (1), p. 33–41 (2012) Bucureşti, p. 38

description is based on the results of monitoring of habitats and species, carried out in 2013 the last time in Romania in compliance with Art. 17 of the Habitats Directive[559].

The nine NATURA 2000 Sites[560]:

1. **ROSPA0076 Black Sea / 147,242.9 ha (custodian: SC EURO LEVEL)**

This is a Site of Community importance, according to the 79/409/CEE Bird Directive, directly nominated Special Protected Area through Governmental Decree No. 1284/2007 regarding the declaration of avifaunistic protected areas as an integrating part of the NATURA 2000 European ecological network in Romania.

2. **ROSCI0269 -Vama Veche - 2 Mai Marine Reserve / 5,272 ha (custodian: NIMRD)**

The Vama Veche – 2 Mai Marine Reserve is a Site of Community Importance (Habitats Directive). The area of the SCI overlaps with the Vama Veche - 2 Mai Marine Reserve, a Nature Reserve of national importance aiming at the protection of marine habitats and species (corresponding to the IUCN category IV).

The area is especially valuable because it comprises various habitats of European interest. It is rich in benthic and pelagic life and constitutes a refuge and breeding area for many marine species.

In the reserve, anthropogenic pressures include: the expansion of human settlements, unregulated touristic activities, the Mangalia shipyard, sand and rock excavation, illegal wastewater discharges, and illegal fishing.

Due to its location on the Romanian - Bulgarian border, there is a possibility to enlarge the reserve and to establish a transboundary reserve jointly managed by Bulgaria and Romania. However, there are no advancements in this regard so far.

3. **ROSCI0094 - The Sulphur Seeps in Mangalia / 362 ha (custodian: NIRD GEOECOMAR)**

This Site of Community Importance (Habitats Directive) comprises sulphur springs and rocky, sandy and peat bottoms. It is connected to the Dobrogea plateau‘s karst complex. The causes of the sulphur emissions and their effects on the marine ecosystem have not been sufficiently studied yet.

Even though the site is rather small, it is a biodiversity hot-spot with a particularly high diversity of habitats and species. Among them are also ecosystem-engineering species like the sea grass *Zostera noltii*, the perennial brown alga *Cystoseira barbata* and the lugworm *Arenicola marina*. An extension of this highly valuable site has been proposed.

4. **ROSCI0197 - Submerged Beach from Eforie North - Eforie South / 141 ha (custodian: SC EURO LEVEL)**

This Site of Community importance (Habitats Directive) is the only place at the Romanian shore where the bivalves *Donacilla cornea* and *Donax trunculus* still exist. Due to their requirements with regard to water purity, oxygen concentration and salinity, their presence is an indicator of good water quality. Today, the submerged beach is mainly affected by tourism-associated pollution and wastewater discharges.

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[559] *Zaharia*, Tania, *Maximov*, Valodia, *Radu*, Gheorghe, *Anton*, Eugen, *Spinu*, Alina, *Nenciu*, Magda,“Reconciling fisheries and habitat protection in Romanian coastal marine protected areas”, Lleonart J., Maynou F. (eds), The Ecosystem Approach to Fisheries in the Mediterranean and Black Seas, Sci. Mar. 78S1: 95-101. doi: http://dx.doi.org/10.3989/scimar.04028.25B, p. 100-101

[560] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., “Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)”, EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 64-69

5. **ROSCI0273 - Marine Area from Cape Tuzla / 1,738 ha (custodian: NIMRD/GEOECOMAR)**

Around Cape Tuzla, rocky reefs reach their maximum depth (at 28 m). The underwater landscape of the reefs is very diverse, with plateaus, canyons, drop-offs, overhangs and small caves that are populated by a rich marine fauna. The area is severely affected by road building activities along the coast. Massive amounts of clay have been dumped into the sea, infilling small gulfs. Furthermore, in 2011, coastal defence works have been realized in the area to protect the coast against further erosion.

6. **ROSCI0237 -Submerged Methanogenic Carbonate Structures Sfantu Gheorghe / 6,122 ha (custodian: NIRD GEOECOMAR)**

Located at depths between 15 and 784 m in the Northwestern part of the Black Sea, the submerged carbonate structures are built by bacteria and archaea around methane emissions. Because of the proximity to the Danube Delta Biosphere Reserve, a joint management would be feasible.

Since the site is located far offshore, the anthropogenic pressure is insignificant.

7. **ROSCI0066 - Danube Delta - Marine Zone / 121,697 ha (custodian: DDBRA)**

This Site of Community Importance overlaps with the marine area of the Danube Delta Biosphere Reserve, a natural protected area of national and international importance, a Ramsar site and an UNESCO site.

New NATURA 2000 Sites[561]:

In 2011, based on a NIMRD proposal, two new marine sites (SCIs) were declared by the Order of the Environment and Forests Minister No. 2387/2011 (23 August 2011), amending the Order of the Environment and Sustainable Development Minister No. 1964/2007 regarding the natural protected area regime of the Sites of Community Importance. The aim of this proposal of NIMRD was to protect sub-types of 1170 - Reef habitat, including 1170 – 2 Biogenic reefs with *Mytilus galloprovincialis*, insufficiently protected by previously declared sites.

These new sites were:
ROSCI0281 - Cap Aurora (No custodian yet / 13,073.5 ha[562]);
ROSCI0293 - Costinesti – 23 August (No custodian yet / 4,878.00 ha[563]).

VI. Management:

Currently, only for two MPAs in Romania regulations and a management plan have been issued. These are the Danube Delta – marine zone, as part of the Danube Delta Biosphere Reserve (DDBR) and the 2 Mai – Vama Veche Marine Reserve, which is overlapping with the respective NATURA 2000 site.

1. The Danube Delta:

An area of 500,000 ha, located where the Danube enters the Black Sea and including all previously declared protected areas, was declared a biosphere reserve under National Decree No. 983 on 27 August 1990. The reserve was submitted in May 1991 to UNESCO for nomination as a biosphere reserve and to the Ramsar Bureau for nomination as a Ramsar site[564].

[561] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 65
[562] European Environment Agency: http://natura2000.eea.europa.eu/natura2000/SDF.aspx?site=ROSCI0281
[563] European Environment Agency: http://natura2000.eea.europa.eu/natura2000/SDF.aspx?site=ROSCI0293
[564] UNESCO, Danube Delta: http://whc.unesco.org/en/list/588 (20.05.2014)

Characteristics:
Romania's Danube Delta Biosphere Reserve (DDBR) now covers around 580,000 ha. It is the second largest and the best preserved of Europe's deltas. The greater part of the Danube Delta is situated in Romania (Tulcea county), but its northern part, on the left bank of the Chilia arm, is situated in Ukraine (Odessa Oblast)[565].

The Danube Delta is characterized by a rich diversity of wetland habitats, numerous lakes and ponds and over 330 species of birds and 45 species of freshwater fish.

Agriculture, fishing and forestry secure the livelihood of the people living in the delta region, including between 12,000 and 13,000 people who live in settlements within the DDBR. During the 1980's, large-scale agricultural and fish farming developments caused the degradation and loss of the delta's wetlands and led to soil salinization and the virtual extinction of wild carps in the region[566]. The nature of the delta is furthermore affected by the land use decisions taken upstream, thus in any of the nine countries bordering the river[567], as well as by pollution, damming, industrialization, livestock, and urban settlements and the introduction of alien species[568].

Ecological restoration started in 1994 with the Babina agricultural polder (2,100 ha) and, until now, more than 15,000 ha of wetlands have been restored[569]. Additionally, management approaches have been developed that balance public use with conservation and encourage sustainable tourism.

Administration:
Decree No. 264/91, issued on 12 April 1991, places all institute, agency and inspectorate staff under the administration of the Danube Delta Biosphere Reserve Authority (DDBRA). Also, all public domain and all aquatic and natural resources of the reserve are since then owned by the DDBRA[570].

The DDBRA is led by a Governor, which is appointed by the Romanian Government at the proposal of the Ministry of Environment and Sustainable Development with approval of the Prefect of Tulcea and the Academy of Science and also acts as the President of the Scientific Council and the Executive Council. The DDBRA is a public institution, subordinated to the Ministry of Environment[571].

According to the Law No. 82/1993, the administration of the Danube Delta Biosphere Reserve is supervised by the Consiliul Ştiinţific (Scientific Council). 23 representatives from the DDBRA and many other institutions, for example local authorities, ministries, health services, research institutions, the Romanian Academy of Science and economic companies, are members of that Council (Order of the Ministry of Environment and Climate Change 487/2013)[572].

[565] Protected Planet, Danube Delta World Heritage Site: http://www.protectedplanet.net/sites/67728 (20.05.2014)
[566] Wetland Tourism: Romania – The Danube Delta / A Ramsar Case Study on Tourism and Wetlands (2012): http://www.ramsar.org/pdf/case_studies_tourism/Romania/Romania_Danube_EN.pdf (21.05.2014) p. 1
[567] UNESCO-MAB Biosphere Reserves Directory – Danube Delta: http://www.unesco.org/mabdb/br/brdir/directory/biores.asp?mode=all&code=ROM-UKR+01 (20.05.2014)
[568] WWF, Danube River Delta: http://wwf.panda.org/about_our_earth/ecoregions/danube_river_delta.cfm (20.05.2014)
[569] DDBRA, Development: http://www.ddbra.ro/en/danube-delta-biosphere-reserve-authority/development-investments-program/development-investments-program-a561 (21.05.2014)
[570] UNESCO, Danube Delta: http://whc.unesco.org/en/list/588 (20.05.2014)
[571] DDBRA: http://www.ddbra.ro/en/danube-delta-biosphere-reserve-authority/about-us/organization-a597 / http://www.ddbra.ro/en/danube-delta-biosphere-reserve-authority/about-us/management-a598, (21.05.2014)
[572] DDBRA, Consiliul Ştiinţific: http://www.ddbra.ro/administratia/despre-noi/organizare/consiliul-stiintific-a180 (21.05.2014)

The Scientific Council is supported by a Consultative Council (Consiliul Consultativ de Administrare). Its decisions, as well as the decisions of the Governor of the Consultative Council, are implemented by the Executive Council (Colegiul executiv al Administraţiei)[573].

According to the Law No. 82/1993, the Danube Delta Biosphere Reserve administration has as its main objectives the ecological management of the reserve, nature conservation, the promotion of sustainable exploitation of natural resources as well as the rehabilitation of the habitats that have been destroyed by hydro technical projects realized before 1989.

Zoning:
The DDBR includes 20 strictly protected sites covering a total of 50,904 ha, thus 8.7 % of the Reserve's surface. These areas contain the most valuable examples of the Reserve's natural terrestrial and aquatic ecosystems. 13 buffer zones covering 222,996 ha, thus 38.5 % of the Reserve's area, have been established around the strictly protected sites to protect them from the impacts of human activities in adjacent areas. In these areas, activities like the sustainable exploitation of natural resources, eco-tourism and research are allowed[574].

The rest of the Reserve consists of economic zones, covering 306,100 ha (52.8 % of the Reserve's surface). These areas include easily flooded areas, protected fishing, fish farming, agricultural and forest areas, and areas where ecological restoration has been carried out or is planned by the DDBRA[575].

Management:
A strategy for international conservation assistance was established in 1991 with the support of the IUCN, and guidelines for an integrated management of forestry, agriculture, fisheries, and tourism have been prepared. The first management plan was produced between 1994-1995. During 2001-2002, the management plan has been revised, and for 2006-2007 and 2008-2012, new management plans have been elaborated. Furthermore, during 2002 and 2003, joint management objectives for biodiversity conservation and sustainable development in the nature protected areas in the Danube Delta (Romania-Ukraine) and Lower Prut River (Republic of Moldova) have been developed with the support of the EU Commission (TACIS-CBC Program). All key stakeholders concerned with conservation, recreation or tourism development in the DDBR, as well as relevant government agencies and the County (Judets) Councils of Tulcea and Constanţa have been involved in the development of the management plans[576].

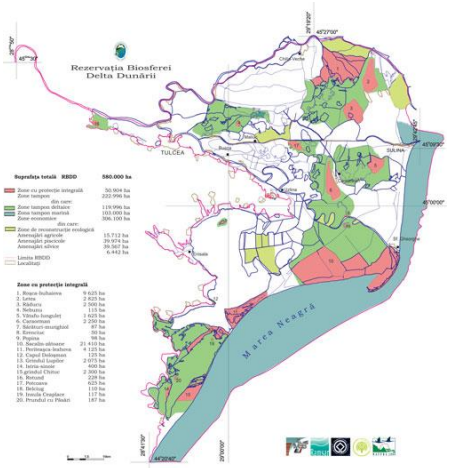

Figure 9: Map of Danube Delta

The management plan for 2008-2012[577] is divided into nine topics, and then subdivided into several corresponding actions. For example, topic A concerns the "Management of Species and Habitats

[573]DDBRA, Organizare: http://www.ddbra.ro/administratia/despre-noi/organizare (21.05.2014)
[574] "Stakeholder Position Paper on Coastal and Marine Protection / Management: Mediterranean and Black Sea Case Studies", Project: CoCoNet / Deliverable 6.1, NatureBureau / *Goriup*, Paul, p. 33
[575] Wetland Tourism: Romania – The Danube Delta / A Ramsar Case Study on Tourism and Wetlands (2012): http://www.ramsar.org/pdf/case_studies_tourism/Romania/Romania_Danube_EN.pdf (21.05.2014) p. 2
[576] Wetland Tourism: Romania – The Danube Delta / A Ramsar Case Study on Tourism and Wetlands (2012): http://www.ramsar.org/pdf/case_studies_tourism/Romania/Romania_Danube_EN.pdf (21.05.2014) p. 2

Protection". The corresponding action is to "combat and/or attenuate the risk factors (pathological agents, climatic changes, anthropic activities, invasive species, etc.) for the habitats state, identify and implement the measures to limit the negative effects" (A2.2). The Indicator of Achievement is the "identification of risk factors and measures to limit the negative effects". The management plan also sets a timeline for the implementation of the actions and determines the implementation partners.
The DDBRA aims to apply an inter-sectoral approach to management and planning in the delta and to implement the key EU directives, including the Water Framework Directive, the Habitats Directive, and the Floods Directive, as well as international agreements including the Ramsar Convention and the Convention on Biodiversity[578].

Cooperation between Romania and Ukraine[579]:
In 1996, a "Memorandum of Understanding" was signed between the DDBR National Institute for Research and Development of Romania and the Dunaiskiy Plavni Natural Reserve Authority (DPA) of the Ukraine. This agreement led to cooperation in staff training, research, management, ecological restoration and in raising public awareness. Later, the two countries agreed on joint projects to monitor and manage migratory birds and fisheries and to map the vegetation in the delta. Various international projects also contributed to a close cooperation. And, approximately 15 years ago, a green corridor was established along the entire length of the lower Danube River, crossing Romania, Bulgaria, Ukraine and Moldova and constituting Europe's most ambitious wetland protection and restoration program[580].

Weaknesses in the management of the Danube Delta:
A survey among different stakeholders in the Delta revealed the following weaknesses[581]:

- A lack of regulation of human activities
- A weak control of pollution
- A lack of political will to protect the delta
- Poor compliance with regulations

2. The 2 Mai- Vama Veche Marine Reserve:
Characteristics:
The Vama Veche - 2 Mai Marine Reserve is located in the southern part of the Romanian coastline, which belongs to the Limanu Municipality, Constanta County. In the Reserve, there are three villages, village 2 Mai (about 2,000 inhabitants), Limanu (about 2,000 inhabitants) and Vama Veche (about 200 inhabitants). It is 5,000 ha big, comprising a coastline of 7 km, and waters reach a maximum depth of 40 m[582].

[577] DDBRA, Management Plan 2008-2012: http://www.ddbra.ro/media/ACTION_PLAN_for_DDBR_Management_Plan_2008-2012.pdf (21.05.2014)
[578] Wetland Tourism: Romania – The Danube Delta / A Ramsar Case Study on Tourism and Wetlands (2012): http://www.ramsar.org/pdf/case_studies_tourism/Romania/Romania_Danube_EN.pdf (21.05.2014) p. 2
[579] "Stakeholder Position Paper on Coastal and Marine Protection / Management: Mediterranean and Black Sea Case Studies", Project: CoCoNet / Deliverable 6.1, NatureBureau / *Goriup*, Paul, p. 36-38
[580] International Commission of the Protection of the Danube River ICPDR: http://www.icpdr.org/main/publications/ten-years-green-corridor (06.06.2014)
[581] "Stakeholder Position Paper on Coastal and Marine Protection / Management: Mediterranean and Black Sea Case Studies", Project: CoCoNet / Deliverable 6.1, NatureBureau / *Goriup*, Paul, p. 82
[582] *Zaharia*, Tania, Reservat Vama Veche: http://www.mare-mundi.eu/index.php?option=com_content&view=article&id=240&Itemid=151&limitstart=7 (30.05.2014)

The area is characterized by a rich benthic and pelagic life and provides shelter and breeding areas for many marine organisms[583]. Invertebrates, fish and cetacean species, which are rare or endangered, have been spotted in the reserve. In a relatively small area, the reserve contains the most diverse assemblage of habitats on the entire Romanian coast, of which many are of European importance[584].

The proximity of the reserve to the Bulgarian border could provide an opportunity for the expansion of the reserve and for cross-border cooperation.

Administration:
The Vama Veche 2 Mai Marine Littoral Aquatory Reserve was founded in 1980 through Decision No. 31/1980 of the Constanta County Council, and confirmed as a protected area by Law No. 5/2000, regarding the approval of the National Territory Systematization Plan, code 2.345[585].

The Vama Veche – 2 Mai Marine Reserves falls under the category "Natural Reserve" (Governmental Emergency Order (GEO) 57/2007) and aims at the protection of marine habitats and species. Since 2007 (Order of the Minister for Sustainable Development No. 776/2007), the Reserve has formed part of the NATURA 2000 Network (Code: ROSCI0269)[586].

The National Institute for Marine Research and Development "Grigore Antipa" of Constanta has been the custodian of the reserve between 2004 and 2009. Since this period, real protection measures have been undertaken. This includes research and the development of a management plan and regulations. These have been submitted to the Ministry of Environment. In 2011, the Institute has been appointed custodian again for the next five years[587].

Zoning:
The reserve consists of a strictly protected area (Zona A) that covers about 3,150 ha and a buffer zone (Zona B) that covers about 1,850 ha. In the strictly protected area, only scientific activities are permitted, in the buffer zone, also traditional economic activities are permitted (Art. 3 II of the Regulation for the Vama Veche 2 Mai Marine Littoral Aquatory Reserve)[588].

Management:
The 2 Mai - Vama Veche Marine Reserve regulations and the management plan are to be approved by the Romanian Academy of Science and reviewed by the Ministry of Environment and Climate

[583] *Niţă*, Victor, *Zaharia*, Tania, *Nenciu*, *Cristea*, Magda Mădălina, *Ţiganov*, George, "Current State Overview of the Vama Veche – 2 Mai Marine Reserve, Black Sea, Romania" Aquaculture, Aquarium, Conservation & Legislation International Journal of the Bioflux Society (2012) Vol. 5, Issue I: http://www.bioflux.com.ro/docs/AACL_5.1.10.pdf (30.05.2014), p. 44-45
[584] *Zaharia*, Tania, Reservat Vama Veche: http://www.mare-mundi.eu/index.php?option=com_content&view=article&id=240&Itemid=151&limitstart=7 (30.05.2014)
[585] *Zaharia*, Tania, Reservat Vama Veche: http://www.mare-mundi.eu/index.php?option=com_content&view=article&id=240&Itemid=151&limitstart=7 (30.05.2014)
[586] *Niţă*, Victor, *Zaharia*, Tania, *Nenciu*, *Cristea*, Magda Mădălina, *Ţiganov*, George, "Current State Overview of the Vama Veche – 2 Mai Marine Reserve, Black Sea, Romania" Aquaculture, Aquarium, Conservation & Legislation International Journal of the Bioflux Society (2012) Vol. 5, Issue I: http://www.bioflux.com.ro/docs/AACL_5.1.10.pdf (30.05.2014), p. 44
[587] *Niţă*, Victor, *Zaharia*, Tania, *Nenciu*, *Cristea*, Magda Mădălina, *Ţiganov*, George, "Current State Overview of the Vama Veche – 2 Mai Marine Reserve, Black Sea, Romania" Aquaculture, Aquarium, Conservation & Legislation International Journal of the Bioflux Society (2012) Vol. 5, Issue I: http://www.bioflux.com.ro/docs/AACL_5.1.10.pdf (30.05.2014), p. 44
[588] Ministry of Environment and Climate Change / Regulation: http://www.mmediu.ro/gospodarirea_apelor/zona_costiera/regulament_rezervatie.pdf (30.05.2014)

Change. In the period 2010 - 2012, a new Management Plan was developed, as the previous plan did not take into account that the area had become a NATURA 2000 site[589].

The structure of the management plan is as follows[590]:

- Legal basis
- Zoning
- Planning procedure
- Management Infrastructure / Human resources
- Mapping
- Physical and geographical features
- Biotic features
- Socio-cultural and socio-economic aspects

Additionally, an implementation plan sets specific targets with a timetable for achieving them (Annex 3).

3. The planning process for the other Sites of Community Importance:

Art. 6 I of the Habitats Directive states that "for special areas of conservation, Member States shall establish the necessary conservation measures involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans, and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the sites".
For ROSCI0269, ROSCI0094, ROSCI0273, ROSCI0197 and ROSCI0237, management plans are prepared within the framework of a project funded by the Sectorial Operational Programme – Environment of the Ministry of Environment and Sustainable Development (SOP ENV). For ROSCI0066, there is also a SOP ENV project, which will provide for management measures that are integrated in the management plan of the Danube Delta Biosphere Reserve of which the site forms part[591].

The SOP ENV supports the preparation and implementation of management plans. Plans shall include spatial conditions, an inventory of natural features and socio-economic information, planning and management tools, zoning and management objectives and guidelines[592].

For all five SCIs, new management plans have been elaborated by the Institutul Naţional de Cercetare - Dezvoltare Marină "Grigore Antipa" / INCDM (National Institute for Marine Research and Development / NIMRD).

Structure of the management plans[593]:

1. Introduction

[589] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 74-76
[590] Ministry of Environment and Climate Change / Management Plan: http://www.mmediu.ro/gospodarirea_apelor/zona_costiera/plan_management_rezervatie.pdf (30.05.2014)
[591] *Zaharia*, Tania, *Maximov*, Valodia, *Radu*, Gheorghe, *Anton*, Eugen, *Spinu*, Alina, *Nenciu*, Magda,"Reconciling fisheries and habitat protection in Romanian coastal marine protected areas", Lleonart J., Maynou F. (eds), The Ecosystem Approach to Fisheries in the Mediterranean and Black Seas, Sci. Mar. 78S1: 95-101. doi: http://dx.doi.org/10.3989/scimar.04028.25B, p. 101
[592] Ministry of Environment and Sustainable Development, Sectoral Operational Programme – Environment / 2007-2013 (2007), p. 78
[593] Information on the Management Plans kindly provided by Dr. Dragos Micu, National Institute for Marine Research and Development (NIMRD) "Grigore Antipa"

- Short description of the site
- General objective of the management plan / Integrated and participative management approach
- Legal Basis

2. Description of the site
- General information
- Habitat types
- Flora and fauna species of Community / regional importance
- Importance of the site for biodiversity conservation
- Physical information
- Biological and ecological information
- Socio-cultural and socio-economic information

3. Evaluation of the current conservation status
- Evaluation based on a set of criteria

4. Objectives
- Achievement of a good conservation status (especially of representative habitats and characteristic species)
- Identification of specific indicators and thresholds for a good conservation status
- Identification of threats, vulnerable species and habitats and management conflicts
- Description of the impacts of anthropogenic activities (pollution, fishing, military activities and tourism)

5. Implementation
- Zoning:
  Zone A: strictly protected (only scientific research permitted)
  Zone B: activities compatible with the protection objectives permitted (for example: sport fishing, small, traditional fishing, leisure boating, activities of the coast guard)
- Action Plan:
  Determination of actions, targets, priorities, timeframe and implementing institutions for the following topics:
  Biodiversity
  Tourism
  Local community and economy
  Public awareness and education
  Management

6. Stakeholders
Characteristics / Responsibilities / Capacity and motivation / Possible actions

7. Monitoring
Objectives and corresponding indicators

However, the drafts of the management plans still need to be approved by the Academy of Science and the Ministry of Environment, which can be a lengthy process. To be able to enforce the plans,

the necessary authority has to be given to the custodian of the protected area and the custodian has to be entitled to impose fines and sanctions.

ROSCI0281 and ROSCI0293, designated in 2011, have no custodian and no management plan yet. Only the minimum measures required to be implemented by the regulations designating the MPAs were drafted for the sites. These regulations, however, have not been made public[594].

VII. Networks:

Art. 54 of the Law on environmental protection / No. 137 (29 December 1995) states on networks of protected areas: "For the conservation of some natural habitats, of the biodiversity that defines the biogeographical specific of the country, as well as of the natural structures and systems of ecological, scientific, and landscape value, the national network of protected areas and natural monuments shall be maintained and developed…"

The small marine reserves in Romania are expected to connect automatically, because of the short distances (a maximum of 10-15 km) between them. The reserves are close enough for protected populations to interact through dispersal. This system of small, interconnected MPAs can be as efficient as fewer larger MPAs. More than 80 % of the Romanian coastline could be protected in this way[595].

VIII. Recommendations[596]:

- to fully transpose European legislation to avoid respective sanctions;
- to simplify and clarify existing legislation which has become too complex due to constant actualization;
- to strengthen administrative capacity at national and local level and to ensure coordination between the different authorities;
- to ensure the enforcement of the regulations, also by expanding the number of staff;
- to integrate the coastal habitats under protection regime into the land use plans and the sectorial policies. Currently, activities are often permitted in or in the vicinity of protected areas that conflict with the protection targets, without imposing any compensatory measures.
- to truly implement management plans, including the action plans for species and habitats, and other measures of conservation as required by the Order of the Ministry No. 850 (27 October 2003) on the administration of protected areas;
- to implement an ecosystem based management;
- to designate buffer zones and eco-corridors to protect the areas from harmful human activities;
- to further develop the network of protected areas, based on scientific criteria;
- to reach agreements with strict obligations on nature protection between the owners or administrators of the places located in or in the vicinity of protected areas (e.g. hotel owners);

[594] *Zaharia*, Tania, *Maximov*, Valodia, *Radu*, Gheorghe, *Anton*, Eugen, *Spinu*, Alina, *Nenciu*, Magda,"Reconciling fisheries and habitat protection in Romanian coastal marine protected areas", Lleonart J., Maynou F. (eds), The Ecosystem Approach to Fisheries in the Mediterranean and Black Seas, Sci. Mar. 78S1: 95-101. doi: http://dx.doi.org/10.3989/scimar.04028.25B, p. 101

[595] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 75

[596] *Begun*, T., *Muresan*, *M.*, *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity – Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)", EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 77-78

- to conduct further scientific studies in order to define the short, medium and long conservation targets;
- to establish a strict timeframe for reaching the conservation targets;
- to evaluate the state of the species and habitats and to develop indicators to measure its improvement;
- to improve monitoring;
- to take into account stakeholders' opinion;
- to prioritize nature conservation over rapid economic success;
- to raise public awareness; and
- to cooperate with the other Black Sea countries to establish a network of protected areas in the whole basin.

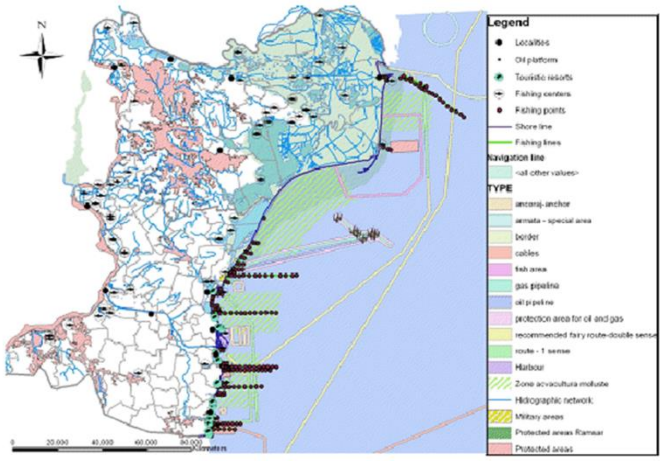

Figure 10: Integrated map on maritime uses and activities: Journal of Marine Technologies and Environment, Vol. II, 2010

I. The characteristics of the Romanian coastal zone:

Romania is located in south-eastern Europe at the lower reaches of the Danube River. Its coast on the Black Sea stretches from Ukraine in the North to Bulgaria in the South. In total, the Romanian coastline is 244 km long. The coastal region is called Dobrogea and covers an area of 15,485 km², thus 6.5 % of the Romanian territory[597]. Dobrogea is subdivided into two regional administrative units, Tulcea County in the North and Constanta in the South. Two main geo-morphological zones can be identified on the Romanian coastline. The northern zone, Tulcea County, is characterised by sandy beaches, low altitudes and gentle submarine slopes. The Danube Delta is found in this area.

The southern zone features limestone cliffs, small sandy beaches at river mouths and harbours and steep submarine slopes. It is the focal point of Romanian seaside tourist activities. Furthermore, economic activities that depend largely on the sea are concentrated here. The capital city of Constanta County is Constanta, the second biggest city of Romania with the country's largest port[598].

As one of the more recent EU member states, Romania is in a process of rapid economic development. The activities in the Romanian coastal and sea area include fishing, shipping, tourism, military activities and oil and gas extraction. These activities are not always compatible[599].

[597] *Demmers*, I., *Keupink*, E., *Popa*, B., *Timmer*, R. "Outline Strategy for the integrated management of the Romanian Coastal Zone" Draft Report 2004, Royal Haskoning / Netherlands: http://ec.europa.eu/environment/iczm/evaluation/iczmdownloads/romania2004.pdf / Ikzm-d Lernen "Outline Strategy for Integrated Management of the Romanian Coastal Zone 2004: http://www.ikzm-d.de/infos/pdfs/156_Outline_Strategy_for_Integrated_Management_of_the_Romanian_Coastal_Zone-2004.pdf (21.01.2013) p. 13

[598] *Demmers*, I., *Keupink*, E., *Popa*, B., *Timmer*, R. "Outline Strategy for the integrated management of the Romanian Coastal Zone" Draft Report 2004, Royal Haskoning / Netherlands: http://ec.europa.eu/environment/iczm/evaluation/iczmdownloads/romania2004.pdf / Ikzm-d Lernen "Outline Strategy for Integrated Management of the Romanian Coastal Zone 2004: http://www.ikzm-d.de/infos/pdfs/156_Outline_Strategy_for_Integrated_Management_of_the_Romanian_Coastal_Zone-2004.pdf (21.01.2013) p. 20

[599] Coman, Claudia, Alexandrov, Laura, Dumitru, Valentina, Lucius, Irene "Plancoast Project in Romania : Extending Coastal Spatial Planning to the Marine Zone"

The unsustainable use of the coastal resources, the growth of the population living on the coast and the long term impacts of climate change endanger the environment of the coastal zone[600]. Coastal urbanization and tourism generate big quantities of litter and pollution. Additionally, the building of marinas and the extension of ports put valuable habitats like spawning and nursery areas for marine living resources in danger. Uncontrolled, unregulated and unreported small-scale fisheries are further increasing the pressure on coastal ecosystems[601]. For a prosperous future of the country, it is essential to counteract those threats and to preserve the valuable resources of the Black Sea[602]

An example for the need for ICZM: Mamaia Beach[603]:

8 km long, Mamaia Beach, close to Constanta City, is the largest touristic seaside resort in Romania. It is located between the Black Sea and the Siutghiol Lake on a narrow sand bar, only 250 – 350 m wide, and formed by sandy material that originates from the Danube River.

In the last decades, erosion has affected the entire beach of Mamaia, especially during the winter months because of the strong and frequent storms.

The strategy adopted before 1990 was to solve the problem of coastal erosion locally. "Hard" and "soft" coastal protection measures were developed to stop the erosion. The soft solution – nourishment – was not effective, because the fine sand that was dredged from the lake was washed away seawards in a short time. The hard solution of defence structures in the southern part of Mamaia beach was able to limit at least the most disastrous effects of storm surges. The main problem of this section of the Romanian Black Sea coast, however, is the lack of sediment supply due to the Danube River dam.

Thus, a new solution has to be found on a regional, not only on a local level. ICZM could contribute to find such a regional solution.

II. Key legal framework:

Despite those conflicts and threats, spatial planning in coastal and marine areas still represents a new domain for Romania. But, as the following explanations will illustrate, a start has been made.

1. General legal framework

- Law on environmental protection / No. 137 (29 December 1995)

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http://www.nodc.org.ua/ukrncora/index2.php?option=com_docman&task=doc_view&gid=77&Itemid=35 (07.01.2013) p. 5

[600] Coman, Claudia, Alexandrov, Laura, Dumitru, Valentina, Lucius, Irene "Plancoast Project in Romania : Extending Coastal Spatial Planning to the Marine Zone" http://www.nodc.org.ua/ukrncora/index2.php?option=com_docman&task=doc_view&gid=77&Itemid=35 (07.01.2013) p. 2

[601] *Nicolaev*, Simon, Presentation / OurCoast Conference "Integrated Coastal Zone Management in Europe: The way forward" (Riga, 2011): http://www.ourcoastconferenceriga.eu/presentations/session2/simion_nicolaev.pdf (08.01.2013)

[602] Climate of Coastal Cooperation "Romania: ICZM planning in an initial stage": http://www.coastalcooperation.net/part-I/I-3-3.pdf (13.01.2013) p. 50

[603] *Coman*, Claudia, "Mamaia (Romania)", National Institute for Marine Research and Development, EUROSION Case Study: http://copranet.projects.eucc-d.de/files/000151_EUROSION_Mamaia.pdf, (10.06.2014), p. 2, 4, 13

In 1995, the Environmental Protection Law has been published that introduced basic principles like the precautionary principle, the risk prevention principle, the principle to conserve biodiversity and the ecosystems, the polluter pays principle and the principle of sustainable development[604].

- Water Law / No. 107 of (25 September 1996)[605]
- Law on land resources (20 February 1991)
- Law on territorial planning / No. 5 (6 March 2000)
- Law on the land use planning system / No. 247 (2005)
- Forest Code / No. 26 (24 April 1996)

2. The national progress on Integrated Coastal Zone Management

In 2002, the Governmental Emergency Ordinance 202/2002 was issued as the legal basis for ICMZ. That Ordinance has been updated by the Law No. 280/2003, following the European Parliament and Council Recommendation of 30 May 2002 on Integrated Coastal Zone Management in Europe (2002/412/EC). It regulates the designation of coastal zones, restrictions of certain human activities, management measures, finance, public participation and enforcement. To further promote environmental protection and the rehabilitation of the coast, the National Committee of the Coastal Zone (NCCZ) has been established.

Romania has also submitted a draft "Outline Strategy for the Integrated Management of the Romanian Coastal Zone – Towards Implementation" to the European Commission in 2006. A National Plan for Integrated Coastal Zone Management (draft emission 2006-2007) aims to guide national, regional and local level government agencies to achieve the sustainable development of coastal and marine areas[606]. It sets specific targets and contains mechanisms to improve the cooperation between all relevant stakeholders. Ultimately, the plan is supposed to ensure a "good environmental status" of the Black Sea by 2020, as scheduled in the "Marine Strategy Framework Directive", transposed into national law through the Governmental Emergency Ordinance No. 71 (30 June 2010)[607].

Several coastal management plans have been developed as well, for example, the Urban planning for the Black Sea Coastal Zone (2010-2011), the Master Plan for severe protected areas (2007) and the Strategic Action Plan for the Rehabilitation of the Black Sea (updated in 2009). The Romania National Tourism Development Master Plan (2007-2026) focuses on sustainable development[608]. Furthermore, within the framework of EU regional cooperation and specific bilateral arrangements, a variety of coastal projects to support ICZM efforts are being prepared to strengthen the management

[604] *Demmers*, I., *Keupink*, E., *Popa*, B., *Timmer*, R. "Outline Strategy for the integrated management of the Romanian Coastal Zone" Draft Report 2004, Royal Haskoning / Netherlands: http://ec.europa.eu/environment/iczm/evaluation/iczmdownloads/romania2004.pdf / Ikzm-d Lernen "Outline Strategy for Integrated Management of the Romanian Coastal Zone 2004: http://www.ikzm-d.de/infos/pdfs/156_Outline_Strategy_for_Integrated_Management_of_the_Romanian_Coastal_Zone-2004.pdf (21.01.2013) p. 61

[605] Water Law: Romania: http://faolex.fao.org/

[606] European Commission – DG Environment "Analysis of Member States progress reports on Integrated Coastal Zone Management (ICZM)", Final Report: http://ec.europa.eu/environment/iczm/pdf/Final%20Report_progress.pdf (17.01.2013) p. 90

[607] Reporting Implementation ICZM Recommendation 2006-2010 Romania, http://ec.europa.eu/environment/iczm/ia_reports.htm, p. 2

[608] European Commission – DG Environment "Analysis of Member States progress reports on Integrated Coastal Zone Management (ICZM)", Final Report: http://ec.europa.eu/environment/iczm/pdf/Final%20Report_progress.pdf (17.01.2013) p. 90

capabilities, to develop the data management infrastructure and to identify adequate coastal protection measures[609].

Details of the legal framework:
The Romanian ICZM legal framework consists mainly of the following documents:

- **Governmental Emergency Ordinance No. 202/2002** regarding coastal zone management, **approved with amendments through Law No. 280/2003**;
- **Government Decision No. 1015/2004** regarding the organization and the responsibilities of the National Committee of the Coastal Zone;
- **Government Decision No. 749/2004** regarding the administration and the establishment of a buffer zone adjacent to the coastal zone to preserve the environment as well as patrimonial and landscape values;
- **Government Decision No. 5467/2004** regarding the methodology for the delineation of the public state domain in the coastal zone.

The main provisions of the Governmental Emergency Ordinance (GEO) No. 202/2002 regarding coastal zone management, approved with amendments through Law No. 280/2003 (Annex I):

The GEO provides the general framework for the delineation of the coastal area that belongs to the public domain. Regulating the use of this coastal area is the exclusive right of the Government and is executed by the central public authority for environmental protection and water management. Furthermore, the territorial sea and the natural resources of the Exclusive Economic Zone and of the continental shelf are public property (Territorial Water Law No. 107/1996) and their management forms an integral part of the management of the coastal zone.

The GEO contains provisions for the free use, easements and the expropriation of the coastal area. The use of the coastal area, for example for agriculture, military activities, energy production, the exploitation of natural resources, fishing, industrial activities, tourism or transport is regulated as well. Where there is a risk of landslides, flooding and erosion, constructions works are restricted. Some areas are protected (habitats, wetlands, archaeological sites etc.) by the GEO, independently of their status as public domain. Additionally, there are provisions regarding financial mechanisms for coastal zone management and the access to environmental information.

A special section of the GEO is dedicated to the Integrated Coastal Zone Management Plan. This Plan is to be detailed by local plans of the local public authorities for environmental protection and water management. Existing territorial and urban plans have to be updated accordingly[610].

To improve the vertical and horizontal coordination between all levels of governance and between different sectors[611] and to eliminate overlaps and contradictions with existing legislation[612], a draft to amend the GEO has been proposed.

[609] Climate of Coastal Cooperation "Romania: ICZM planning in an initial stage": http://www.coastalcooperation.net/part-I/I-3-3.pdf (13.01.2013) p. 50
[610] Reporting Implementation ICZM Recommendation 2006-2010 Romania, http://ec.europa.eu/environment/iczm/ia_reports.htm, p. 4
[611] European Commission – DG Environment "Analysis of Member States progress reports on Integrated Coastal Zone Management (ICZM)", Final Report: http://ec.europa.eu/environment/iczm/pdf/Final%20Report_progress.pdf (17.01.2013) p. 91
[612] *Demmers*, I., *Keupink*, E., *Popa*, B., *Timmer*, R. "Outline Strategy for the integrated management of the Romanian Coastal Zone" Draft Report 2004, Royal Haskoning / Netherlands: http://ec.europa.eu/environment/iczm/evaluation/iczmdownloads/romania2004.pdf / Ikzm-d Lernen "Outline

Finally, through the GEO No. 202/2002, the National Committee for the Coastal Zone has been established in order to ensure a sustainable management of the coastal zone.

The National Committee for the Coastal Zone:
The National Committee for the Coastal Zone (NCCZ) was set up in June 2004 by the Government Decision No. 1015/2004. The Secretary of State for Water of the Ministry of Environment and Forests chairs the committee in which 46 delegates of 40 authorities, institutions and stakeholders are represented[613]. This includes: ministries, county representatives, Environmental Protection Agencies, the National Institute for Marine Research "Grigore Antipa", the National Administration Romanian Waters – Dobrogea Littoral Water Directorate, the Romanian Academie, the Danube Delta Biosphere Reserve Administration, the City Halls of villages situated along the coast and NGOs [614]. Even though a broad participation is important, one point of criticism has been that the Committee is too large to effectively prepare political decisions[615] and should for that reason rather be only composed of representatives of key authorities and the most important stakeholders[616].

The NCCZ is responsible for the approval of all works related to Integrated Coastal Zone Management.

The NCCZ has the following specific responsibilities[617]:

- Approving plans regarding Integrated Coastal Zone Management and local and regional spatial planning;
- Approving studies regarding the environmental impact of activities planned in the coastal zone as well as the environmental audit for the existing ones;
- Approving projects regarding the establishment of natural parks and reserves;
- The NCCZ is, through the Permanent Technical Secretariat, empowered to inform the competent organizations about critical situations in the coastal zone (not to take decisions, though).

Structure of the National Committee of the Coastal Zone:

- National Committee of the Coastal Zone (NCCZ);
- Permanent Technical Secretariat of the National Committee of Coastal Zone (PTS);

Strategy for Integrated Management of the Romanian Coastal Zone 2004: http://www.ikzm-d.de/infos/pdfs/156_Outline_Strategy_for_Integrated_Management_of_the_Romanian_Coastal_Zone-2004.pdf (21.01.2013) p. 71

[613] Nicolaev, Simon, Presentation / OurCoast Conference "Integrated Coastal Zone Management in Europe: The way forward" (Riga, 2011): http://www.ourcoastconferenceriga.eu/presentations/session2/simion_nicolaev.pdf (08.01.2013)

[614] UNDP-GEF Black Sea Ecosystem Recovery Project "Policy Inventory, Analysis and Key Issues" (Romania_Final Report_rev final.doc), p.33

[615] Coman, Claudia, Alexandrov, Laura, Dumitru, Valentina, Lucius, Irene "Plancoast Project in Romania : Extending Coastal Spatial Planning to the Marine Zone" http://www.nodc.org.ua/ukrncora/index2.php?option=com_docman&task=doc_view&gid=77&Itemid=35 (07.01.2013) p. 3

[616] *Demmers*, I., *Keupink*, E., *Popa*, B., *Timmer*, R. "Outline Strategy for the integrated management of the Romanian Coastal Zone" Draft Report 2004, Royal Haskoning / Netherlands: http://ec.europa.eu/environment/iczm/evaluation/iczmdownloads/romania2004.pdf / Ikzm-d Lernen "Outline Strategy for Integrated Management of the Romanian Coastal Zone 2004: http://www.ikzm-d.de/infos/pdfs/156_Outline_Strategy_for_Integrated_Management_of_the_Romanian_Coastal_Zone-2004.pdf (21.01.2013) p. 71

[617] Reporting Implementation ICZM Recommendation 2006-2010 Romania, http://ec.europa.eu/environment/iczm/ia_reports.htm, p. 12

- Thematic Working Groups (WG).

Responsibilities of the Ministry of Environment and Forests:

- to coordinate the ICZM process and the NCCZ;
- to chair the NCCZ;
- to coordinate the work of the Permanent Technical Secretariat (PTS) of the NCCZ;
- to provide technical expertise on the projects of the NCCZ through the Dobrogea Littoral Basin Administration (ABA DL).

Responsibilities of the Permanent Technical Secretariat (PTS):
The PTS is the operative body of the NCCZ with the following responsibilities:

- The preparation of the documents for NCCZ / WG debates;
- The organization of NCCZ meetings, public debates and other related activities;
- The preparation of correspondence, according to the decisions adopted by the NCCZ;
- Public relations / information of the stakeholders about the NCCZ activities;
- The preparation of reports of NCCZ/WG meetings and public debates;
- The drafting of the NCCZ yearly working program.

The National Institute for Marine Research and Development "Grigore Antipa" Constanta acts as the responsible body for the PTS activities.

The subsidiary bodies of the NCCZ:
Six working groups have been formed to support the NCCZ. They consist of experts from relevant authorities and research institutes who can provide advice and guidance on specific topics.

WG 1: WG for the delineation of the coastal zone, for urbanism and spatial planning;

WG 2: WG for the prevention of damage of the coastal zone due to coastal erosion, landslides and other accidents;

WG 3: WG for the preparation of technical and legal documents regarding the coastal area;

WG 4: WG for the development of ICZM policies, strategies and action plans;

WG 5: WG for the monitoring and surveillance of activities in the coastal zone;

WG 6: WG for information and communication.

The draft to amend the GEO No. 202/2002 includes a revision of the organizational structure of the NCCZ and the proposal to establish an executive Commission[618].

Public participation[619]:

[618] European Commission – DG Environment "Analysis of Member States progress reports on Integrated Coastal Zone Management (ICZM)", Final Report: http://ec.europa.eu/environment/iczm/pdf/Final%20Report_progress.pdf (17.01.2013) p. 91
[619] *Demmers*, I., *Keupink*, E., *Popa*, B., *Timmer*, R. "Outline Strategy for the integrated management of the Romanian Coastal Zone" Draft Report 2004, Royal Haskoning / Netherlands: http://ec.europa.eu/environment/iczm/evaluation/iczmdownloads/romania2004.pdf / Ikzm-d Lernen "Outline Strategy for Integrated Management of the Romanian Coastal Zone 2004: http://www.ikzm-

Public participation is an important instrument to promote ICZM. The involvement of all the stakeholders can increase their readiness to make their contributions, thus to care for the environment, to adhere to the regulations and to pay taxes and fees.

Public participation in the ICMZ process was introduced in Romania by the following provisions:

1. Membership in the NCCZ and participation in the decision making process by representatives of the private sector, interest groups, advocacy groups and representatives of public organizations of residents (Article 67, GEO No. 202/2002);

2. The right to information and the free access to information (Articles 69 and 72, GEO No. 202/2002);

3. The right to contest decisions and to have a decision reconsidered (Article 72, GEO No. 202/2002).

However, information also needs to be disseminated to the general public. In that way, informed decisions can be taken by its representatives in the decision-making bodies. A website should thus provide information on strategies, plans, events etc. to complement the existing public access to policy documents and status reports on the coastal zone.

III. Evaluation of the current situation:

1. Progress:

Romania is the first Black Sea country that has a special legal and institutional framework for ICZM. The ICZM process in Romania facilitates the implementation of the ICZM Recommendation of the European Parliament and Council, of the Water Framework Directive, the Marine Strategy Framework Directive and other water related Directives and can ensure a sustainable development in the coastal zone. Already more than 70 % of the Romanian coastline has a protected status (Danube Delta Biosphere Reserve etc.)[620].

A variety of regulations stipulate that licenses, permits and other authorizations are to be obtained for activities such as transport, fisheries or offshore drilling. Restrictions can, for example, be imposed on activities in marine protected areas like the Danube Delta Biosphere Reserve marine area or the Marine Protected Area 2 Mai – Vama Veche. These restrictions can be adapted to changes resulting from the increase of activities or the deterioration of the state of marine ecosystems. Thus, fishery activities can be restricted so that depleted fish stocks are able to recover. Those regulatory processes can also have a spatial dimension if areas are defined where activities are promoted or restrained[621].

2. Weaknesses:

- **A fragmented approach**

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d.de/infos/pdfs/156_Outline_Strategy_for_Integrated_Management_of_the_Romanian_Coastal_Zone-2004.pdf (21.01.2013) p. 69

[620] *Nicolaev*, Simon, Presentation / OurCoast Conference "Integrated Coastal Zone Management in Europe: The way forward" (Riga, 2011): http://www.ourcoastconferenceriga.eu/presentations/session2/simion_nicolaev.pdf (08.01.2013)

[621] Coman, Claudia, Alexandrov, Laura, Dumitru, Valentina, Lucius, Irene "Plancoast Project in Romania : Extending Coastal Spatial Planning to the Marine Zone" http://www.nodc.org.ua/ukrncora/index2.php?option=com_docman&task=doc_view&gid=77&Itemid=35 (07.01.2013) p. 3

The Ministry of Environment and Forests deals with most of the regulations. However, the coastal and marine waters are administrated by the National Administration "Romanian Waters"; navigation activities are regulated by the Ministry of Transport and its institutions and the bathing water surveillance is under the responsibility of the Ministry of Health and the Public Health Directorates of local authorities. Thus, there is no single "planning authority" for the sea. Whereas on land a planning authority prepares plans and regulates all activities on their basis, there is a specific authority for each activity at sea[622].

Even though the respective decision-makers have to pay due respect to the protection of the marine environment according to several laws (e.g. Environment Law, the Water Law, the Fisheries Law or the Coastal Zone Law) those sectorial controls are not able to respond quickly to new pressures[623] and to pay due regard to the cumulative impacts of the various sea uses. There is therefore a need for a more holistic approach and a cross-sectoral plan for the sea.

- **A lack of compliance**

To achieve a sustainable management of coastal and marine natural resources, the GEO needs to be more efficiently enforced[624]. The current lack of compliance with the Ordinance is inter alia due to the fact that some important steps in the ICZM process have not been taken yet, for example the division of the coastal zone into functional areas, the establishment of a database on environmental information and an efficient control and monitoring system[625]. These measures should therefore be taken as a next step.

IV. Recommendations[626]:

- Cooperation between the different sectors
- Regional and supra-regional planning
- Cooperation with countries experienced in ICZM and the EU
- Enforcement of the regulations
- Educational work to ensure the support of local communities
- Agreements with the other Black Sea countries on an ICZM and Marine Spatial Planning framework

[622] Coman, Claudia, Alexandrov, Laura, Dumitru, Valentina, Lucius, Irene "Plancoast Project in Romania : Extending Coastal Spatial Planning to the Marine Zone" http://www.nodc.org.ua/ukrncora/index2.php?option=com_docman&task=doc_view&gid=77&Itemid=35 (07.01.2013) p. 5

[623] Coman, Claudia, Alexandrov, Laura, Dumitru, Valentina, Lucius, Irene "Plancoast Project in Romania : Extending Coastal Spatial Planning to the Marine Zone" http://www.nodc.org.ua/ukrncora/index2.php?option=com_docman&task=doc_view&gid=77&Itemid=35 (07.01.2013) p. 5

[624] Coman, Claudia, Alexandrov, Laura, Dumitru, Valentina, Lucius, Irene "Plancoast Project in Romania : Extending Coastal Spatial Planning to the Marine Zone" http://www.nodc.org.ua/ukrncora/index2.php?option=com_docman&task=doc_view&gid=77&Itemid=35 (07.01.2013) p. 1

[625] European Commission – DG Environment "Analysis of Member States progress reports on Integrated Coastal Zone Management (ICZM)", Final Report: http://ec.europa.eu/environment/iczm/pdf/Final%20Report_progress.pdf (17.01.2013) p. 92

[626] *Geisler*, Tina, *Tiffert*, Johannes, "Küsten Im Wandel: Rumänien", Geographisches Institut der Universität Kiel (2007): http://www.ikzm-d.de/modul.php?show=156 (10.06.2014)

RUSSIA

Protected Areas

I. History of protected areas in Russia:

The first protected area in Russia, the Barguzinsky Strict Nature Reserve, was created in 1916 to protect the habitat of the Barguzin Sable[627]. On 15 January 2014, 102 strict nature reserves, 46 national parks, 71 nature sanctuaries and 28 natural monuments have been created in the Russian Federation at the federal level[628]. The main categories of protected areas are defined by the Federal Law "On Protected Areas".

II. Key legal framework:

Federal Law on protected areas / No. 33-FZ (14 March 1995)
Federal Law on wildlife / No. 52-FZ (24 April 1995)
Federal Law on environmental protection / No. 7-FZ (10 January 2002)

III. Competencies:

Ministry of Natural Resources and Environment:

The Ministry of Natural Resources and Environment of the Russian Federation (Minprirody of Russia) is "a federal executive authority performing functions of public policy making and statutory regulation in the field of the study, use, renewal, and conservation of natural resources, including the subsoil, water bodies, forests located in designated conservation areas, fauna and their habitat, in the field of hunting, hydrometeorology and related areas, environmental monitoring and pollution control, including radiation monitoring and control, and functions of public environmental policy making and implementation and statutory regulation, including issues of production and consumption waste management (hereinafter waste), conservation areas, and state environmental assessment" (Art. 1 Statute of the Ministry)[629].

The Federal Supervisory Natural Resources Management Service:

The Federal Supervisory Natural Resources Management Service is a federal executive body performing control and supervision functions in the sphere of nature management. It operates under the authority of the Ministry of Natural Resources and Environment.

Inter alia, the Management Service is responsible for the organization and management of specially protected natural areas of federal importance, for the protection of water bodies, the compliance with legislation concerning the marine environment and the natural resources of the internal waters, the territorial sea, and the Exclusive Economic Zone, and for the mineral and living resources conservation on the continental shelf (Regulation on the Management Service, approved by Resolution of the Government of the Russian Federation No. 400 / 30 July 2004)[630].

[627] "Barguzinsky Nature Reserve." Encyclopaedia Britannica. Encyclopaedia Britannica Online. Encyclopædia Britannica Inc., http://www.britannica.com/EBchecked/topic/53248/Barguzinsky-Nature-Reserve (21.02.2014)
[628] WWF, Protected areas categories: http://www.wwf.ru/about/what_we_do/reserves/info/categories/eng (19.02.2014)
[629] Ministry of Natural Resources and Environment: http://www.mnr.gov.ru/english/ (24.06.2014)
[630] The Federal Supervisory Natural Resources Management Service: http://www.mnr.gov.ru/english/fsnrms.php (24.06.2014)

IV. Categories[631]:

Relevant Laws:

Federal Law on protected areas / No. 33-FZ (14 March 1995)

This Federal Law regulates the organization, protection and use of protected areas in order to conserve unique and representative ecosystems, notably natural formations, plant and wildlife species and their genetic basis. Furthermore, it promotes research on natural processes and the ecological education of the population.

The first chapter concerns the different types of protected areas and their management as well as information on the state cadastre of protected areas. The second chapter deals with the strict natural reserves, their creation, their management and the activities prohibited in the reserves. The third chapter is about national parks, their goals and the organisation of recreational activities. Chapters 4 to 8 contain information on nature sanctuaries, natural monuments, nature parks, resorts and health spas and dendrological parks and botanical gardens.

Regional Law on protected areas / Krasnodar Kray / No. 656-KZ (31 December 2003)

This Regional Law concerns the management of protected areas and aims to conserve unique and representative ecosystems and wild fauna and flora species. Protected areas shall be classified as follows: (a) natural parks; (b) nature monuments; (c) dendrological parks and botanical gardens; and (d) health resorts and spas. Protected areas are declared by the supreme executive body of the Regional Administration upon recommendation by the authorized state institution for environmental protection. Protected areas are to be registered in the State Register of protected areas.

The chapters of the law concern the categories of protected areas, procedures for determining the areas, powers of the legislative body of Krasnodar Kray, planning and management as well as the State Register.

Summary:

Category[632]	**IUCN Category**[633]	**Federal**	**Regional**	**Local**
Strict Nature Reserves (Zapovednik) The strictest form of spatial conservation in Russia. All forms of human activities are banned. The main objectives of Strict Nature Reserves are the preservation of ecosystems and research.	**Ia, Ib**	**X**		
National Parks Combine several functions: nature conservation, recreation and education. Therefore, different zones, ranging from completely "closed for visitors" to "open for recreational activities", are established.	**II**	**X**		

[631] *Krever*, Vladimir, *Stishov*, Mikhail, *Onufrenya*, Irina: National Protected Areas of the Russian Federation, GAP Analysis and Perspective Framework, WWF / Moscow 2009, p. 8 / www.faolex.fao.org

[632] WWF, Protected areas categories: http://www.wwf.ru/about/what_we_do/reserves/info/categories/eng (19.02.2014)

[633] *Krever*, Vladimir, *Stishov*, Mikhail, *Onufrenya*, Irina: National Protected Areas of the Russian Federation, GAP Analysis and Perspective Framework, WWF / Moscow 2009, p. 15

Nature Sanctuaries (Zakaznik) Created to preserve certain important natural complexes and sites. Some anthropogenic activities are restricted in these areas.	**Federal: Ib, IV**	**X**	**X**	
Natural Monuments Created to preserve important natural sites of small size (a grove, a ravine, a breeding colony etc.).	**Federal: III**	**X**	**X**	
Nature Parks Created for nature conservation and for recreational purposes.			**X**	
Dendrological Parks and Botanical Gardens		**X**	**X**	**X**
Resorts and Health Spas		**X**	**X**	**X**

V. Marine Protected Area (MPAs):

1.95 % of the Russian Exclusive Economic Zone is protected. Those protected marine areas constitute parts of 34 primarily terrestrial protected areas (19 Strict Nature Reserves, 5 National Parks and 10 Federal Nature Sanctuaries)[634]. Only one protected area that is mainly marine has been created in Russia: the Far Eastern Marine Reserve[635].

The decision on the establishment of federal protected areas is made by the Ministry of Natural Resources and Environment[636]. As marine areas are under federal ownership, it is not possible to create regional MPAs[637]. Therefore, there are the following possibilities to further restrict human activities for marine environmental protection purposes in Russia[638]:

- the creation of new MPAs or the inclusion of marine areas into existing Strict Nature Reserves, National Parks or federal Nature Sanctuaries;
- the creation of marine Natural Monuments (there is no example yet in Russia);
- the creation of marine buffer zones around Strict Nature Reserves and National Parks;
- the creation of a fishery marine protection zones (there is no example in Russia yet since this possibility was provided by national legislation quite recently).

VI. Networks:

In Russia, there is no legislation on the federal level on wildlife corridors or ecological networks. Some regions, however, have adopted a number of relevant regulatory legal acts on their own initiative (for example, Khabarovsk Territory, Oryol oblast)[639].

Thus, Russia urgently needs to establish regulations for a network of marine protected areas (MPAs), particularly for the Black Sea.

VII. Two examples of protected areas in the coastal zone of the Black Sea:

[634] WWF, Russian system of protected areas: http://www.wwf.ru/about/what_we_do/reserves/info/statistics/eng (19.02.2014)
[635] WWF, Marine Protected Areas: http://www.wwf.ru/about/what_we_do/seas/zapoved/eng/doc348/page1 (18.02.2014)
[636] Ministry of Natural Resources and Environment of the Russian Federation: http://www.mnr.gov.ru/english/ (21.02.2014)
[637] WWF, Marine protected areas: http://www.wwf.ru/about/what_we_do/reserves/info/mpas/eng (19.02.2014)
[638] WWF, Marine protected areas: http://www.wwf.ru/about/what_we_do/reserves/info/mpas/eng (19.02.2014)
[639] WWF, Econets: http://www.wwf.ru/about/what_we_do/reserves/info/econets/eng (19.02.2014)

1. **Sochi National Park[640]:**

Sochi National Park was founded in May 1983 and is located on the southwestern edge of the Great Caucasus Mountain Range. The park is bordered to the west by the Black Sea, to the South by Georgia, and to the northeast by the Caucasian State Nature Biosphere Reserve (Kavkazsky Zapovednik).

The Park covers 193,700 ha. High mountains are concentrated in the southeastern corner, and several streams and rivers cross the park. Climatic conditions are influenced by the Black Sea and by the Caucasus Mountains. At the shore of the Black Sea, summers are hot and temperatures rarely drop below freezing, even in winter, whereas the mountains are snow-covered for four to five months per year. Forests, primarily deciduous, cover nearly 95 % of the park's area. For many animals from both Central Europe and Southern Asia, the Sochi National Park offers a valuable habitat. The whole Sochi region is also a popular vacation spot.

Since the Sochi National Park was the Soviet Union's first National Park, special guidelines to define its purpose and regulate its use were required. The park's charter states that it was established to preserve the area's natural complexes, while encouraging recreation, education, and science.

Evaluation of the management:

The Sochi National Park corresponds to the IUCN Protected Areas Category II / National Park[641]. The Russian Ministry of Natural Resources and Environment[642] manages the park, but the relevant executive agencies of the Krasnodar Region have also some influence[643]. The park has been divided into three zones, a strictly protected area of about 71,700 ha, a protected area of 42,500 ha and a regulated area of 77,100 ha[644]. Then, in 1997, the territory of the Sochi National Park was divided into five zones of protective land use management[645].

The Western Caucasus has also been inscribed on the World Heritage List by the World Heritage Committee in 1999. The World Heritage Site comprises three elements of the most strictly protected zone of the Sochi National Park (all in Krasnodar Kray)[646].

In Decision 37COM7B.23 (2013)[647], UNESCO urges the Russian Federation inter alia to develop an overall sustainable tourism strategy and to ensure that the potential impacts of any proposed infrastructure upgrading inside the National Park on its Outstanding Universal Value are carefully assessed. They also urged the country to ensure implementation of an overall management plan for the park by developing an operational plan and establishing an overall coordination body.

Consequences of the Sochi 2014 Olympic Games:

The winter sport facilities for the Sochi 2014 Olympic Games in the mountains are located on the territory of the Sochi National Park. Due to a lack of environmental information about the area, Sochi

[640] Center for Russian Nature Conservation: http://www.wild-russia.org/bioregion5/5_Sochinsky/5_Sochinsky.htm (17.02.2014)
[641] Protected Areas Categories System: http://www.iucn.org/about/work/programmes/gpap_home/gpap_quality/gpap_pacategories/ (17.02.2014)
[642]The Ministry of Natural Resources and Environment: http://www.mnr.gov.ru/english/ (17.02.2014)
[643] Mark Mc Ginley, the Encyclopedia of Earth: http://www.eoearth.org/view/view/157058/ (17.02.2014)
[644] http://www.russia-channel.com/nature-reserves/sochinsky/ (17.02.2014)
[645] Sochi Club: http://www.sochiclub.narod.ru/mount.htm (17.02.2014)
[646] Western Caucasus / UNESCO http://whc.unesco.org/en/list/900 (21.02.2014)
[647] State of Conservation (SOC) 2013: http://whc.unesco.org/en/soc/1881 (17.02.2014)

2014 organizers, according to the WWF[648], did not sufficiently take the environmental impacts into consideration in the planning process. This resulted in the construction of a joint highway-railway route that destroyed the fishery value of the Mzymta River. That river was previously a spawning site for 20 % of all the Black Sea salmon, a species listed in the Russian and the IUCN Red Lists.

Additionally, the nature conservation legislation was significantly weakened under the pretext of Olympic needs, especially sections relating to protected nature areas and environmental assessment of construction projects. For example, in 2006, the Law "On Protected Areas" was amended, so that it now allows large-scale athletic events in National Parks[649].

2. **Utrish Reserve:**
The Utrish Reserve has a marine area of 2,530 ha that is up to 40 m deep and extends about 2 km offshore[650]. The natural territories on the Abraussky peninsula and the Markotkh ridge consist of dry subtropical sub-Mediterranean type ecosystems[651]. This geographical area is recognized as a centre of plant diversity and endemism under the name Novorossia (WWF/IUCN 1994, 48)[652].

In August 2008, the WWF-Russia submitted a reserve plan for Utrish to the ministry. Two clusters have been planned, the Abraussky cluster with an aquatic zone and the Sheskharissky cluster, located in the mountains[653]. Since then, the Office of Presidential Affairs has planned a project for a luxury "sports and health complex" in the middle of the reserve.

"According to the Government Executive Order No. 1436p of September 2nd, 2010, on the establishment of the Utrish nature reserve, the most valuable coastal areas of the relict forest are to be set aside and got stripped of the status of regional nature reserve. This will allow for the implementation of the plans to construct therein an elite sports and recreational complex with a network of roads necessary for such construction. The unique landscapes get thereby doomed"[654] it says in an appeal to sign a petition to save the Utrish Reserve.

Environmental protectionists also call for the enlargement of the reserve. "We have the Utrish Reserve, for example, that protects a very small strip of sea. In fact, there should be much larger MPA at Utrish," confirms Vasily Spiridonov, an expert from the UNDP / GEF project "Strengthening the Marine and Coastal Protected Areas of Russia"[655].

VIII. Two examples of protected areas in the coastal zone of the Azov Sea:

1. The Priazovskiy Zakaznik is located in the Kuban Delta. The biggest danger for this protected area is fossil fuel extraction. In 2004, a major environmental accident took place during repair works at a borehole[656].

[648] Mistakes of Sochi-2014: http://www.wwf.ru/about/positions/sochi2014/eng (17.02.2014)
[649] Mistakes of Sochi-2014: http://www.wwf.ru/about/positions/sochi2014/eng (17.02.2014)
[650] Marine Protected Areas: http://www.blackseascene.net/content/content.asp?menu=0000029_000000 (18.02.2014)
[651] Saving of the unique natural area: http://biologyhelp.livejournal.com/12089.html (18.02.2014)
[652] http://www.cbd.int/doc/pa/tools/Identifying%20important%20plant%20areas.pdf (18.02.2014)
[653] Saving of the unique natural area: http://biologyhelp.livejournal.com/12089.html (18.02.2014)
[654] Sign the petition about granting Utrish the status of federal reserve: http://www.save-utrish.ru/english/ (18.02.2014)
[655] United Nations Development Programme, Russian Federation http://www.undp.ru/index.php?iso=RU&lid=1&pid=1&cmd=text&id=286 (18.02.2014)
[656] Environmental Watch/North Caucasus: http://www.verduloj.org/kuban.htm (21.03.2014)

2. Tamano-Zaporozhskiy Zakaznik includes the Taman Peninsula (Kerch Strait). It was affected by major oil spills in 2006 and 2007[657].

IX. Recommendations:

- to assess and take into consideration the impacts of human activities on protected areas;
- to provide for adequate mitigation measures;
- to prioritize the protection of the marine ecosystems over economic benefits;
- to protect all especially valuable marine areas;
- to adopt legislation on ecological networks also in the Krasnodar region;
- to ensure that the MPA network fits into a broader spatial planning and ecosystem-based management framework;
- to develop and implement efficient management plans for all MPAs;
- to monitor the effectiveness of the management plans;
- to increase public awareness; and
- to support a coherent MPA system within the whole Black Sea basin.

[657] Strengthening the Marine and Coastal Protected Areas of Russia, UNDP Project Document, p. 22

Integrated Coastal Zone Management

I. Characteristics of the coastal zone:

The Krasnodar Region is the southernmost region of Russia and borders the Black Sea and the Sea of Azov. Geographically, the area is split by the Kuban River in two different parts. The western extremity of the Caucasus range lies in the southern third of the region, within the Crimean sub-Mediterranean forest ecoregion. The climate there is Mediterranean and, in the south-east, subtropical. The northern two-thirds of the country is covered by the Pontic Steppe and has a more continental climate[658].

The Krasnodar Region is one of the most economically developed regions in Russia, with an important port in Novorossiysk. Being the warmest region of the country, the Black Sea coast of Krasnodar has also become the most popular tourist destination of Russia, comprising the resort city of Sochi. About 25 % of all registered hotels and resorts in Russia are located in the region[659].

Also due to its quite recent transition to a market economy, the conflict between using the natural resources now and ensuring their sustainable management for the benefit of future generations has become very visible in Russia[660]. In this context, the General Director of Wildlife Conservation, Alexey Zimenko, noted that the coasts, being very special ecological zones, must be treated as "national capital" and that they "shall in no case be treated with such yardsticks of economic management, as, for example, in the Moscow suburbs. Principles and technologies of inland resource management are, as a rule, not suitable to the coasts"[661].

II. Evolution of ICZM:

Besides contributing to the protection of the environment, a reliable legislative basis for the development and conservation of coastal zones would also attract investment[662]. Between 1993 and 1994, a number of Presidential Decrees relevant to Integrated Coastal Zone Management (ICZM) have been adopted. With the Presidential Decree No. 1470 of 6 July 1994 regarding natural resources of the sea coast of the Black Sea and the Sea of Azov, the initiative of the regional administration of Krasnodar Kray to allocate some of the natural resources of the Black Sea and Azov Sea coast to the federal natural resources has been approved. The Government of the Russian Federation, according to that decree, validates the list of those natural resources and determines the federal bodies responsible for their management. The boundaries of protected areas as well as zones for recreation and health improvement were also to be determined.

Then, a federal target programme called "Integrated Coastal Zone Management for the Black and Azov Seas Taking into Account the Task of Rational Use of Natural Resources in the Black Sea and Adjacent Territory" has been prepared and approved. However, in 1997, the programme has been suspended again[663].

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[658] Wikipedia, Krasnodar Krai / Geography: http://en.wikipedia.org/wiki/Krasnodar_Krai (26.06.2014)
[659] Wikitravel, Krasnodar Krai: http://wikitravel.org/en/Krasnodar_Krai (26.06.2014)
[660] *Vlasyuk*, Konstantin: "Inventory of Policies and Regulatory Acts and Practices of Its Implementation; Development of Proposals in Sphere of Water Protection, Water Management and Integrated Coastal Zone Management" UNDP-GEF Black Sea Ecosystem Recovery Project Phase II, July 2005, p. 39
[661] United Nations Development Programme, Russian Federation http://www.undp.ru/index.php?iso=RU&lid=1&pid=1&cmd=text&id=286 (18.02.2014)
[662] Legal principles of coastal zone management in the Russian Federation: http://www.unesco.org/csi/act/russia/legalpro7.htm (18.02.2014)
[663] *Vlasyuk*, Konstantin: "Inventory of Policies and Regulatory Acts and Practices of Its Implementation; Development of Proposals in Sphere of Water Protection, Water Management and Integrated Coastal Zone Management" UNDP-GEF Black Sea Ecosystem Recovery Project Phase II, July 2005, p. 41

III. Key legal framework:

Water Code / No. 74-FZ (1 January 2007)
Land Code / No. 136-FZ (25 October 2001)
Forest Code / No. 22-FZ (29 January 1997)
Urban Code / No. 73-FZ (7 May 1998)
Federal Law on Land Use Planning / No. 78-FZ (18 June 2001)
Federal Law on Tourism / No. 132-FZ (24 November 1996)

IV. Competencies:

Ministry of Agriculture
Ministry of Economic Development
Ministry of Education and Science
Ministry of Emergency Situations
Ministry of Natural Resources and Environment
Ministry of Health
Ministry of Construction Industry, Housing and Utilities Sector
Ministry of Industry and Trade
Ministry of Regional Development
Ministry of Transport

V. Weaknesses of the current management system:

In the Russian Federation legislation, the coastal zone is not yet regarded as an integral, natural "land-sea" complex[664]. Instead, there are various sectoral regulations for the protection and management of coastal and marine resources, for example the Constitution, federal and local laws, presidential decrees and resolutions of the Government of the Russian Federation. Various government bodies are responsible for the conservation, protection, registration and use of resources. This is not beneficial for the implementation of an integrated management approach[665], which is listed in the Maritime Doctrine of Russian Federation 2020 as one of the principles of the future national maritime policy (an "integrated approach to maritime activities"[666]).

VI. ICZM Pilot Project Gelendzhik[667]:

An ICZM pilot project has been implemented in Gelendzhik on the Black Sea coast of Russia in 1998-2000 within the TACIS project and was, between 2002 and 2004, further developed within an EuropAid project on "Technical Assistance to the Black Sea Environment Program". Within the framework of the project, an assessment of the current state and the sensitivity of the natural components of the area to threats has been performed, advisable restrictions for the use of the land have been identified, ecological and inter-sectoral conflicts have been revealed, and appropriate solutions have been proposed. Based on this research, a strategy for sustainable tourism has been prepared for the recreational zone of the Gelendzhik Resort (see figure 11).

[664] Legal principles of coastal zone management in the Russian Federation: http://www.unesco.org/csi/act/russia/legalpro7.htm (18.02.2014)
[665] Legal principles of coastal zone management in the Russian Federation: http://www.unesco.org/csi/act/russia/legalpro7.htm (18.02.2014)
[666] Maritime Doctrine of Russian Federation 2020, 27 July 2001: http://www.oceanlaw.org/downloads/arctic/Russian_Maritime_Policy_2020.pdf, p. 3
[667] *Antonidze*, Ekaterina: "ICZM in the Black Sea region: experience and perspectives", Journal of Coastal Conservation Planning and Management, Springer Science + Business Media B.V. (2009)

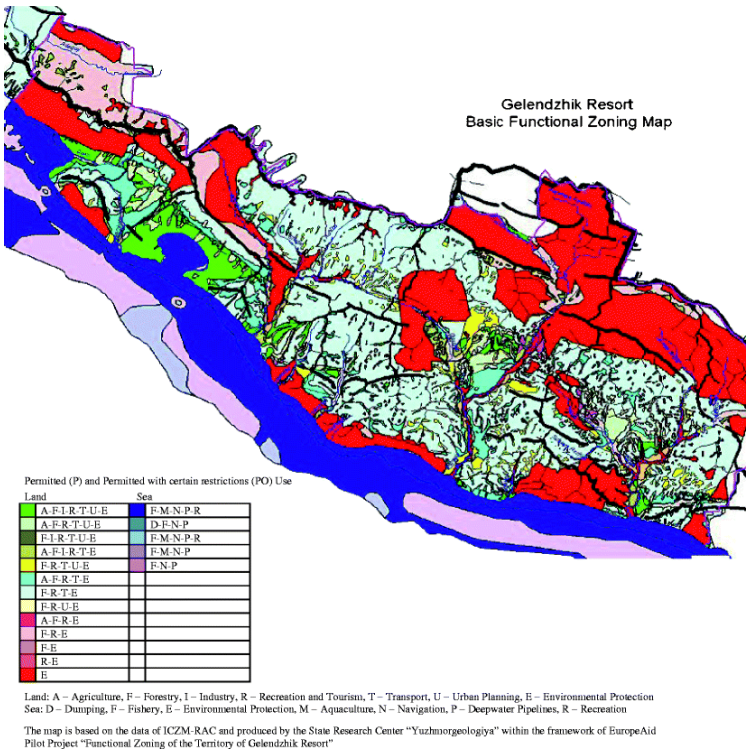

Figure 11: Antonidze, Ekaterina: "ICZM in the Black Sea region: experience and perspectives", Journal of Coastal Conservation Planning and Management, Springer Science + Business Media B.V. (2009) http://link.springer.com/article/10.1007%2Fs11852-009-0067-6/fulltext.html#Fig2

VII. Recommendations[668]:

- to develop a vision for a "Russian" ICZM[669];
- to ask all ministries and agencies to formulate their plans for the coastal zone;
- to list all coastal zone sources of anthropogenic impacts;
- to determine a set of criteria to assess the state of the coastal zone environment;
- to develop a system of zoning that takes into account the environment and coastal ecosystems when designing industrial, recreational, commercial and protected zones[670];
- to implement a special law on ICZM that contains a strategy for coastal development and conservation and takes the coastal ecosystems into account[671];
- to define clearly the responsibilities of the various administrative bodies with regard to ICZM and ensure an efficient coordination of the tasks by a special authority responsible for the management of marine and coastal activities[672];

[668] *Vlasyuk*, Konstantin: "Inventory of Policies and Regulatory Acts and Practices of Its Implementation; Development of Proposals in Sphere of Water Protection, Water Management and Integrated Coastal Zone Management" UNDP-GEF Black Sea Ecosystem Recovery Project Phase II, July 2005, p. 47-48
[669] *Vlasyuk*, Konstantin: "Inventory of Policies and Regulatory Acts and Practices of Its Implementation; Development of Proposals in Sphere of Water Protection, Water Management and Integrated Coastal Zone Management" UNDP-GEF Black Sea Ecosystem Recovery Project Phase II, July 2005, p. 43
[670] Legal principles of coastal zone management in the Russian Federation: http://www.unesco.org/csi/act/russia/legalpro7.htm (18.02.2014)
[671] Legal principles of coastal zone management in the Russian Federation: http://www.unesco.org/csi/act/russia/legalpro7.htm (18.02.2014)

- to toughen control over the activities of the administration;
- to pass a Krasnodar Kray law on an environmental fund in order to finance the development of territorial plans and for other necessary measures for ICZM;
- to develop a program for environmental education;
- to promote and finance the involvement of all stakeholders;
- to sign and ratify the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters of 1998, since public participation is a basic tenet of ICZM; and
- to further develop civil society[673].

VIII. Progress towards Marine Spatial Planning:

For the Baltic Sea, a joint co-chaired Working Group on Maritime Spatial Planning was launched in October 2010 by HELCOM and the Vision and Strategies around the Baltic Sea (VASAB) Committee on Spatial Planning and Development of the Baltic Sea Region (CSPD/BSR). The Working Group was established to ensure cooperation among the Baltic Sea Region countries for a coherent regional Maritime Spatial Planning (MSP) process[674]. Within that framework, also a Regional Baltic Maritime Spatial Planning Roadmap (2013-2020) was created. The aim of that roadmap is to implement maritime spatial plans throughout the Baltic Sea region by 2020, which are coherent across borders and apply the ecosystem approach[675]. Thus, Russia could transfer its experience with MSP in the Baltic Sea to the Black Sea.

[672] *Gogoberidze*, George, *Lednova*, Julia, *Oganova*, Sofia, *Lazareva*, Maria, *Ezernitskaya*, Engenia: Methods of Strategic Environmental Assessment for Coastal Landscapes, Proceeding volume of the EMECS' 10 – MEDCOAST'13 Joint Conference, Turkey, 2013, p. 349

[673] *Vlasyuk*, Konstantin: "Inventory of Policies and Regulatory Acts and Practices of Its Implementation; Development of Proposals in Sphere of Water Protection, Water Management and Integrated Coastal Zone Management" UNDP-GEF Black Sea Ecosystem Recovery Project Phase II, July 2005, p. 47

[674] HELCOM-VASAB MSP WG: http://helcom.fi/helcom-at-work/groups/helcom-vasab-maritime-spatial-planning-working-group

[675] HELCOM: MSP Roadmap: http://helcom.fi/action-areas/maritime-spatial-planning/msp-roadmap/ (17.03.2014)

TURKEY

Protected Areas

Biodiversity conservation in Turkey:
Bridging two continents, Europe and Asia, Turkey has acquired the character of a small continent itself with regard to biological diversity[676], comprising forests, mountains, steppes, wetlands as well as coastal and marine ecosystems[677].

Three ecoregions of Turkey, two terrestrial (Caucasus and Mediterranean) and one marine (Mediterranean), are classified as Global 200 Ecoregions[678]. The "Global Ecoregions" is a "science-based global ranking of the Earth's most biologically outstanding terrestrial, freshwater and marine habitats" prepared by the WWF[679].

About 18 % of the territory of Turkey, 141,000 km², belongs to the Black Sea Region. The Black Sea Region stretches from the border to Georgia in the East to the eastern edge of the Adapazari plain in the West. The provinces of Artvin, Rize, Trabzon, Gümüshane, Bayburt, Giresun, Ordu, Sinop, Samsun, Amasya, Kastamonu, Zonguldak, Bartin, Bolu and almost all of Tokat are located there[680]. The Turkish Straits connect the Mediterranean and the Black Sea.

The Turkish Black Sea Region is characterized by a rich habitat diversity, with coastal dunes, marine caves, canyons, wetlands, reefs and islands. It also provides a spawning ground for migratory fish species such as the bonito, anchovy, bluefish and sprat, and cetaceans are often spotted near the Istanbul Strait[681].

In spite of those valuable nature areas, conservation efforts in Turkey are still inadequate. This is reflected by the fact that, in 2012, Turkey landed only in place 109 out of 132 countries in the World Environmental Performance Index[682] and in place 121 in biodiversity and habitat conservation. In 2014, Turkey received a better overall score (66 out of 178 countries). With regard to biodiversity and habitat conservation, however, it ranked only in place 133[683].

The main threats to the coastal and marine biodiversity of the Turkish Black Sea include the destruction of marine habitats and ecosystems, the over-exploitation of marine resources and the loss of coastal habitats through mass urbanization[684].

I. Key legal framework:
Environment Law No. 2872 (9 August 1983)

[676] The National Biological Diversity Strategy Action Plan, Republic of Turkey, Ministry of Environment and Forestry, General Directorate of Nature Conservation and National Park, 2007, p. 11
[677] IUCN "Biodiversity in Turkey": http://iucn.org/about/union/secretariat/offices/europe/?9778/Biodiversity-in-Turkey (25.04.2014)
[678] National system of marine protected areas: http://www.mpa.gov.tr/ProjeBilgi.aspx?id=8 (23.04.2014)
[679] About Global Ecoregions: http://wwf.panda.org/about_our_earth/ecoregions/about/ (23.04.2014)
[680] The Black Sea Region: http://www.enjoyturkey.com/info/sights/blacksea.htm (24.04.2014)
[681] *Öztürk*, Bayram, *Topaloğlu,* Bülent, *Kıdeys,* Ahmet, *Bat*, Levent, *Keskin*, Çetin, *Sezgin*, Murat, *Öztürk*, Ayaka Amaha Ahmet, *Yalciner*, Cevdet "A proposal for new marine protected areas along the Turkish Black Sea coast" J. Black Sea/Mediterranean Environment, Vol. 19, No. 3: 365-379 (2013), p. 366
[682] Environmental Performance Index 2012: http://sedac.ciesin.columbia.edu/downloads/data/epi/epi-environmental-performance-index-pilot-trend-2012/2012-epi-full-report.pdf (23.04.2014), p. 10
[683] Environmental Performance Index 2014: http://epi.yale.edu/epi/country-profile/turkey (23.04.2014)
[684] *Öztürk*, Bayram, *Topaloğlu,* Bülent, *Kıdeys,* Ahmet, *Bat*, Levent, *Keskin*, Çetin, *Sezgin*, Murat, *Öztürk*, Ayaka Amaha Ahmet, *Yalciner*, Cevdet "A proposal for new marine protected areas along the Turkish Black Sea coast" J. Black Sea/Mediterranean Environment, Vol. 19, No. 3: 365-379 (2013), p. 366

Natural Parks Law No. 2871 (9 August 1983)
Law on the Protection of Cultural and Natural Wealth No. 18113 (2 July 1983)
National Parks Law No. 2873 (1993)
Regulation on wildlife preservation and wildlife development areas (8 November 2004)
Regulation on wetlands (17 May 2005)

National Environmental Strategies, Plans and Programmes[685]:
Starting from the fifth 5-Year Development Plan, which concerns the years 1985 to 1989, environmental concerns were included in national programmes. The Ninth Development Plan for the years 2007 to 2013 states in its point 459 that "the activities for the investigation, conservation and evaluation of and the addition of economic value to the biological diversity and genetic resources of our country will be accelerated"[686].

Other Plans and Programmes include:

- National Environmental Action Plan
- National Plan for In-Situ Conservation of Plant Genetic Diversity
- National Biological Diversity Strategy and Action Plan
- National Agenda 21 Programme
- National Wetland Strategy
- Turkish National Forestry Programme
- National Science and Technology Policies 2003-2023 Strategy Document
- National Environmental Strategy
- National Rural Development Strategy

National Biological Diversity Strategy Action Plan (2007)

The "goal 9" [687] of the National Biological Diversity Strategy Action Plan states:

To develop and implement effective methods for the conservation of coastal and marine biological diversity, the maintenance of ecological functions provided by coastal and marine ecosystems, and the sustainable use of these ecosystems.

Objective 9.1.

To strengthen necessary administrative, legal, institutional and technical capacity for the identification, monitoring, conservation and sustainable use of coastal and marine biological diversity

Objective 9.2.

To fill the information gaps concerning coastal and marine biological diversity, to identify and put under conservation the areas and species which have importance for biological diversity and are under threat, and to develop and implement monitoring programmes

Objective 9.3.

[685] The National Biological Diversity Strategy Action Plan, Republic of Turkey, Ministry of Environment and Forestry, General Directorate of Nature Conservation and National Park, 2007, p. 40
[686] The National Biological Diversity Strategy Action Plan, Republic of Turkey, Ministry of Environment and Forestry, General Directorate of Nature Conservation and National Park, 2007, p. 39
[687] The National Biological Diversity Strategy Action Plan, Republic of Turkey, Ministry of Environment and Forestry, General Directorate of Nature Conservation and National Park, 2007, p. 16

To combat against the threats to coastal and marine biological diversity

II. Competencies:

The Ministry of Forestry and Water Affairs:
The Ministry of Forestry and Water Affairs was established in June 2011, with a vision "to be a respectable and leading institution ensuring the right to live in a healthy environment where fundamental requirements of existing and next generations are considered; life quality is enhanced and natural resources are managed reasonably"[688]. The duties of the Ministry include the development of policies for the protection of nature and the designation of protected areas. It is also responsible for the management of National Parks, Nature Parks, Natural Monuments, protected wildlife reserves and wetlands and for the preservation of biological diversity[689].

The General Directorate of Nature Protection and Natural Parks is in charge of planning and establishing National Parks, Nature Parks, Natural Monuments, protected wildlife reserves and recreation spots as well as preserving the plant and animal species of the country[690].

The Ministry of Environment and Urbanization[691]:
This Ministry was formed in 2011. One of its units is the General Directorate for the Protection of Natural Assets. The Environmental Protection Agency for Special Areas was restructured as General Directorate for the Protection of Natural Assets by the Decree No. 644 on the "Organization and Functions of the Ministry of Environment and Urbanization" of 2011.

The General Directorate for the Protection of Natural Assets is responsible for developing and monitoring national protected areas. Its main tasks are the following:

- to ensure an effective and sustainable management
- to prepare municipal plans
- to prepare reliable inventories for protected areas

III. Categories[692]:

In Turkey, the Law "On Forest" has been adopted in 1956. The first National Forest Park was then established in 1958 in Anatolia, the Yozgat National Forest Park. The Law "On National Parks" was adopted in 1983 and determines four types of protected areas (Art. 2):

[688] Ministry of Forestry and Water Affairs / Republic of Turkey: http://www.ormansu.gov.tr/osb/Dosya/did/B2.pdf (24.04.2014), p. 1
[689] Ministry of Forestry and Water Affairs / Republic of Turkey: http://www.ormansu.gov.tr/osb/Dosya/did/B2.pdf (24.04.2014), p. 2
[690] Ministry of Forestry and Water Affairs / Republic of Turkey: http://www.ormansu.gov.tr/osb/Dosya/did/B2.pdf (24.04.2014), p. 3
[691] The 2012 Forum of Marine Protected Areas in the Mediterranean: http://www.medmpaforum2012.org/en/node/337 (24.04.2014)
[692] *Yalinkiliç*, M. Kemal, "Protected Areas of Turkey", General Directorate of Nature Conservation and National Parks: http://www.cembit.dmi.gov.tr/FILES/doc/korunan-alanlar/turkiyenin_korunan_alanlari_en-US.pdf (23.04.14), p. 6 / *Kuçuk*, M, *Erturk*, E., "Biodiversity and Protected Areas in Turkey", Sains Malaysiana 42(10)(2013) 1455-1460, p. 1459-1460 / OECD Environmental Performance Reviews – Turkey (2008), p. 94-96 / TÜRKİYE'NİN KORUNAN ALAN SİSTEMİ: http://www.milliparklar.gov.tr/korunanalanlar/korunanalan1.htm (23.04.2014)

- **Nature Reserves** have the strictest protection status and their aim is the protection of habitats of rare and endangered species. These areas are reserved for scientific and educational activities only.

- **National Parks** have great scientific, scenic and cultural significance, at national and international level. National Parks in Turkey have four zones: a central zone that is strictly protected, a sensitive use zone where activities are restricted, a sustainable use zone where certain activities compatible with the purpose of the park are authorized, and a controlled use zone where tourism and recreational activities are allowed. This multi-functional structure of national parks that includes both, the conservation of resources and the promotion of eco-tourism and recreational activities, constitutes a new approach for the sustainable management of protected areas in Turkey[693].

- **Nature Parks** have a characteristic vegetation and fauna. Recreational activities are allowed in those parks.

- **Natural Monuments** are sites of special scientific interest or with outstanding natural features, for example ancient trees or waterfalls.

Some marine and coastal areas are protected under the Law "On National Parks". Most marine and coastal areas, however, are protected under the Regulation "On Specially Protected Areas". Additionally, there are coastal areas protected under the Law "On Hunting" and the Watershed Regulation[694].

Since 1990, the extent of protected areas has almost doubled and amounts now to 7.24 % of the territory. About 1.2 % of these areas are protected under the IUCN categories I-II. However, the existing protected areas do not yet adequately represent all components of biological diversity in Turkey, in particular not the marine ecosystems[695].

Number of PAs	Category	Law	Authority	IUCN-Category
40	National Park (Milli Park)	Law on National Parks	Ministry of Forestry and Water Affairs	II
31	Nature Reserve (Tabiatı Koruma Alanı)	Law on National Parks	Ministry of Forestry and Water Affairs	I
107	Natural Monument (Tabiat Anıtı)	Law on National Parks	Ministry of Forestry and Water Affairs	III
184	Nature Parks (Tabiat Parkı)	Law on National Parks	Ministry of Forestry and Water Affairs	V
81	Wildlife Reserve Areas (Yaban	Law on Terrestrial Hunting	Ministry of Forestry and	

[693] *Çağlayan,* Eray, *Agan*, Kübra, *Emeksiz*, Murat, *Lise*, Yıldıray, *Yılmaz,* Mustafa, "An overview of national parks, recreational activities and visitor flows in Turkey", Stockholm 2012: http://mmv.boku.ac.at/refbase/files/mmv6_96_97.pdf (23.04.2014), p. 94

[694] OECD Environmental Performance Reviews – Turkey (2008), p. 94-96

[695] The National Biological Diversity Strategy Action Plan, Republic of Turkey, Ministry of Environment and Forestry, General Directorate of Nature Conservation and National Park, 2007, p. 12

	Hayatı Geliştirme Sahası)		Water Affairs	
58	Conservation Forest (Muhafaza Ormanı)	Law on Forest	Ministry of Forestry and Water Affairs	
239	Genetic Conservation Areas	Law on Forest	Ministry of Forestry and Water Affairs	
373	Seed Stands	Law on Forest	Ministry of Forestry and Water Affairs	
15	Specially Protected Areas (SPAs) (Özel Çevre Koruma Bölgesi)	Law on Environment	Ministry of Environment and Urbanization	IV
1273	Nature Sites (Doğal sit)	Law on Conservation of Cultural and Natural Heritage	Ministry of Environment and Urbanization	
14	Ramsar Sites (Ramsar Alanı)	Ramsar Convention / By-law on Conservation of Wetlands	Ministry of Forestry and Water Affairs	
1	Biosphere Reserve (Biyosfer Rezervi)	Law on National Parks – Law on Forest	Ministry of Forestry and Water Affairs	

IV. Draft Law "On Biodiversity":

In consequence of a newly drafted law on Conservation of Nature and Biodiversity, so-called SİT areas, natural sites under protection (e.g. valuable coastal areas) could be reassessed and could lose their protected status. Up to 1,200 sites could lose their protected status, according to NGOs[696]. A variety of development projects, tourism facilities and possibly even the construction of factories or power plants could then be allowed in those areas[697]. The overriding "public interest", which is, according to the draft law, necessary for the authorization of those projects, is difficult to verify and is feared to mean "economic interest" in reality[698]. Even the European Union issued a statement indicating that the draft law is "worrying" [699].

[696] Bianet (6 June 2013) "Gezi Resistance Suspends Bill Proposal on Nature": http://bianet.org/english/environment/147305-gezi-resistance-suspends-bill-proposal-on-nature (06.05.2014)
[697] *Erimtan*, Can "Controversial Nature Conservancy Law Postponed", Istanbul Gazette, 6 June 2013: http://istanbulgazette.com/controversial-nature-conservancy-law-postponed/2013/06/06/ (05.05.2014)
[698] Bianet (6 June 2013) "Gezi Resistance Suspends Bill Proposal on Nature": http://bianet.org/english/environment/147305-gezi-resistance-suspends-bill-proposal-on-nature (06.05.2014)
[699] *Erimtan*, Can "Controversial Nature Conservancy Law Postponed", Istanbul Gazette, 6 June 2013: http://istanbulgazette.com/controversial-nature-conservancy-law-postponed/2013/06/06/ (05.05.2014)

The law would furthermore subject all sites to the jurisdiction of the Ministry for Forestry and Water Affairs[700]. The potential consequences of this have been shown in 2010 in the controversy over the construction of new hydroelectric dams. The Trabzon Board for the Protection of Cultural and Natural Artifacts decided to declare the Black Sea province of Rize a protected zone and thus not to authorize 22 hydroelectric power plants planned in the area. This decision affected the government's plans to increase clean electricity production through hydropower[701], targeting 4,000 hydroelectric schemes by 2023[702].

The government's draft law would transfer the authority over protected areas to a "National Biological Diversity Board." This new board would be headed by the Environment Ministry secretary and include 14 bureaucrats, 4 academics and two representatives of nongovernmental organizations, to be selected by the ministry. The public is not planned to be included[703]. By having the competence to decide on the protected status of areas, the board could overrule decisions such as that of the Trabzon Board.

The law was planned to be adopted in parliament in June 2013, but, due to the objections raised by various NGOs, the decision on the law has been postponed[704].

V. Networks:

Turkey's first wildlife corridor has been established in 2012 to protect brown bears, wolves, lynx, and wild cats in the Caucasus forests[705]. Apart from this corridor, there are no regulations concerning networks of protected areas.

VI. Management:

Management Plans:

The majority of the existing marine and coastal protected areas are currently managed by the General Directorate for the Protection of Natural Assets of the Ministry of Environment and Urbanization. Besides, the General Directorate for Nature Conservation and National Parks of the Ministry of Forestry and Water Affairs, the Ministry of Food, Agriculture and Livestock and the Ministry of Culture and Tourism are authorized to manage and plan the sustainable development of some of the existing marine and coastal protected areas[706].

In Turkey, the first MPA management plan was developed for the Kaş-Kekova MPA (Mediterranean), collaboratively between WWF, Boğaziçi University, and the MPA management authority. Data from ten years of research was used to establish important ecological areas for conservation and

[700] *Erimtan*, Can "Controversial Nature Conservancy Law Postponed", Istanbul Gazette, 6 June 2013: http://istanbulgazette.com/controversial-nature-conservancy-law-postponed/2013/06/06/ (05.05.2014)
[701] Hurriyet Daily News (28.10.2010) "Draft law will make it harder to fight dams, Turkish activists say": http://www.hurriyetdailynews.com/default.aspx?pageid=438&n=turkish-govt-counterattacks-to-win-war-over-hydro-power-2010-10-28 (06.05.2014)
[702] *Gibbons*, Fiachra, *Moore*, Lucas "Turkey's Great Leap Forward risks cultural and environmental bankruptcy", The Guardian (29.05.2011): http://www.theguardian.com/world/2011/may/29/turkey-nuclear-hydro-power-development (06.05.2014)
[703] Bianet (6 June 2013) "Gezi Resistance Suspends Bill Proposal on Nature": http://bianet.org/english/environment/147305-gezi-resistance-suspends-bill-proposal-on-nature (06.05.2014)
[704] *Erimtan*, Can "Controversial Nature Conservancy Law Postponed", Istanbul Gazette, 6 June 2013: http://istanbulgazette.com/controversial-nature-conservancy-law-postponed/2013/06/06/ (
[705] *Şekercioğlu*, *Çağan* "Turkey's First Wildlife Corridor Links Bear, Wolf and Lynx Populations to the Caucasus Forests", National Geographic: http://newswatch.nationalgeographic.com/2012/02/13/turkeys-first-wildlife-corridor-links-bear-wolf-and-lynx-populations-to-the-caucasus-forests/ *(24.04.2014)*
[706] National system of marine protected areas: http://www.mpa.gov.tr/ProjeBilgi.aspx?id=8 (24.04.2014)

biodiversity. For the identification of the management objectives and the design of user's zones and monitoring plans, socio-economic data has been collected[707].

For wetlands, 22 management plans have been already adopted by local and national wetland committees.

Those management plans contain[708]:

Preamble, description (current status, biological, hydrogeological, physical, demographic aspects, water quality etc.), problems, objectives and Action Plans.

The management plan for the Kizilirmak Delta, for example, which is the biggest wetland in the Black Sea Region and provides habitat for many flora and fauna species, aims to establish an active management structure, involving the local population, and to protect biological diversity by allowing, at the same time, a sustainable agriculture, tourism and fishing[709].

The preparation procedure for wetland management plans in Turkey takes about 2 years[710]:

- In the first year, physical, ecological and socio-economic data of the site is collected.
- All stakeholders are informed about the management plan.
- In the second year, the data is evaluated by experts of various institutions and the management plan is developed, taking account the opinions of all stakeholders.

Mediterranean Sea case study / Gökova Bay: a successful example for MPA management[711]
The endangered Mediterranean monk seal and the sandbar shark as well as river otters living in connected ecosystems, make the fauna of the Gökova bay an especially valuable Mediterranean area. Due to its untouched coast and clean water, Gökova Bay is also attractive for local and foreign tourists. The bay has been designated a Special Environmental Protected Area (SEPA) in 1988.

In 2010, fishing and other related activities have been banned along the 23-kilometer-long Mediterranean Sea coast of Muğla's Gökova Bay in an attempt to protect the local environment. In order not to harm the over 200 small-scale fishermen that depend on the bay for their livelihoods, the heads of local sea products cooperatives and fishers themselves have been involved in the process of deciding which areas are suitable for fishing and which are to be protected.

A meeting with all the stakeholders was held at the Environmental Protection Agency for Special Areas to determine the "Protected Marine Areas". Those protected areas were explained to considerably benefit local fishers in the future because the marine life in the region would not be over-fished. Convincing the local population of the positive impact of 'No Fishing Zones' has proven

[707] WWF factsheet 2012, "Marine Protected Areas – Guiding Principles and Benefits": http://ian.umces.edu/pdfs/ian_newsletter_379.pdf (25.06.2012), p. 4
[708] Okumuş, Elif, "Wetland Management, NBSAP and Aichi Targets in the Context of Turkey", Ministry of Forestry and Water Affairs, Wetland Department: http://www.cbd.int/doc/nbsap/nbsapcbw-casi-02/nbsap-istanbul-turkey-wetlands.pdf (25.06.2014), p. 12
[709] *Yeniyurt*, C., *Hemmami*, M. "Ramsar Sites of Turekey" Doğa Derneği, Ankara, Türkiye (2011), p. 53
[710] *Yalinkiliç*, M. Kemal, "Protected Areas of Turkey", General Directorate of Nature Conservation and National Parks: http://www.cembit.dmi.gov.tr/FILES/doc/korunan-alanlar/turkiyenin_korunan_alanlari_en-US.pdf (24.04.14), p. 10
[711] Whitley Fund for Nature: Turkey's first Community MPA: http://whitleyaward.org/winners/turkeys-first-community-managed-marine-protected-area/ / Hurriyet Daily News "Fishing banned in SW Turkey's Gökova Bay": http://www.hurriyetdailynews.com/default.aspx?pageid=438&n=fishing-forbidden-in-gokova-2010-07-16 (24.04.2014)

to be essential for the success of the MPA. This experience could serve as an example for the management of future Black Sea MPAs.

VII. Inventory of existing and proposed protected areas:

Turkey is bordered by four seas: the Black Sea, the Sea of Marmara, the Aegean Sea and the Mediterranean Sea. Turkey's coastline is about 8,500 km long, excluding the islands. The coast is characterized by a rich biodiversity and hosts about 3,000 plant and animal species[712].

More than 6.5 % of Turkey's territorial waters is currently under protection[713], thus 34,335 ha of coastal terrestrial and wetland protected areas have been established[714]. However, all 15 marine protected areas are located in the Mediterranean Sea[715], which is regarded as more important for tourism and biodiversity than the Black Sea[716]. Turkey has protected the fewest coastal areas, compared with other Black Sea countries[717].

1. Black Sea coastal protected areas:

Several sites on the Turkish Black Sea coast are already recognized and protected for their high ecological values.

There are two internationally important wetlands: Kizilirmak delta, designated in 1998 as a Ramsar site and Yeşilirmak delta. Both deltas are located in the province Samsun[718].

Other protected areas are in the Black Sea coastal zone[719]:

Name	Size	Date of establishment
Acarlar Golu Game Reserve	11,576 ha	1977
Çamburnu Nature Reserve	180 ha	N/A
Camgol Forest Protected Forest	314 ha	1964
Haciosman Forest Nature Reserve	86 ha	1987
Hamsilos Nature Park	68 ha	2007
Iğneada Longoz Forests	3,155 ha	2007

[712] National system of marine protected areas: http://www.mpa.gov.tr/ProjeBilgi.aspx?id=8 (24.04.2014)
[713] *Begun*, T., *Muresan*, M., *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)" EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 80
[714] BlackSea Transboundary Diagnostic Analysis (3.3.7): http://www.blacksea-commission.org/_tda2008-document3.asp (23.04.2014)
[715] Protected Planet / Turkey: http://www.protectedplanet.net/countries/224 (24.04.2014)
[716] *Öztürk*, Bayram, *Topaloğlu,* Bülent, *Kıdeys,* Ahmet, *Bat*, Levent, *Keskin*, Çetin, *Sezgin*, Murat, *Öztürk*, Ayaka Amaha Ahmet, *Yalciner*, Cevdet "A proposal for new marine protected areas along the Turkish Black Sea coast" J. Black Sea/Mediterranean Environment, Vol. 19, No. 3: 365-379 (2013), p. 374
[717] *Begun*, T., *Muresan*, M., *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)" EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 80
[718] *Begun*, T., *Muresan*, M., *Zaharia*, T., *Dencheva*, K., *Sezgin*, M., *Bat*, L.,*Velikova*, V., "Conservation and Protection of the Black Sea Biodiversity Review of the existing and planned protected areas in the Black Sea (Bulgaria, Romania, Turkey)" EC DG Env. MISIS Project Deliverables (2012): www.misisproject.eu, p. 81
[719] Black Sea Coastal / Marine Protected Areas reported to UNEP-WCMC: http://www.salix.od.ua/BlackSeaMPAmap.htm / Protected Planet: http://www.protectedplanet.net / Ministry of Culture and Tourism: http://www.kultur.gov.tr/EN,36408/artvin---camburnu-nature-reserve.html / İğneada Longoz Ormanları Milli Parkı: http://www.milliparklar.gov.tr/mp/igneadalongozormanlari/index.htm / Wikipedia "List of nature parks of Turkey": http://en.wikipedia.org/wiki/List_of_nature_parks_of_Turkey / *Tockner*, Klement, *Robinson*, Christopher T., *Uehlinger*, Urs, "Rivers of Europe" 2009 Elsevier, point 17.11. (24.04.2014)

National Park		
Kucukkertil Forest Recreation Area	N/A	N/A
Kuztepe Forest Recreation Area	N/A	N/A
Meryem Ana Forest Recreation Area	1,000 ha	N/A
Sarıkum Nature Reserve	785 ha	1987

2. A proposal for Black Sea MPAs[720]:

The designation of five ecologically important sites has been recommended, taking into account the criteria specified by the Convention on Biological Diversity. These sites would cover a surface area of 1,189.9 km² (about 2 % of the Turkish territorial sea in the Black Sea).

Zone 1: İğneada Region (14,300 ha)

Firstly, a protected area close to the border to Bulgaria has been proposed, comprising a marine and a terrestrial component. The area provides a habitat to many flora and fauna species, has only a low population density and is connected to already established MPAs in Bulgaria. In the future, cooperation between Turkey and Bulgaria in the management of the MPAs or the designation of a trans-boundary MPA could further increase the efficiency of environmental protection measures here.

Zone 2: Şile Kefken (36,600 ha)

This area includes important habitats for fish and bird species. It is located close to the Istanbul Strait, which links the Black Sea to the Mediterranean Sea and thus also links habitats and species. Therefore, its biodiversity is especially threatened by the introduction of alien species and needs special protection measures.

Zone 3: Cide – Doğanyurt (3,740 ha)

In this zone, the Mediterranean monk seal has been spotted, the last time in 2010. Since the monk seal belongs to the most endangered species, this area should be placed under special protection.

Zone 4: Kızılırmak and Yeşilırmak Rivers and Deltas (64,200 ha)

The fourth zone is between the Kızılırmak and Yeşilırmak Rivers and Deltas. These areas are characterized by a rich biodiversity and variety of habitat types (wetlands, rivers, lakes, dunes, forests). They also provide spawning grounds for several sturgeon species.

Zone 5: Mezgit Reef off Trabzon (150 ha)

[720] *Öztürk*, Bayram, *Topaloğlu,* Bülent, *Kıdeys,* Ahmet, *Bat*, Levent, *Keskin*, Çetin, *Sezgin*, Murat, *Öztürk*, Ayaka Amaha Ahmet, *Yalciner*, Cevdet "A proposal for new marine protected areas along the Turkish Black Sea coast" J. Black Sea/Mediterranean Environment, Vol. 19, No. 3: 365-379 (2013)

The Mezgit Reef is about 2 km long and located at a distance of 30 nautical miles from Trabzon, at a depth of 80-90 m. Reefs are rare and important for all kind of marine life, especially for benthic species, and should therefore be protected.

VIII. Key problems regarding protected areas:

- A weak nature conservation legal framework that does not reflect globally accepted principles[721];
- High bureaucratic complexity, overlapping competences, little communication and cooperation between government departments[722];
- Insufficient capacity to take action due to institutional weakness[723];
- Poor enforcement of environmental regulations and little public control on compliance with environmental standards[724];
- Lack of financial, human and technical resources[725];
- The protection of biological diversity is not integrated in the regulation of other sectors[726];
- Poor management of protected areas and lack of efficient management plans[727];
  (a number of the country's protected areas are little more than "paper parks," set aside by government decree, but lacking any enforcement[728]);
- A general lack of awareness about environmental issues[729];
- Lack of political will and support (priority is often given to gaining economic benefit, also due to pressure from the population)[730].

IX. Recommendations:

- Define clear responsibilities;
- Ensure cooperation between all authorities and stakeholders;
- Efficiently enforce environmental protection regulations;
- Apply a holistic approach;
- Attach more importance to the protection of the Black Sea (not see it mainly as a fishing

[721] *Şekercioğlu*, Çağan Hakki, *Anderson*, Sean, *Akçay*, Erol, *Bilgin*, Raşit "Turkey's Rich Natural Heritage Under Assault" Science 23 December 2011: Vol. 334 no. 6063 pp. 1637-1639: http://www.sciencemag.org/content/334/6063/1637.2.full (06.05.2014)
[722] *Şekercioğlu*, Çağan Hakki, *Anderson*, Sean, *Akçay*, Erol, *Bilgin*, Raşit "Turkey's Rich Natural Heritage Under Assault" Science 23 December 2011: Vol. 334 no. 6063 pp. 1637-1639: http://www.sciencemag.org/content/334/6063/1637.2.full (06.05.2014)
[723] The National Biological Diversity Strategy Action Plan, Republic of Turkey, Ministry of Environment and Forestry, General Directorate of Nature Conservation and National Park, 2007, p. 102
[724] *Hance*, Jeremy "Turkey's rich biodiversity at risk" (28.03.2012): http://news.mongabay.com/2012/0328-hance_turkey_biodiversity.html (06.05.2014)
[725] The National Biological Diversity Strategy Action Plan, Republic of Turkey, Ministry of Environment and Forestry, General Directorate of Nature Conservation and National Park, 2007, p. 102
[726] The National Biological Diversity Strategy Action Plan, Republic of Turkey, Ministry of Environment and Forestry, General Directorate of Nature Conservation and National Park, 2007, p. 102
[727] *Gümü*, Cantürk, *Şen*, Gökhan, *Toksoy*, Devlet, *Ayaz*, Hüseyin, *Bahat*,Betül: Nature Conservation and National Parks in Turkey, p. 246: http://congress.sfb.bg.ac.rs/PDF/forestry/rad20f.pdf (06.05.2014)
[728] *Hance*, Jeremy "Turkey's rich biodiversity at risk" (28.03.2012): http://news.mongabay.com/2012/0328-hance_turkey_biodiversity.html (06.05.2014)
[729] *Hance*, Jeremy "Turkey's rich biodiversity at risk" (28.03.2012): http://news.mongabay.com/2012/0328-hance_turkey_biodiversity.html (06.05.2014)
[730] The National Biological Diversity Strategy Action Plan, Republic of Turkey, Ministry of Environment and Forestry, General Directorate of Nature Conservation and National Park, 2007, p. 102

ground[731]);
- Transfer the experience gained from the MPAs in the Mediterranean to the Black Sea;
- Find a better balance between economic interests and the protection of the environment;
- Implement the proposal for new marine protected areas along the Turkish Black Sea coast;
- Prepare and implement management plans for marine areas;
- Establish corridors for animal species also in the marine area to connect MPAs;
- Support a basin wide network of MPAs.

[731] *Öztürk*, Bayram, *Topaloğlu,* Bülent, *Kıdeys,* Ahmet, *Bat*, Levent, *Keskin*, Çetin, *Sezgin*, Murat, *Öztürk*, Ayaka Amaha Ahmet, *Yalciner*, Cevdet "A proposal for new marine protected areas along the Turkish Black Sea coast" J. Black Sea/Mediterranean Environment, Vol. 19, No. 3: 365-379 (2013)

Integrated Coastal Zone Management

Turkey has 1,701 km of coastline bordering the Black Sea (20.4 % of its total coastline). The Black Sea (Karadeniz) Region is divided in the eastern and the western Black Sea region, two regions that show very different characteristics.

Along the eastern part, mountain ranges run parallel to the coast and limit the size of the coastal area to extreme minimums, which renders the area unsuitable for many coastal uses. Since the humidity brought by the marine winds consolidates over the mountainous slopes and falls as precipitation, this region is the most humid region of Turkey[732].

On the western Black Sea, alluvial plains are located, for example Kizilirmak and Yesilirmak. The coastal area along these alluvial and deltaic shores widens significantly from a handful of kilometres to a few tens of kilometres, comprising agricultural land of the highest productivity[733].

Due to the intensification of the economic development in the coastal zone after the 80's, Turkey has gained considerable experience in the planning and management of coastal activities. Shipping, fishing, urbanization, and the conservation of natural and cultural heritage are the traditional sectors that have been dealt with in the coastal zone. Recently, also new sectors such as tourism and mariculture have become more and more important[734].

Even though there have been several efforts since the late 80's to apply a more integrated approach to the management of coastal zones and to transfer more responsibilities to local administrations, the management of coastal development in Turkey is still centralized and clearly sectoral[735].

Thus, there is not yet a holistic legal framework for ICZM or a special institutional structure for the management of the coastal zone. The consequences are overlapping competences of various organisations (more than 20 institutions are responsible for the sea and coastal areas[736]) and gaps in the management of the coast[737]. So far, efforts to advance ICZM almost never go beyond project level[738].

I. Competencies:

Increasing coastal problems led to the establishment of a number of units for the management of the coastal zone at the central governmental level.

For planning in coastal areas, the Ministry of Public Works and Settlements has the final authority, except in areas that have been declared as tourism centres. There, the authority has been

[732] *Ozhan*, Erdal, "Coastal Area Management" UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 2
[733] *Ozhan*, Erdal, "Coastal Area Management" UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 3
[734] *Ozhan*, Erdal, "Coastal Area Management" UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 2
[735] *Ozhan*, Erdal, "Coastal Area Management" UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 2
[736] European Commission Study "Exploring the potential of maritime spatial planning in the Mediterranean" (2011), Country Report Turkey: http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/turkey_01_en.pdf (25.04.2013) p.5
[737] Evaluation of ICZM in Europe, European Commission: http://ec.europa.eu/environment/iczm/evaluation/iczm_national_reporting_turkey.htm (22.04.2013)
[738] Evaluation of ICZM in Europe, European Commission: http://ec.europa.eu/environment/iczm/evaluation/iczm_national_reporting_turkey.htm (22.04.2013)

transferred to the Ministry for Tourism[739]. Within the Ministry of Public Works and Settlements, the "Coastal Inventory Agency" is charged with determining the coastal shoreline and developing inventories with regard to the implementation of the Coastal Law.

In 1993, the National Committee on Turkish Coastal Zone Management (KAY) was established. The Committee organizes seminars, courses and projects on ICZM and is administered by the Middle East Technical University (METU) in Ankara[740].

In 1997, the Environmental and Coastal Management Agency was established by the Ministry of Environment to prepare, implement and evaluate environmental management plans[741].

Key authorities in the field of ICZM[742]:

Public authority	**Relevant legislation**
Ministry of Public Works and Settlements	Coastal Law – Settlement Law
The Prime Minister's Office, Under Secretariat for Maritime Affaires	Harbours Law
Ministry of Transportation	Harbours Law
Ministry of Environment	Environment Law – The Ministerial Decree for SEPAs (Special Environmental Protection Areas)
Ministry of Agriculture	Fisheries Law
Ministry of Forestry	National Parks Law – Forest Law
Ministry of Domestic Affairs	Coastal Security Force Law – Municipal Law
Ministry of Culture	Law for the Conservation of Cultural and Natural Wealth
Municipalities	Municipal Law
Ministry of Tourism	Law for the Encouragement of Tourism

II. Instruments and approaches[743]

A comprehensive framework law for integrated coastal management is not available in Turkey. There are, however, several regulations and instruments that address issues relevant to coastal zone management:

The Coastal Law No. 3621 of 1990, amended in 1992[744]:
Main aim of the Coastal Law:

- to protect the coasts
- to utilize the coastal resources only for public benefit
- to ensure free access of the public to the coast

[739] Evaluation of ICZM in Europe, European Commission: http://ec.europa.eu/environment/iczm/evaluation/iczm_national_reporting_turkey.htm (22.04.2013)
[740] Evaluation of ICZM in Europe, European Commission: http://ec.europa.eu/environment/iczm/evaluation/iczm_national_reporting_turkey.htm (22.04.2013)
[741] Mediterranean Environmental Technical Assistance Program, The World Bank "ICZM – Turkey": http://siteresources.worldbank.org/EXTMETAP/Resources/CZMP-Turkey.pdf (22.04.2013)
[742] European Commission Study "Exploring the potential of maritime spatial planning in the Mediterranean" (2011), Country Report Turkey: http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/turkey_01_en.pdf (25.04.2013) p. 6
[743] Mediterranean Environmental Technical Assistance Program, The World Bank "ICZM – Turkey": http://siteresources.worldbank.org/EXTMETAP/Resources/CZMP-Turkey.pdf (22.04.2013)
[744] *Ozhan*, Erdal, "Coastal Area Management" UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 39-40

The law defines the term “shoreline” as “the line along which water touches the land” and the term “shore” as the area between the shoreline and the “shore edge line” which is “the natural limit of the sand beach, gravel beach, rock, boulder, marsh, wetland and similar areas, which are created by water motions in the direction of land”. The shore strip has a minimum width of 100 m horizontally to the “shore edge line”. That area, however, is quite small and those definitions thus have only limited use with regard to ICZM[745].

The coast “is under the provision and possession of the State” (Art. 5) and “is open to benefit of all, equally and freely” (Art. 6).

On the shore, subject to a land use planning permit, infrastructure such as piers, ports, bridges or lighthouses, as well as facilities that help to protect the coast such as treatment plants are allowed. Also, constructions and facilities that cannot be built in the interior of the country, for example ship dismantling or fish farming facilities, can be located there.

On the first 50 m of the shore strip, most constructions are forbidden. This area is meant to be used “for pedestrian access, walking, relaxing, sightseeing and recreational purposes”.

In the remaining part of the shore strip (at least 50 m wide), roads, recreational and tourism facilities (other than those which offer boarding) as well as public waste treatment plants can be built, but are subject to a land use planning permit.

The Coastal Law is to be enforced by the municipalities within their borders and in adjacent areas, by the provincial governors in all other areas (Art. 13). The final authority for planning is the Ministry of Public Works and Settlements and, in coastal areas declared as tourism centres by the Council of Minister’s decrees, the Ministry of Tourism.

However, the Coastal Law is not a coastal management law that comprehensively manages all activities[746] and it is clearly focused on activities on the shore, not in the sea[747].

Other relevant laws:

- Law on Land Development Planning and Control No. 3194 (3 May 1985)
- Law for the Encouragement of Tourism No. 2634 (16 March 1982)
- Environmental Law No. 2872 (1983)
- The Law for the Protection of Cultural and Natural Values No. 2863 (1983)
- National Parks Laws No. 2873 (1993): identification of areas of national and international significance and management of those areas[748]
- Forest Law No. 6831 (31 August 1983)
- Harbours Law No. 618 (20 April 1925)

[745] *Ozhan*, Erdal, “Coastal Area Management” UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 3
[746] *Unsal*, Fatma “Overview of Turkish Coastline Policy and Implementation” http://www.marenostrumproject.eu/PDFs/MareNostrum_KickoffMeeting_Turkish_Coastline_Policy.pdf (09.05.2014)
[747] *Kaya*, Latif Gürkan, “Application of Collaborative Approaches to the Integrative Environmental Planning of Mediterranean Coastal Zone: Case of Turkey”: http://bof.bartin.edu.tr/journal/1302-0943/2010/Cilt12/Sayi18/21-32.pdf (13.05.2014), p. 24
[748] European Commission Study “Exploring the potential of maritime spatial planning in the Mediterranean” (2011), Country Report Turkey: http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/turkey_01_en.pdf (25.04.2013), p.5

- Fisheries Law No. 1380 (22 March 1971)

Instruments used for coastal management[749]:

- National development plans
- Sectoral development plans
- Land use plans
- Specially managed areas, for example SPAs or National Parks
- Environmental Impact Assessment
- Endangered Species Protection
- UNEP Regional Seas Programme (for the Black Sea and the Mediterranean)
- Union of municipalities around enclosed basins

Spatial Planning[750]:
A number of plans exist that can assist in the process of spatial planning. These include:

Environmental Profile Plans
These plans concern housing, industry, agriculture, tourism and transportation and have to correspond with national and regional planning decisions.

Framework Land Use (development) Plans
These plans determine the use densities of an area, the main transportation axis, the main infrastructural facilities and the areas to be protected.

Detailed Land Use (application) Plans
The Detailed Land Use (application) Plans are prepared at the scale of 1/1000, in accordance with higher-level framework land use plans of the 1/5000 scale. Such plans take regional particularities into account and determine for example the height of the buildings and the characteristics (widths) of roads, parking lots and parks.

Sectoral Policies[751]:
Tourism development has been especially promoted in the 70's and early 80's. Since the development of tourism has been considered a priority, the protection of natural and cultural assets only played a minor role in the development plans of the 1970s. This changed in the second half of the 1980s, following the debate over the conservation of the nesting beach of the loggerhead sea turtles in the Dalyan region. The beach was threatened by a major tourism development facility. As a consequence of that debate, the first three specially protected coastal areas were declared. Furthermore, tourism development projects have been revised and several projects have been stopped in the early 1990s for reasons of nature protection.

Other examples of sectoral development plans include plans for the development of ports and maritime transport, yachting tourism and marinas as well as fisheries and lagoons.

[749] *Ozhan*, Erdal, "Coastal Area Management" UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 53
[750] *Ozhan*, Erdal, "Coastal Area Management" UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 53-54
[751] *Ozhan*, Erdal, "Coastal Area Management" UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 54-55

III. An example of an ecologically unsound decision in the coastal area in Turkey:

The Black Sea Coastal Dual Carriageway was inaugurated in 2007, it connects Sinop, Samsun, Trabzon and Sarp and is 715 km long[752]. Whilst being important for the economic development of the area, the road disrupted the access of many cities to the shore and destroyed valuable natural coastal areas[753]. In some places, the development of the Black Sea coastal road forced the sea back, losing precious meters of its water. For example: pre-development, the habitat in the Trabzon area was perfect for a wide variety of fish to lay their eggs. Young fish were able to survive in the shallow waters because fishing boats could not go there without risk of grounding. Now, just a couple of meters away from the newly created coastline, the water reaches depths of 30 m and the valuable ecosystem is lost[754].

The Coastal Law No. 3621 of 1990 actually prohibits most constructions, including new roads, in the first 50 m of the shore strip. But, since the highway project began 1987 and the highway was built over an old road, the project was considered not to violate the law[755].

IV. Examples of ICZM-Projects in Turkey:

Significant efforts have been made by national as well as international organisations to advance ICZM in Turkey. But even though their projects have improved the management practices in Turkey and have provided valuable experience with ICZM, they did not yet generate a truly integrated management system[756].

1. Mediterranean:

The Coastal Management and Tourism Project in Cirali (Çıralı):

The Coastal Management and Tourism Project in Cirali was initiated in 1997 by the WWF-DHKD (Wildlife Conservation Society). Cirali is a small village located on the Mediterranean coast, in the region of Antalya. The Cirali bay is divided into different zones of protection to preserve its natural assets, including the endangered sea turtles *Caretta caretta*, and its historical and archaeological wealth. This protected status spared Cirali from big hotels and commercial centres[757]. The main outputs of the Cirali project was a Coastal Management Plan, the Cirali Physical Plan and the Ulupinar Cooperative that promotes agricultural products[758].

Coastal Area Management Programme (CAMP) Projects: The Bay of Izmir[759]

The city of Izmir is the third largest city of Turkey. In the Bay, there are major industrial facilities and an important port.

One of the most substantial outputs of the "the Bay of Izmir" CAMP was the study report entitled an "Integrated Management Study for the Izmir Area". The report summarized the state of the natural resources and the current decision-making process in its first part. It then describes the elements of

[752] General Directorate of Highways "Black Sea Coastal Dual Carriageway": http://www.wdf.org/gspc/virtual2001/pdf/YigitPaper.pdf (09.05.2014)
[753] Environmental Justice Atlas: http://ejatlas.org/conflict/black-sea-coastal-highway-project-turkey (09.05.2014)
[754] *Van Herpen*, Wilco, "Trabzon after the new coastal road", Hürriyet Daily News (3.10.2012): http://www.hurriyetdailynews.com/trabzon-after-the-new-coastal-road.aspx?pageID=238&nID=31487&NewsCatID=379 (09.05.2014)
[755] Environmental Justice Atlas: http://ejatlas.org/conflict/black-sea-coastal-highway-project-turkey (09.05.2014)
[756] *Ozhan*, Erdal, "Coastal Area Management" UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 64
[757] http://www.cirali.org/en/cirali-hakkinda.html
[758] *Ozhan*, Erdal, "Coastal Area Management" UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 61-62
[759] *Ozhan*, Erdal, "Coastal Area Management" UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 62-63

integrated coastal and marine management, before making recommendations in the third part, including measures for the preparation of an Integrated Coastal Master Plan.

2. **Black Sea:**

Akçakoca District Pilot Project[760]:

The objective of the ICZM pilot project on "testing of methodology on spatial planning for ICZM" (2007) was the development of a spatial plan for the Akçakoca District coastal area. Akçakoca is located in the Düzce Province, in the Black Sea region of Turkey, about 200 km east of Istanbul[761]. In that area, the decreasing income from hazelnut cultivation caused people to find other new sources of income, like tourism activities and poultry husbandry[762].

Objectives of the promotion of spatial planning in the Akçakoca District[763]:

- to protect the marine environment and the vulnerable coastal zone;
- to help in creating a common regional understanding of the ICZM approach;
- to improve the capabilities of the regional authorities for coastal planning and management;
- to contribute to the effective implementation of the Black Sea Strategic Action Plan in the pilot area.

Also, the Akçakoca Coastal Information System (CIS) was developed within the project. One of the main outcomes of CIS application was the production of integrated land use maps, helping to analyze inter-sectoral conflicts. The main sectoral conflicts identified include agriculture-agriculture, agriculture-forestry, agriculture-tourism, agriculture-industry, and industry-industry conflicts[764].

The project included the following stages[765]:

- data collection;
- establishment of a database for spatial data;
- preparation of a Geographic Information System (GIS) map (environmental, land-use and socio-economic data);
- identification of conflicting uses;
- development of means to prioritize uses;
- functional land-use zoning;
- stakeholder consultation.

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[760] European Commission – DG Environment "Option for Coastal Information Systems – Progress Report" (2011): http://ec.europa.eu/environment/iczm/pdf/21807-REL-T002.1_Progress%20Report.pdf (12.05.2014) p. 197

[761] Wikipedia: http://en.wikipedia.org/wiki/Ak%C3%A7akoca (12.05.2014)

[762] *Tanik*, Aysegul, *Zafer Seker*, Dursun, *Ozturk*, Izzet, *Tavsan*, Cigdem, "GIS Based Sectoral Conflict Analysis in a coastal district of Turkey", Istanbul Technical University, The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXVII. Part B8. Beijing 2008: http://www.isprs.org/proceedings/XXXVII/congress/8_pdf/6_WG-VIII-6/03a.pdf (12.05.2014) p. 666

[763] *Tanik*, Aysegul, *Zafer Seker*, Dursun, *Ozturk*, Izzet, *Tavsan*, Cigdem, "GIS Based Sectoral Conflict Analysis in a coastal district of Turkey", Istanbul Technical University, The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXVII. Part B8. Beijing 2008: http://www.isprs.org/proceedings/XXXVII/congress/8_pdf/6_WG-VIII-6/03a.pdf (12.05.2014) p. 665

[764] *Tanik*, Aysegul, *Zafer Seker*, Dursun, *Ozturk*, Izzet, *Tavsan*, Cigdem, "GIS Based Sectoral Conflict Analysis in a coastal district of Turkey", Istanbul Technical University, The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXVII. Part B8. Beijing 2008: http://www.isprs.org/proceedings/XXXVII/congress/8_pdf/6_WG-VIII-6/03a.pdf (12.05.2014) p. 667

[765] *Coman*, Claudia, "ICZM and MSP in the Black Sea Region", Black Sea Commission, PlanCoast Conference 2007: www.plancoast.eu/files/split/COMANSplit.ppt *(12.05.2014)*

V. Weaknesses identified in Turkey[766]:

Lack of coordination:
Several organizations work on the coastal management, but there is no higher-level authority that ensures the coordination of their work. Thus, management efforts are not sufficiently integrated and consistent yet.

Lack of cooperation:
The cooperation of different institutions is required by some of the laws, but often only through a "weak" mechanism (asking for an opinion). Thus, not all parties relevant for an integrated management are adequately involved in the decision-making process.

Lack of public participation:
The administration in Turkey tends to be over-centralized, local authorities and the public are not sufficiently included in the management of the coast.

Lack of environmental protection:
The promotion of the development of tourism centres by the Law for the Encouragement of Tourism has delayed the development of an efficient coastal management, and, for a long time, no adequate consideration has been given to the protection of the environment.

Lack of clear-cut laws:
The institutional framework is too complex and rights and competences are not always clearly defined. This leads to unnecessary bureaucracy and impedes an effective management of coastal areas.

Lack of effectivity:
Even though several important tools such as land use planning, sectorial development planning, environmental impact assessment, specially protected areas or the Coastal Law have been already implemented in Turkey, the effectiveness of their application in practice still needs to be improved.

Lack of control and enforcement:
Even though there are authorities in charge to control the compliance with the relevant laws, there is still a lack of enforcement.

Reasons:
- a lack of employees that realize site visits;
- inadequate expertise and training of employees;
- a lack of equipment;
- a lack of knowledge on environmental regulations;
- a lack of coordination between and within governmental agencies.

[766] *Ozhan,* Erdal, "Coastal Area Management" UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 63-64 / Cömert, Çetin, Bahar, Özgül, Şahin, Necati "ICZM and cage siting for marine aquaculture", Fresenius Environmental Bulletin, Vol. 17 - No 12b (2008): http://www.aquaculture.stir.ac.uk/public/GISAP/pdfs/Comert.pdf (22.04.2013) p. 3-4 / *Sesli,* F. Ahmet, *Sisman,* Aziz, *Aydinoglu,* A. Cagdas "Coastal legislation and administrative structures in Turkey" Scientific Research and Essay Vol.4 (12) pp. 1447-1453, December 2009, p. 1445 / *Bas,* Oguz: Legal frame work for marine policy and coastal management in Turkey (2006) http://www.belgeler.com/blg/10sf/legal-frame-work-for-marine-policy-and-coastal-management-in-turkey-turkiye-de-deniz-politikalari-ve-kiyi-yonetiminin-yasal-cercevesi p. 112

Lack of plans:
In Turkey, regional and urban land use plans are often not produced in time, are not truly implemented or are, due to a lack of data and analysis, not suitable to efficiently regulate the different uses. Also, the concept of management plans is still relatively new in Turkey.

Lack of data:
Relevant data on physical and ecological coastal processes and the natural and cultural resources of the coast is often not available, not accurate, not up to date or not digitally available. There is thus not yet enough reliable data available to underpin decision-making in environmental matters.

Lack of a scientific analysis:
Plans and reports are often inaccurate because they have not been scientifically analysed. A scientific analysis would be important, however, to enable the decision-makers to thoroughly assess the plans.

VI. Recommendations[767]:

- Identify the various anthropogenic impacts on the coastal environment;
- Determine the powers and responsibilities of all authorities relevant to ICZM;
- Establish a special authority responsible for the management of the coast;
- Adopt an "umbrella law" on coastal management, integrating the sectoral regulations;
- Eliminate contradictions between different regulations;
- Ensure coordination between different sectors;
- Extend regulations to activities in the sea;
- Develop a democratic management model, involving local authorities and the public;
- To sign and ratify the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters of 1998;
- Prepare and apply management plans for the coastal area;
- Adopt research and monitoring programmes on coastal issues;
- Improve the national, local and marine spatial data infrastructure;
- Support an ICZM agreement at Black Sea basin level.

[767] *Bas,* Oguz: Legal framework for marine policy and coastal management in Turkey (2006) http://www.belgeler.com/blg/10sf/legal-frame-work-for-marine-policy-and-coastal-management-in-turkey-turkiye-de-deniz-politikalari-ve-kiyi-yonetiminin-yasal-cercevesi p. 107-108 / *Sesli,* F. Ahmet, *Sisman,* Aziz, *Aydinoglu,* A. Cagdas "Coastal legislation and administrative structures in Turkey" Scientific Research and Essay Vol.4 (12) pp. 1447-1453, December 2009, p. 1449 / Cömert, Çetin, Bahar, Özgül, Şahin, Necati "ICZM and cage siting for marine aquaculture", Fresenius Environmental Bulletin, Vol. 17 - No 12b (2008): http://www.aquaculture.stir.ac.uk/public/GISAP/pdfs/Comert.pdf (22.04.2013) p. 3 / *Ozhan,* Erdal, "Coastal Area Management" UNEP/MAP, Priority Actions Programme Regional Activity Centre (2005): http://www.medcoast.org.tr/publications/cam%20in%20turkey.pdf (09.05.2014), p. 6

UKRAINE

Protected Areas

I. **Evolution of the protected areas system:**

The percentage of protected areas increased from 4.6 % of the territory of Ukraine in 2004 to 5.7 % in 2011. The total protected area covered 3,744,500 ha in 2011, including 403,000 ha of marine reserves in the Black Sea[768]. There are also protected forests and protected coastlines, water-protection zones and other forms of protection. If all those types of protected areas are taken into account, the total share of protected areas amounts to more than 10 % of the territory of Ukraine[769].

According to the draft for the National Ecological Program for the Development of Protected Areas up to 2020, 15 % of the Ukrainian territory is to be protected by 2020[770]. The draft was prepared in 2006, but has not yet been approved[771].

The expansion of the protected areas system has been recently supported by several decrees, including presidential decrees No. 774/2008: "About exigent measures for expansion network of national natural parks," No. 1129/2008: "About expansion of the network and territories of national natural parks and other protected areas," and No. 611/2009: "About additional measures for development of protected areas management in Ukraine." Additionally, decree No. 1129 calls for the establishment of 19 new national level protected areas, while No. 611 includes measures to consolidate the protected areas system under the Ministry of Ecology[772].

II. Key legal Framework:

- Law of Ukraine on Environmental Protection (1991)
- Law on Protected Areas of Ukraine (1992)
- Law of Ukraine on Fauna (1993)
- Forest Code of Ukraine (1994)
- Water Resources Code of Ukraine (1995)
- Law of Ukraine on Flora (1999)
- Land Code of Ukraine (2002)
- Law on Red Data Book of Ukraine (2002)
- Law on Ecological Network of Ukraine (2004)
- National Programme of Ukraine for National EcoNet Development for Years 2000 -2015 (2000)
- Action Program for Biodiversity Conservation and Protected Area Management in Ukraine through 2020 (2006)
- Draft National Strategy for Financing Sustainability of Protected Areas (2009)
- Draft plan for the National Ecological Program for the Development of Protected Areas up to 2020 (2010)

[768] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 13
[769] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 14
[770] *Parchuk*, Grygorii, "Setting-up of the Pan-European Ecological Network in Ukraine 2007-2012": http://www.coe.int/t/dg4/cultureheritage/nature/econetworks/Documents/2012/Ukraine-E_onet_2012_Parchuk-last.pdf
[771] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 7
[772] *Brann*, Josh: Strengthening Governance and Financial Sustainability of the National Protected Area System - Ukraine, GEF / UNDP, Terminal evaluation (2012) p. 2

- State Cadastre of Protected Areas

III. Competencies[773]:

Ministry of Ecology and Natural Resources (national level)
The Ministry of Ecology and Natural Resources is the central authority for the conservation of biodiversity and the management of the environment. The Ministry is responsible for implementing national environmental policies and for coordinating all activities with regard to the environment.

Department of Protected Areas (national level)
The Department of Protected Areas (formerly the State Service for Protected Areas Management) deals with all issues connected with the management of biodiversity and protected areas.

Research Centre on Protected Areas (national level)
The Research Centre is inter alia responsible for scientific research on protected areas, the elaboration of management plans and the support of the government in drafting environmental policies.

Regional and local administrations
Regional and local administrations are responsible for protected areas of local importance. They organize spatial planning and control the use of the land. On all issues related to the establishment, management and monitoring of protected areas, they cooperate with the regional branch of the Ministry of Ecology.

Scientific-Technical Council[774]
To ensure the participation of the local communities and relevant stakeholders in the planning and the management, Scientific-Technical Councils are established in many protected areas. For Nature Reserves, Biosphere Reserves, National Natural Parks and Regional Landscape Parks, those councils are mandatory.

Scientific-Technical Councils have up to 25 members and include scientists and experts for environmental issues, education or recreation as well as representatives of local authorities and NGOs. The Councils make recommendations for the management of the respective protected area and for personnel matters and finance. Decisions are usually taken by a majority of the votes.

Administration of the protected areas
All Nature Reserves, Biosphere Reserves and National and Regional Landscape Parks must have their own administrative body[775].

IV. Categories[776]:

The protected areas of Ukraine are divided into 11 different categories of national or local importance. Seven categories designate natural areas (Nature Reserves, Biosphere Reserves,

[773] Strengthening Governance and Financial Sustainability of the National Protected Area System in Ukraine, GEF / UNDP project document: http://www.undp.org/content/dam/undp/documents/projects/UKR/00048804/Project_Document.pdf, p. 9-12
[774] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 35
[775] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 41
[776] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 12-13, Internet Encyclopedia of Ukraine: http://www.encyclopediaofukraine.com/display.asp?linkpath=pages\N\A\Naturepreserves.htm, Wikipedia: http://en.wikipedia.org/wiki/Categories_of_protected_areas_of_Ukraine#Nature_Preserves, (18.03.2014)

National Nature Parks, Regional Landscape Parks, Reserves, Nature Monuments, and Protected Tracts) and 4 artificial areas (Botanical Gardens, Zoological Parks, Dendrology Parks and Parks of Landscape Architecture)[777].

The regime, the degree of protection and the permitted activities and use of natural resources have been defined for each category of protected areas by the Law "On Protected Areas of Ukraine" (1992). The system of protected areas is based on the system that had been developed in the former Soviet Union. Two terms are important for the understanding of the Ukrainian protected areas system: the term “Zapovednik”, which means in Russian “sacred” or “protected from disturbance” and is thus used for areas that require strict nature protection, and the term “Zakaznik”, which means an area where economic activities are restricted[778].

It is therefore difficult to compare the Ukrainian system with other international concepts. Even if, in the following list, each category of the Ukrainian system is assigned a corresponding IUCN category, in reality the management of the different protected areas does not always correspond to the management normally required for that IUCN category[779].

Nature Reserves (Natsionalny Pryrodnyy Zapovednik) are created to preserve natural sites of national importance and representative types of landscapes, such as steppes or forests. Their primary function is to promote scientific research and conservation activities. Economic activities are not permitted in the reserves. The system of nature reserves was already initiated in the former USSR, shortly after the Revolution of 1917. In 1988, already more than 150 nature reserves have been created, of which 12 were located in Ukraine.

The Ukrainian category “Nature Reserve” corresponds to category Ia or Ib of the IUCN classification (Strict Nature Reserve or Wilderness Area).

Biosphere Reserves (Biosphernyy Zapovednik) are protected areas of international importance. They are established to facilitate monitoring and environmental research and to test innovative approaches to sustainable development. In the Biosphere Reserves, there are usually three functional zones with special management regimes: a core zone, a buffer zone and a zone of anthropogenic landscapes (transition area). Biosphere Reserves can contain protected areas of other categories, and therefore correspond to multiple IUCN categories (Ia, II, IV, V).

National Nature Parks (Natsionalnyy Pryrodnyy Park) are sites of national importance that have a special natural, recreational, historical, cultural, scientific, educational or aesthetic value. The objective of the designation of sites as Natural Nature Parks is to ensure their conservation, restoration and effective use. National Nature Parks have different zones (e.g. core zones - zones for the controlled development of tourism or economic zones). Ukrainian National Nature Parks meet the requirements of category II “National Park” of the IUCN classification.

Regional Landscape Parks (Regionalnyy Landshaftnyy Park) are established at the local level with the aim to preserve typical or unique natural areas with their valuable natural, historic and cultural features. Touristic and recreational activities are allowed in those areas, as well as environmental education activities. The Regional Landscape Parks of the Ukraine correspond to category V “Protected Landscape / Seascape” of the IUCN classification.

[777] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 11
[778] Ukraine FAA119: Biodiversity Analysis: Actions Needed for Conservation (May 2011), USAID, p. 27-28
[779] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 12-13

Reserves (Zakaznik) are small parcels of land or small water bodies. They are designated to protect some special elements of nature, for example an endangered plant or animal species, but not the entire natural complex. In the Reserves, activities are restricted or even prohibited if they are incompatible with the protection objectives. Most of the Reserves correspond to the IUCN category IV (Habitat / Species Management Area).

Nature Monuments (Pamyatnyk Pryrody) are unique natural formations that have a special environmental, scientific or aesthetic value, for example a cave or a waterfall. They are often rather of local than of national significance. In those areas, any activity is prohibited that threatens the conservation goals or leads to the degradation or change of the original condition of the monument. The Ukrainian category "Natural Monuments" corresponds to the IUCN category III "Natural Monument or Feature".

Protected Tracts (Zapovidne Urochyshe) are usually areas a little bit larger than monuments, like small lakes or riverbanks that have a special scientific, conservation or aesthetic value. In the Protected Tracts, any activity is prohibited that endangers the objectives of the protection status. Protected Tracts correspond with the IUCN category Ia "Strict Nature Reserve".

V. Procedure to establish a protected area[780]:

Any institution, for example state or scientific organizations or organization for the protection of the environment, and all citizens can propose the creation of a protected area.

The proposal is to be adopted by the Ministry if the planned protected area is of national importance and by its regional department if the planned protected area is of local importance. Users and owners of natural resources as well as local authorities and other stakeholders have to agree to the proposal.

After the establishment of a protected area has been approved, a "Project of Creation" is prepared by experts. The procedure to establish protected areas contains thus participatory and science-based elements.

The following points should be included in the "Project of Creation" [781]:

1. Ecological value of the area
2. Economic and social values (promotion of local industries, improvement of livelihoods for local people, sustainable development of the region, etc.)
3. International value
4. Criteria for choosing the territory for protection
5. Information about region, location, size, features
6. Information about uses
7. Analysis of land owners, users and other stakeholders
8. Characteristics of the area:
   8.1. Natural features
   8.2. Environmental and biological value
   8.3. Socio-economic characteristics of the region
   8.4. Scientific, recreational, aesthetic, historic and cultural value
9. Zoning of the territory of the protected area:

[780] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 14
[781] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 26-27

9.1. Previous functional zoning of the area
9.2. Definition of restrictions for each zone
10. Pre-assessment of the socio-economic impact on the region
11. Pre-assessment of the ecological impact on the region

On the basis of the "Project of Creation" of the protected area, the Ministry of Ecology and Natural Resources prepares the draft Decree for the President on the creation of the protected area, who then approves this Decree.

The procedure to create a new Marine Protected Area in Ukraine – the example of the "Small Phyllophora Field"[782]:

1. In September 2008, field studies of the state of the algae *Phyllophora biocenosis* and its distribution in the Small Field were carried out by scientists.
2. A petition to the President was prepared for establishing the Botanical Reserve of national importance "Small Phyllophora Field" in Karkinitsky Bay. According to the Law of Ukraine "On Protected Areas" (1992), such a petition is the first step towards creating a National Nature Park.
3. The petition was considered and approved by the Ministry of Ecology.
4. The petition was agreed upon with local authorities, the local government and with the Republican Committee of the Autonomous Republic of Crimea (ARC) on Environmental Protection (Reskomprirody Crimea).
5. The "Project of Creation" has been prepared by UkrCES and the Reskomprirody Crimea.
6. The "Project of Creation" was presented by the Reskomprirody Crimea to the Supreme Council of the ARC for approval and submission to the Ministry of Ecology.
7. The Ministry of Ecology prepared a draft of the Presidential Decree and has discussed this draft with other relevant ministries and committees.
8. The approved draft of the Presidential Decree and the "Project of Creation" has been forwarded to the Cabinet of Ministers.
9. After review and approval by the Governmental Committee of the Cabinet of Ministers, the documents are submitted to the Administration of the President of Ukraine.
10. The final decision on the creation of the reserve is taken by the President of Ukraine and published in print in the form of a Presidential Decree (2012).

VI. Strength and Weaknesses of the protected area system[783]:

Strengths:

- there is a steady growth of protected areas and already plans for a further enlargement
- the categories of protected areas correspond largely to the IUCN categories
- the procedure to establish protected areas includes elements of stakeholder participation

Weaknesses[784]:

- not always clear definitions of the boundaries of protected areas and a lack of respect for defined boundaries

[782] Kostylev, Eduard, Tkachenko, Feodor, Tretiak, Irina: Way of Creating a New Marine Site of Nature Reserve Fund of Ukraine – "Small Phyllophora Field", Turkish Journal of Fisheries and Aquatic Sciences 12: 533-534 (2012)
[783] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 18, 19, 31, 35
[784] *Milchakova*, Nataliya "Report on Environmental Legislation of Ukraine, Use of Natural Resources in the Marine Area and Coastal Marine Region", 4 January 2014, provided for CoCoNET, p. 5

- lack of management plans and low level of protection
- insufficient funding
- lack of criminal liability for the violation of environmental laws
- low awareness of officials on local and national level towards protected areas
- general political instability, a high level of corruption and insufficient administrative capacities[785]

The participants of an UNDP/GEF project concluded: "The principal bottleneck is the capacity of PA institutions to put existing legislation and policies into action, especially when innovative approaches, permitted by the legal and policy framework, are considered, such as: raising own financing from economic activities, habitat recovery works; decentralization of the State Service; designating transboundary PAs"[786].

VII. First steps towards a network of protected areas:

The Law of Ukraine on ecological network of Ukraine (Econet) / N1864–IV (24 June 2004)

The purpose of the legislation on the ecological network is the management of the ecological network to ensure the sustainable development of Ukraine and to reconcile economic, social, ecological and other public interests (Art. 2).

An ecological network is a contiguous territorial system set up with the purpose to protect the environment, the landscape and biological diversity and the natural habitats of animals and plants. The principles of management of ecological networks include ensuring the functioning of ecosystems and of single components thereof and the unification of the Ukrainian ecological network with the networks of the neighbouring States and the Pan-European ecological network. With the monitoring of the ecological network, the preservation of the integrity of the ecological network through preventive action is to be facilitated (Art. 20).

The Law of Ukraine on National program of forming the national ecological network of Ukraine for years 2000–2015 / N1989 (21 September 2000)

"The principal objective of the Programme is to increase the area of land in the country under the natural landscapes to the level sufficient for the preservation of their diversity close to their initial natural condition. Also the development of their territorially integrated system built to ensure the possibility to use the natural ways of the migration and propagation of species of plants and animals, which would ensure the preservation of natural ecosystems, species and populations of the flora and fauna" (Point 5/3). One of the major tasks of the Programme is "to develop and take actions aimed at the preservation of coastal landscapes of the Sea of Azov and the Black Sea, to create a network of marine objects of the natural reserve fund"(3).

According to the National Programme of Ukraine for National EcoNet Development for the years 2000-2015 (2000) and the Law on the Ecological Network of Ukraine (2004), one of the main

[785] *Kovalenko*, Olga: Setting the priorities for threat reduction management in protected areas in Ukraine, thesis submitted to the Central European University (2012), p. 25
[786] Strengthening Governance and Financial Sustainability of the National Protected Area System in Ukraine, GEF / UNDP project document: http://www.undp.org/content/dam/undp/documents/projects/UKR/00048804/Project_Document.pdf, p. 9

challenges in forming the national ecological network is to identify the country's spatial structure and to integrate natural biotopes in the territorial planning system[787].

To develop the ecological network in the regions (oblasts) of Ukraine, Coordination Councils have been established. Besides, regional programs and schemes for ecological network development have been elaborated and approved. In those schemes, different zones (core areas, corridors, buffer zones and restoration areas) have been identified, also for the Azov and Black Seas coasts[788].

Protected areas are the main element of the Econet. The objective is to establish a connected system of protected areas that corresponds to the natural migration routes and the plants and animals species distribution, and thus ensures the preservation of natural ecosystems[789].

At the moment, 9 corridors of national importance have been designated. An Azov-Black Sea Coastal-Marine Ecological Corridor is also planned[790]. Additionally, the various districts of Ukraine have developed 21 regional plans for the creation of the Econet, 4 of them have been already approved[791].

Strengths and weaknesses of the current network development system[792]:

Strengths:

- The general scheme of territory planning takes the necessary expansion of the National Ecological Network into consideration.
- The National Programme on Econet contains the idea of connectivity of protected areas.
- Some corridors of national importance are already designated.
- Some potential sites of Ukraine's Emerald Network have been identified[793]. Set up under the Bern Convention, the Emerald Network aims to supplement the NATURA 2000 Network in non-Community countries.

Weaknesses:

- There is no multi-sectoral advisory committee established on national level to strengthen the inter-sectoral communication and to facilitate the integration of protected areas in national and economic development plans and programmes.
- The Econet is developing very slowly due to low awareness, lack of funds and experts and a frequent change of the government.

VIII. Management[794]:

[787] Transboundary Biosphere Reserve Polesie, http://westpolesie.org/index.php?option=com_content&view=article&id=7&Itemid=7 (18.03.2014)
[788] *Parchuk*, Grygorii, "Setting-up of the Pan-European Ecological Network in Ukraine 2007-2012": http://www.coe.int/t/dg4/cultureheritage/nature/econetworks/Documents/2012/Ukraine-E_onet_2012_Parchuk-last.pdf
[789] *Harichkow*, S.K.: Ecological Networks as a "Green" Growth Factor of the Region's economy, ECONOMICS Nr. 4 (9), 2013, p. 3
[790] *Protsenko*, Leonid, *Kokhan*, Oleg: Setting up of Emerald Network in Ukraine, 2012: http://pjp-eu.coe.int/documents/1461016/3529611/Ukraine.pdf/012945d3-55d7-4ef9-a638-cfe97bffb6b9
[791] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 19
[792] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 23
[793] Environment / Partnership: http://ec.europa.eu/environment/nature/partnerships/index_en.htm (21.03.2014)
[794] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 27

The functions of the protected areas and the necessary protection measures are regulated by the relevant national legislation and by the "Project of Creation" for the protected area. According to Ukrainian legislation, for all Nature Reserves, Biosphere Reserves and National Parks, a "Project of organization of the territory of the protected area" has to be prepared that is similar to a management plan. Guidelines for developing those "management plans" for National Parks, Biosphere Reserves and Regional Landscape Parks have been developed and officially approved in 2006. Such plans have, however, only been adopted for about 40 % of the Nature and Biosphere Reserves and National Parks. For the other categories of protected areas, management plans are not mandatory.

The main differences between the Ukrainian "Project of organization of the territory of the protected area" and a management plan in line with international standards[795]:

	Project of Organization	**Management Plan**
Developer	Special planning organization	Working group involving stakeholders and experts
Participation in the drafting process	Scientific-Technical Council, no direct participation of the public	Participation of the local community and other stakeholders in all stages
Participation in the management	Local residents and stakeholders only involved in certain tasks	Mechanisms of co-management set out in the plan
Harmonization with regional strategies and sectoral policies	No review of relevant documents takes place	Integration of the plan in the overall development strategy for the region
Long-term strategy, action plan, assessment, reference indicators	A long-term strategy, a section on an "Action plan for the development of the protected area" and an annual review required, indicators often not clearly defined	Preparation is required

Weaknesses of the protected areas management system in Ukraine[796]:

1. The Project of Organisation is developed by special project organizations that often lack the competence to prepare plans that conform to European and international standards.

2. The staff of the protected area, local residents, land owners, users and other stakeholders are not involved in the planning process. This can result in conflicts between the protected areas administration and the local community.

[795] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 42
[796] *Drapaliuk*, Anastasiia: Implementation of Programmes of Work on Protected Areas in Ukraine (2011), Thesis for M.Sc. Management of Protected Areas, 105 p., Klagenfurt, p. 28

3. Each state body responsible for protected areas has its own approach to management, which leads to the fragmentation of the protected area system[797].

4. The implementation of the Project of Organisation is the sole responsibility of the administration of the protected area. However, the administration can only manage its own territory. To achieve all the objectives of the protected area, cooperation with land owners and users would therefore be necessary.

5. Local communities receive little economic benefits from protected areas.

6. The state of implementation of the Project of Organisation is not regularly assessed. An adaptive management is thus not always ensured.

IX. Examples of Protected Areas in the coastal and marine zone:

Meotida Regional Landscape Park:
The Regional Landscape Park Meotida was created by the regional council of Donetsk on 30 June 2000. The park is located in the south of the Donetsk region, on the coast of the Azov Sea. In the park, many flora and fauna species and harbour porpoises are present [798]. In 2009, rare Dalmatian Pelicans were observed[799]. The park is divided into four zones: a core zone, a zone for controlled tourism development (excursions, sport activities etc.), a zone for stationary tourism (hotels etc.) and an economic zone[800].

On 25 December 2009, Meotida Regional Landscape Park was awarded a national status and, as a result, provided with 12,000 ha of the Azov Sea water area[801].

Difficulties identified in the decision-making process:
The Meotida Director, Gennadiy Molodan, identified the following difficulties with regard to the current decision-making system in the park[802]:

- "Important decisions are made by politicians not by professionals. Although the argumentation for the decisions is prepared by specialists working in the Scientific department, although the local stakeholders' consent is required, the final decision belongs to those persons which got in their position due to a political mandate and their priorities are determined first of all by political interests.
- Financing to implement decisions is not coming timely ("hard to explain natural seasonal processes to the Financial Administration").
- Sometimes slow reaction in urgent situations (due to the bureaucratic system) - especially when it comes to budgeting. In a Regional Council the decision of the Council members is often required and the Council rarely meets besides its regular meetings.

[797] *Brann*, Josh: Strengthening Governance and Financial Sustainability of the National Protected Area System - Ukraine, GEF / UNDP, Terminal evaluation (2012) p. 2
[798] Cetacean Habitat: http://www.cetaceanhabitat.org/find_mpa_advanced2.php (19.03.2014)
[799] UKRINFORM (19.03.2014):
http://www.ukrinform.ua/eng/news/rare_pelicans_settle_in_meotida_park_on_azov_sea_coast_161599
[800] www.meotida.org.ua (19.03.2014)
[801] *Bykova*, Valentina: Before we hear the sound of thunder / Invest Ukraine
http://www.eng.investukr.com.ua/get-news/549/ (19.03.2014)
[802] *Stanciu*, Erika, *Ioniță,* Alina: Governance of Protected Areas in Eastern Europe, results of a research study commissioned by BfN to ProPark, Romania, Bonn 2014, p. 63

- It follows rather a “local” vision and it doesn’t integrate and ensure the implementation of international conventions (e.g. CBD, World Heritage Convention, Ramsar, Bern Convention, CITES, etc), due to lack of political will and resources.
- Nature protection should be organized not by departmental but by territorial principle - departments are administrative units, whose delineation doesn’t take into account the natural links and processes; to be effective, nature protection should go beyond these borders.”

X. Table of Ukrainian coastal and marine protected areas:

Name	Date / Decree	Location	Features	Management
Azov and Sivash National Nature Park	1993 by Decree of the President	Herson region, South-Western part of the Azov Sea, 43,685 ha aquatic	Coastal landscape, lagoons, islands, fish, birds	Reserve zone, economic zone, recreation zone
Biloberezhzhia Sviatoslava National Nature Park	2009 by Decree of the President	Basin of the Southern Buh		
Black Sea Biosphere Reserve (Chornomorskyi)	1927 by Resolution of the USSR Council of Peoples Commissars No. 172 as part of the BS preserve / 1983 Biosphere Reserve by NAS Presidium Decision No. 538 / 1985 UNESCO certificate / 1998 extended by Decree of the President No. 457	Banks of the lower Dnieper River and the coast and the islands of the Tendriv Bay and Yahorlyk Bay, 74,971 ha aquatic	Steppe, forests, wetlands, migratory and nesting birds	Director, reporting to the Ministry of Ecology, National Academy of Science (NAS): Management Plan prepared, core area and buffer zone (fishing allowed)
Cape Martyan Nature Reserve	1973 by Decree of the Council of Ministers of the Ukrainian Soviet Socialist Republic No. 84 on Nikitsky botanical Garden	Crimea, close to the city of Yalta, about 120 ha marine	Mediterranean flora and fauna, relic vegetation	Ukrainian Academy of Agrarian Science
Danube Delta Biosphere Reserve	Natural World Heritage and Ramsar site in 1991 / 1998 Biosphere	Danube Delta, Romania (82 %) and Ukraine (18 %), 137,986 ha	Lakes, islands, wetlands, numerous birds and fish species, 30 types of	Administration of the Danube Biosphere Reserve (Regulation No.

	Reserve by UNESCO decision	marine	ecosystems, one of the most valuable ecoregions in the world (WWF)	538 / 2008); Ministry of Ecology; National Academy of Science of Ukraine / core zone and buffer zone
Karadag Nature Reserve	1979 on the base of Karadag research station / 2001 declared National Heritage of Ukraine by Statement of the Cabinet of Ministers, application for the European Diploma in 2013	Southeastern Crimea, 809 ha marine	Ancient volcano, unique flora and fauna	National Academy of Science 2 areas: 1 open for guided tours, 1 closed
Kazantip Nature Reserve	1964 Nature Monument / 1998 declared Nature Reserve by Decree of the President	Northwest coast of the Kerch Peninsula, Sea of Azov, 56 ha marine	Home to endangered plant and animal species	
Meotida Regional Landscape Park	2000 by Regional Council of Donetsk / 2009 awarded national status	South of the Donetsk region Sea of Azov, 12,000 ha marine	Sandy beaches, wetlands, birds	Core zone, zone for controlled tourism development, zone for stationary tourism, economic zone
Opuk Nature Reserve	1998 by Decree of the President No. 459	Eastern part of the Crimea, “Rocks-Ships” islands, about 60 ha marine	Steppe landscapes,	Visits possible for scientific and educational purposes, ecological trails
Swan Islands branch of the Crimean Nature Reserve	1923 Crimean Nature Reserve	Bakhchisarai, Simferopol, Razdolniy regions, Alushta and Yalta, ornithological branch on Swan Island	Swans and other waterfowl	Administration in Alushta, State Committee of Forestry, guided tours possible
Tarkhankut National Nature Park MPA	2008 by Executive Order No. 774	Crimea	Marine caves, cliffs	

Tuzlovski Lymany National Park	2010 by Decree of the President	Odessa Oblast, 50,000 ha	Lagoons, separated from Black Sea by sandbar	
Zernov's Phyllophora Field State Botanical Preserve	2008 by Decree of the President	Northwestern Black Sea, 402,500 ha, fully marine	First offshore, fully marine MPA in the Black Sea, phyllophora (red algea), habitat to many animal and plant species	Conservation program by UkrSCES, any use requires permit and has to be compatible with protection goals
Small Phyllophora Field Botanical Preserve	2012 by Decree of the President	Karkinitsky Bay, between Crimea and the coast of the Kherson oblast, 38,500 ha, fully marine	Large colony of phyllophora	Preliminary management plan (TACIS project), economic activities prohibited
Zmiinyi Island Zoological Preserve (Snake Island)		South-western border of Ukraine, island 35 km off the coast and adjacent shelf	Igneous rocks, fish and crab species	Research station of the Odessa National University since 2003, the Ukrainian parliament approved the establishment of a rural settlement in 2007

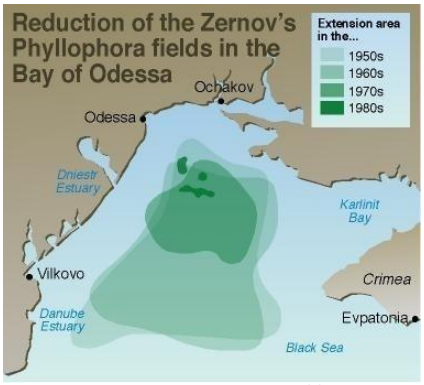

Figure 12: Philippe Rekacewicz, UNEP/GRID-Arendal (www.grida.no)

Info for Table from:
http://www.cetaceanhabitat.org, http://www.opuk.com.ua, www.ucraine.com, http://en.wikipedia.org, http://www.dus.gov.ua, http://www.encyclopediaofukraine.com, *http://www.ukraine.com/national-parks*, http://www1.nas.gov.ua, http://www.unesco.org, www.dbr.org.ua, http://discover-ukraine.info, http://en.zapovednik-karadag.com, http://www.turystam.in.ua, www.meotida.org.ua, http://people.oregonstate.edu, http://www.dus.gov.ua/parks-eng.phtml?ai=park1, http://coconet-fp7.eu/children/MPA_UA.html, http://www.coconet-fp7.eu, http://www.firecaster.com, http://iportal.rada.gov.ua/en/news/page/news/News/News/31428.html, http://www.ukraine.com/blog/explore-ukraines-snake-island, http://www.trjfas.org/pdf/issue_12_02/0245.pdf (19./20.03.2014)

Integrated Coastal Zone Management

I. Characteristics of the coastal zone of Ukraine:

The coastline of Ukraine is about 2,700 km long and includes the northern and western shores of the Black Sea and the Sea of Azov. Here, the coastal cities of Odessa and Mariupol and famous Crimean towns and resorts such as Yalta, Yevpatoriya, Sevastopol, Feodosiya and Kerch are present[803].

The northwestern coast of the Black Sea is intersected by rivers, the largest of which are the Danube River, the Dnister River and the Dnieper River. The land here is relatively flat and contains many sandy beaches.

On the Crimea, a range of mountains runs parallel to the south-east coast, at a distance of about 8-13 km from the sea. In the west, the mountains drop steeply into the sea, in the east, they succeed into a steppe landscape[804].

II. Development of ICZM[805]:

The development of an ICZM policy in Ukraine started with a Ministerial Declaration on the Protection of the Black Sea in Odessa 1993, which confirmed the commitment to Integrated Coastal Zone Management and sustainable development of coastal areas and the marine environment under national jurisdiction. It was decided to implement national coastal zone policies, including legislative measures and economic instruments.

The preparation of a national concept for ICZM then went through a three-year preparatory process. In 1994, a group of Ukrainian experts deepened their knowledge on ICZM in the USA. From 1994 to 1995, within the framework of the international Programme for Environmental Protection of the Black Sea (BSEP), a national report was prepared on ICZM issues in Ukraine. The work conducted for implementing ICZM at national level in the Black Sea countries was co-ordinated by the Programme Coordination Unit BSEP between 1996 and 1997.

National achievements in the field of ICZM:

In 1995, the following reports were produced:

- National report on ICZM
- National ICZM policies & strategies
- Boundaries of the coastal strip in Ukraine
- Working network of environmental management bodies in the coastal zone
- Pilot projects applying ICZM
- Analysis of the laws of Ukraine linking directly to decision making in environmental matters

Results of the TACIS/EuropeAid programmes (1995, 1998 and 2002)[806]:

- Perspectives of Sustainable Tourism Development (1999)
- Policy of Coastal Defence for Azov and Black Sea coasts (1999)
- Coastal Code of Conduct for Russia and Ukraine (1999)

[803] The Black Sea: http://www.tryukraine.com/crimea/black_sea.shtml (26.06.2014)
[804] Wikipedia / Crimean Mountains: http://en.wikipedia.org/wiki/Crimean_Mountains (26.06.2014)
[805] Coastal Guide: Coastal Management in Ukraine: http://www.coastalguide.org/icm/blacksea/index.html (24.03.2014)
[806] *Antonidze*, Ekaterina: The key outcomes of the ICZM related activities – 15 Years of UNDP /GEF in the BS Region, http://iwlearn.net/publications/ll/the-key-outcomes-of-the-iczm-related-activities-antonidze (24.03.2014)

- Guidelines for the preparation of a National Code of Conduct for Coastal Zones (2003)
- Solid wastes management in coastal zones (2000) – Russia, Ukraine
- Pilot Project on ICZM: Malaya Yalta 1999[807]

Definition of the coastal zone in a draft of the Law "On the Coastal Zone"[808]:

"Area of land and the sea along shoreline that includes coastal natural and anthropogenic complexes, which are affected by sea, and also marine area, which is affected by the landscape"

However, this definition of the coastal zone has not been approved yet.

III. Key legal framework:

- Law No. 2780-XII on urban construction (1992)
- Land Code No. 2768-III (2001)
- Law No. 858-IV on land use planning (2003)
- Forest Code No.3852-XII (21 January 1994)
- Law No. 1282 on Tourism (1 January 2004)
- Law No. 2333-III (22 March 2001) regarding validation of the National program of protection and rehabilitation of the areas of the Sea of Azov and the Black Sea
- Water Code No. 213/95-VR (1995): stipulates the restrictions on economic activities and construction in the coastal zone

All water resources in the territory of Ukraine are the national property of the people of Ukraine. The Water Code aims to ensure the environmental safety of the population of Ukraine, as well as efficient water management and its protection against pollution, litter and exhaustion. In the coastal protection zone (up to 2 km), construction of industrial facilities, the use of dangerous pesticides, the deposit of industrial waste and sludge and cesspools for household wastewater are prohibited.

IV. Competencies[809]:

The hierarchy of competent authorities relating to ICZM is shown in Figure 13. As the system was developed within the former Soviet Union, it is quite inflexible and there is a lack of communication between the different institutions.

[807] *Antonidze*, Ekaterina: The key outcomes of the ICZM related activities – 15 Years of UNDP /GEF in the BS Region, http://iwlearn.net/publications/ll/the-key-outcomes-of-the-iczm-related-activities-antonidze (24.03.2014)
[808] *Radchenko*, Victoria: Marine spatial planning: challenges and opportunities in Ukraine, http://eascongress.pemsea.org/sites/default/files/document-files/presentation-msp-radchenko.pdf (24.03.2014)
[809] *Zharova*, Liubov, "Integrated Management as a Background of Modern Environmental Policy", Global Business and Management Research: An International Journal (2012) Vol. 4, No. 2, p. 130

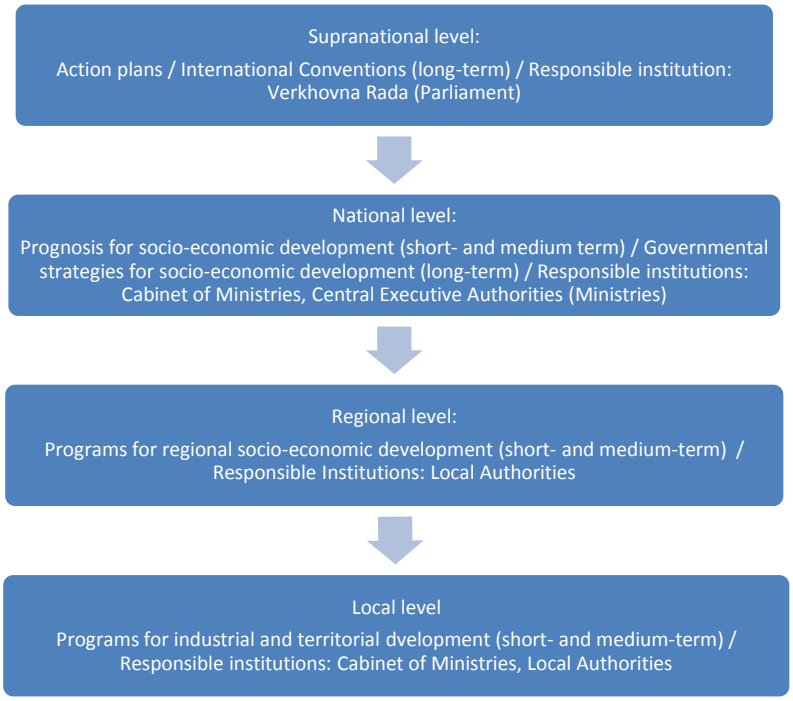

Figure 13: Hierarchy of competent authorities in the field of ICZM

V. Hindrances to an integrated management of the coastal zone:

External factors that impede the development of ICZM in Ukraine[810]:

The special situation of the Sea of Azov

Ukraine borders the Black Sea and the Sea of Azov. The Sea of Azov is a small sea, of which one coast is Ukrainian and the other Russian. Thus, collaboration between the countries is essential for an efficient management of that sea. In reality, however, there are constant conflicts, especially with regard to the evaluation of and compensation for environmental damages and the management of natural resources.

The different attitude of the Black Sea countries towards ICZM

Ukraine promotes the ICZM approach and is even in favour of an ICZM Protocol for the Black Sea. The EU-Members (Romania and Bulgaria) are bound to implement the EU-initiatives on ICZM. However, not all Black Sea countries favour such a close collaboration and the associated commitments.

Internal factors that impede the development of ICZM in Ukraine[811]:

- The planned economy system was not replaced by an efficient planning system.
- The political situation is very instable[812].

[810] *Zharova*, Liubov, "Integrated Management as a Background of Modern Environmental Policy", Global Business and Management Research: An International Journal (2012) Vol. 4, No. 2, p. 125
[811] *Zharova*, Liubov, "Integrated Management as a Background of Modern Environmental Policy", Global Business and Management Research: An International Journal (2012) Vol. 4, No. 2, p. 124, 126, 129

- There is no clear distribution of responsibilities between the state administration and local self-governments[813].
- The high level of bureaucracy and a top-down planning system are a hindrance to quick decision-making.
- There is a low priority of environmental protection, which inter alia leads to insufficient funding.
- Environmental protection policies are not integrated in the sectoral policies and planning processes.
- Issues are regulated by sectoral codes (Water, Land, Subsoil…) that do not meet the requirements of complex and interconnected environmental problems.
- There is a lack of clear objectives in environmental legislation[814].

VI. Pilot Project ICZM: Sevastopol Bay / Pegaso Case[815]:

The PEGASO project aims to advance the implementation of the ICZM Protocol through case studies at 10 pilot sites around the Mediterranean and Black Seas.

Description:

Sevastopol Bay is a natural inland harbour on the coast of the Crimea on the Black Sea. The bay splits Sevastopol city into a southern and a northern part. It is formed by the estuary of the Chorna River and stretches inland for 7.5 km. The local population consists of about 400,000 permanent residents and can double in summer due to the tourist influx.

Main coastal issues:

Eutrophication and water pollution due to discharge of municipal and industrial sewage, biological diversity loss, climate change impacts, intense maritime traffic and high urban density constitute the main problems in the Sevastopol area.

Picture: Argenberg / Wikipedia

Experience:

There is an ICZM group at the Ministry of Ecology, but an integrated national ICZM strategy has not yet been developed. ICZM issues are addressed separately by different national and regional regulations. However, Sevastopol Municipality has recognized the importance of ICZM for the city and its bay.

The aim of the Sevastopol Case was to develop an information system for the bay with the help of all stakeholders. The Marine Hydrophysical Institute first identified 64 potential stakeholders, including representatives of national, regional and local authorities, NGOs, scientific and educational organizations and the private sector. Then, environmental data was gathered from several national

[812] Coastal Guide: Coastal Management in Ukraine: http://www.coastalguide.org/icm/blacksea/index.html (24.03.2014)
[813] Coastal Guide: Coastal Management in Ukraine: http://www.coastalguide.org/icm/blacksea/index.html (24.03.2014)
[814] *Milchakova*, Nataliya "Report on Environmental Legislation of Ukraine, Use of Natural Resources in the Marine Area and Coastal Marine Region", 4 January 2014, provided for CoCoNET, p. 6
[815] People for Ecosystem based Governance in Assessing Sustainable development of Ocean and coast: The Pegaso CASEs, https://cmsdata.iucn.org/downloads/pegaso_case_en_web.pdf, p. 12 /24.03.2014)

monitoring organizations. The results of the work of the Pegaso-Project have been disseminated through local newspapers and television.

VII. Recommendations:

- List all sources of anthropogenic impacts in the coastal zone
- Asses the state of the coastal zone environment
- Adopt a comprehensive law on ICZM
- Ensure better cooperation between all relevant institutions
- Define clear responsibilities
- Implement the ecosystem approach
- Raise awareness towards ICZM
- Train the relevant authorities on ICZM[816]
- Ratify the Kyiv Protocol on Strategic Environmental Assessment (SEA), signed on 21 May 2003, and implement SEA regulations

[816] *Zharova*, Liubov, "Integrated Management as a Background of Modern Environmental Policy", Global Business and Management Research: An International Journal (2012) Vol. 4, No. 2, p. 130

Inventory:

BULGARIA

1. Maritime boundaries

Maritime Space, Inland Waterways and Ports Act of the Republic of Bulgaria (28 January 2000)

Art. 1:

(1) The present Act establishes the legal regime of the maritime space, inland waterways and ports of the Republic of Bulgaria.

(2) In the maritime space and inland waterways and in the ports, the Republic of Bulgaria shall exercise sovereignty, certain sovereign rights, jurisdiction and control in conformity with the generally agreed principles and standards of international law and the international agreements to which the Republic of Bulgaria is a party.

Art. 2:

The present Act aims at ensuring the use of the Black Sea and the river Danube in the interests of cooperation of countries of the Black Sea, the Danube and other countries, facilitating the sea and river connections, providing for the safety of navigation, protection of the marine and river environment during navigation and maintaining the ecological balance.

Art. 5:

(1) The maritime space of the Republic of Bulgaria shall comprise the internal waters, the territorial sea, the contiguous zone, the continental shelf and the exclusive economic zone.

Part VI
Exclusive economic zone
Art. 49:

(1) In the exclusive economic zone, a foreign ship shall not engage in commercial fishing save on the basis of an agreement between the Republic of Bulgaria and the flag State.

(2) While passing through the exclusive economic zone, a foreign fishing ship shall not maintain its fishing gear in working position.

Part VII
Use of the maritime space and protection of the marine environment

Part VIII
Safety of navigation

2. Environmental protection legislation

Disaster Protection Act (19 December 2006)

Art. 1:
This Act shall settle providing the protection of the life and health of the population, the conservation of the environment and the property in case of disasters.

Regulation No. 4 on the conditions and order for issuance of permits for introduction of non-native or reintroduction of native animal and plant species into the nature (22 July 2002)

The Regulation implements Art. 69 of the Biological Diversity Act of 2002 and regulates the issuance of permits for the introduction of non-native or the reintroduction of native animal and plant species into the Bulgarian natural environment.

3. Legal framework for creating Protected Areas and MPAs

Biological Diversity Act (9 August 2002)
Chapter One

General dispositions
Art. 1:
(1) This Act regulates the relations among the State, the municipalities, and the juristic and natural persons in respect of the conservation and sustainable use of biological diversity in the Republic of Bulgaria.
(2) "Biological diversity" means the variety of all living organisms in all forms of their natural organization, the natural communities and habitats thereof, of the ecosystems and the processes occurring therein.
(3) Biological diversity is an integral part of national wealth, and the conservation thereof is a priority and obligation of central-government and municipal authorities and citizens.

Art. 2:
This Act shall have the following purposes:

1. conservation of natural habitat types representative of the Republic of Bulgaria and of Europe and habitats of endangered, rare and endemic plant and animal species within a National Ecological Network;
2. conservation of the protected plant and animal species of the flora and fauna of the Republic of Bulgaria, as well as of those as are subject to use and trade;
3. conservation of the genetic resources and the diversity of plant and animal species outside the natural surroundings thereof;
4. regulation of the introduction of non-native and the reintroduction of native plant and animal species into the wild;
5. regulation of trade in specimens of endangered species of wild flora and fauna;
6. conservation of centuries-old and remarkable trees.

Chapter Two

NATIONAL ECOLOGICAL NETWORK
Section I

General Dispositions
Art. 3:
(1) The State shall develop a National Ecological Network which shall comprehend:
1. special areas of conservation, which may incorporate protected areas;
2. protected areas outside special areas of conservation;
3. buffer zones around protected areas.
(2) CORINE Biotopes sites, Ramsar Convention sites and Important Bird Areas shall be incorporated into the National Ecological Network on a priority basis.

Art. 4:
The National Ecological Network shall have the following purposes:
1. long-term conservation of biological, geological and landscape diversity;

2. provision of sufficiently spacious and high-quality sites for wild animals to breed, feed and rest, including during the period of migration, moulting and wintering;
3. creation of conditions for genetic exchange between geographically separated populations and species;
4. participation of the Republic of Bulgaria in the European and world ecological networks;
5. containment of the adverse impact of human activities on protected areas.

- Section II concerns Special Areas of Conservation
- Section III the Designation and Modification of Special Areas of Conservation
- Section IV Buffer Zones
- Section V Management Plans and Spatial-Development Plans and Projects

Chapter Three

CONSERVATION OF PLANT AND ANIMAL SPECIES

- Section I concerns General Dispositions
- Section II Protected Plant and Animal Species
- Section III the Regulated Use of Plant and Animal Species
- Section IV Prohibited Methods, Devices and Means of Capture and Killing
- Section V the Conservation of Wild Birds
- Section VI Exemptions
- Section VII Action Plans for Plant and Animal Species
- Section VIII the Ex-situ Conservation of Plant and Animal Species
- Section IX the Introduction of Non-Native and Reintroduction of Native Animal and Plant Species into the Wild.

Chapter Four
TRADE IN ENDANGERED SPECIES OF WILD FLORA AND FAUNA

Chapter Five
CONSERVATION OF CENTURIES-OLD OR REMARKABLE TREES

Chapter Six
MANAGEMENT AND CONTROL AUTHORITIES
Art. 114
The Ministry of Environment and Water and other state bodies and the divisions thereof, within the competences thereof, shall manage and control the conservation of biological diversity in the Republic of Bulgaria.

Chapter Seven

ADMINISTRATIVE PENALTY PROVISIONS

Protected Areas Act (11 November 1998)

Chapter One: General Provisions
Section 1: Protected Areas Categories

Art. 2 (2): Nature conservation within protected areas shall take precedence over the other activities therein.

Art. 3: The State shall establish and ensure the functioning and the sustained existence of a protected areas system as part of the regional and global network of such areas in accordance with the international on environmental protection whereto the Republic of Bulgaria is a party.

Section 2: Ownership

Chapter 2 concerns “assigned use and regimes of protection and use of protected areas”, Chapter 3 “designation and modification of protected areas”, Chapter 4 “management and physical security of protected areas” and Chapter 5 “financing of protected areas”.

Regulation on Elaboration of Protected Area Management Plans (8 February 2000)
Chapter One

GENERAL DISPOSITIONS
Art. 1:
This Regulation establishes the terms and the procedure for elaboration of management plans of protected areas.

Art. 2:
(1) Management plans shall be elaborated for:
1. national and natural parks;
2. strict and managed reserves.

(2) Management plans of natural monuments and protected sites shall be elaborated at the discretion of the Ministry of Environment and Water or in the cases under Article 10 herein.

(3) On a priority basis, management plans shall be elaborated for protected areas included in lists under international conventions or of European importance for conservation of biological diversity.

Art. 3:
(1) A management plan shall regulate the activities in the respective protected area within the boundaries delimited by the designation order of the said area.
(2) Biotic and abiotic features and anthropogenic factors within areas adjoining the protected area may be subject to investigation where:
1. the protected area is part of a habitat of European importance or a habitat included in lists under international conventions in the sphere of biological diversity;
2. a need is ascertained to clarify the impact of the said features and factors on the protected area;
3. this is expressly indicated in terms of reference endorsed according to the procedure established by this Regulation.
(3) The information, conclusions and assessments in the cases covered under Paragraph (2) shall be indicated in the plan under separate items.

Art. 4:
Management plans shall be elaborated for a ten-year period of validity and shall be updated upon the lapse of the said period.

Chapter Two:
STRUCTURE AND CONTENTS OF MANAGEMENT PLANS

Chapter Three
COMMISSIONING AND ADOPTION OF MANAGEMENT PLANS

Chapter Four
MODIFICATIONS OF MANAGEMENT PLANS

Annex: Structure of a Protected Area Management Plan

Rules Concerning the Structure and Activity of the National Centre for Environment and Sustainable Development (NCESD) (28 June 1994)
The National Centre fulfils the tasks and activities, entrusted to it by the Ministry of the Environment (MOE) (Art. 3).

4. Legislation regarding marine pollution

Water Act (13 July 1999)
Art. 1
This Act regulates the ownership and management of waters within the territory of the Republic of Bulgaria as a national indivisible natural resource and the ownership of water development systems and facilities.

Art. 2
(1) The objective of this Act is to ensure integrated water management in the interest of society and for protection of public health, as well as to create the conditions to:
…
3. protect surface waters and groundwaters and the waters of the Black Sea; …

(2) The objectives referred to in Paragraph (1) shall be achieved by:
1. prevention of deterioration, as well as protection and enhancement of the status of aquatic ecosystems, of terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems; …
4. application of measures for the protection and improvement of the aquatic environment….

Chapter Ten
Section I: General Disposition
Water management

Art. 148
(1) Waters shall be managed at the national level and at the basin level.
…
(3) River basins as designated by this Act do not confirm to the administrative divisions of Bulgaria and furthermore provide a basis for environmental management in basin terms….

Art. 149
(1) Waters, water sites and water development systems and facilities shall be managed on the basis of river basin management plans.

(2) The plans referred to in Paragraph (1) shall be open to public inspection and shall be consistent with other plans within the scope of the relevant territorial level, including functional-region

development plans, spatial-development, forest-management, park-management and other such plans….

Art. 149 a
(1) The following shall be determined upon production of the management plans referred to in Article 149 herein:

1. environmental objectives;
2. waters intended for household and drinking water supply;
3. water protection zones;
4. programmes of measures.

(2) The river basin management plans shall be produced with characterization of the river management district.

Section II: Water Management Authorities
The state water management policy shall be implemented by the Minister of Environment and Water (Art. 150 (1)). The Minister of Environment and Water or an official empowered thereby shall participate in the National Expert Board on Spatial Development and Regional Policy upon consideration of inter alia spatial-development schemes and plans of the territory of the Black Sea coast, which cover beaches and sand dunes, the aquatic areas related thereto, as well as the lakes, lagoons, firths and wetlands adjoining the sea (Art. 151 (6) 2).

One of the water basin management districts designated by Art. 152 is the Black Sea District, with headquarters in Varna, covering the drainage areas of the rivers emptying into the Black Sea between the northern border and the southern border, including the internal marine waters and the territorial sea. In the districts designated under Art. 152, a Basin Directorate with the Ministry of Environment and Water and a Basin Board shall be established. The Director of the Basin Directorate shall produce the river basin management plan (Art. 155 (1) 2 (a)) and shall participate in the regional, municipal or borough spatial development councils whereat he/she shall present a written opinion of the Basin Directorate upon consideration of inter alia spatial-development schemes and plans for spatial-development areas including ports, beaches and sand dunes and the aquatic areas related thereto (Art. 155 (2) 2).

Section III: Environmental Objectives
Art. 156 a
(1) The environmental objectives referred to in Item 1 of Article 149 a (1) herein as regards water quantity and quality shall be determined in the case of:
1. surface waters for:
    a) prevention of deterioration in the status of all surface water bodies;
    b) protection, enhancement and restoration of all surface water bodies with the aim of achieving good surface water status;…

(2) The measures and time limits for achievement of the environmental objectives referred to in Paragraph (1) shall be set out in the river basin management plans….

Section IV: Characterization of the Water Basin Management District
For each water basin management district, an analysis of its characteristics, a review of the impact of human activity on the status of surface waters and groundwaters and an economic analysis of water use is to be undertaken (Art. 156 h)

Section V: Programmes of Measures for Water Protection and Restoration
According to Art. 156 l, a programme of measures shall be designed for each basin management district and for each part of an international basin district. These programmes shall include basic measures, like procedures for environmental impact assessment, integrated pollution control and the protection of habitats, and supplementary measures, like legislative, administrative or economic instruments (Art. 156 m). Where monitoring or other data indicate that the environmental objectives for a particular water body are unlikely to be achieved through the measures provided and/or within the time limit set, additional measures for the said water body shall be planned to achieve these objectives (Art. 156 n).

Section VI: River Basin Management Plans
Management plans shall, according to Art. 157, be produced for each water basin management district and shall include a general description of the characteristics of the basin management district, a summary of significant types of pressure and impact of human activity on the status of surface waters and groundwaters, an identification and mapping of water protection zones, maps of the monitoring networks, a list of the environmental objectives, a summary of the economic analysis of water use, a summary of the programmes of measures, a register of all other detailed programmes and plans within the scope of the basin management district, a list of the public information and consultation measures, the designation and address of the competent water management authority and contacts points and the procedures for obtaining documentation and information.

Section VII: Public Information and Consultation
Art. 168 a
Upon the production, review and updating of the river basin management plans information shall be provided to the public on the measures planned and the results achieved from the implementation thereof.

Regulation No. 2 on the protection of waters against pollution caused by nitrates from agricultural sources (16 October 2000)
The Regulation deals with the detection, limitation and prevention of water pollution by nitrates from agricultural sources and with the restoration of the water quality.

Regulation No. 5 on the creation of the Network and the activities of the National system for water monitoring (8 November 2000)
The Chapters of the Regulation deal inter alia with the following: general requirements; organization of the network for water monitoring with regard to surface waters, groundwater and the Black Sea coast; control of waste waters and self-monitoring.

Regulation No. 6 establishing emission standards for acceptable content of hazardous and dangerous substances in waste water discharged into water bodies (9 November 2000)
The Regulation establishes emission standards for hazardous and dangerous substances in waste water that is discharged in water bodies.

Regulation No. 8 establishing indicators and standards for the quality of coastal marine waters (25 January 2001)
The Regulation establishes the indicators and standards for the quality of coastal marine waters. The Regulation defines coastal marine water areas, regulates the use of water in those areas and defines Sanitary Protection Zones (SPZ).

Regulation No. 10 establishing the procedure for issuing permits for waste water discharges into water bodies and setting out emission limits for point sources of pollution (3 July 2001)
The Regulation determines emission standards for hazardous and dangerous substances in waste water discharged into water bodies. It aims to prevent, eliminate or reduce water pollution.

Decree No. 24 on the Adoption of a Regulation concerning the procedure for assessment and application of sanctions for damages to or pollution of the environment, exceeding the limiting levels (4 February 1993)
Art. 1: At damaging or polluting the environment above the limiting levels, sanctions shall be applied to legal entities according to the procedure of this Regulation.

5. Legislation regarding fisheries management

Executive Order No. I-275 establishing the fishing regime in the Country's waters (7 April 1995)

Section I
Fishing Regime for the Black Sea
Art. 1 and 2 establish closed seasons for certain species, Art. 3 bans all kinds of bottom trawling and dragging fishing equipment and Art. 4 bans pelagic trawling fishing gear in certain shoreline zones.

Fisheries and Aquaculture Act (2001)

6. Integrated Coastal Zone Management (ICZM)

Regulation No. 3 on the Development of the Black Sea Coastal Area (20 June 1993) / replaced by the Black Sea Coast Spatial Planning Act (promulgated in SG No. 48/2007)

Art. 1:
This Regulation shall determine the specific requirements to the planning and development rules and standards for the Black Sea coastal area ensuring its environmental friendly development.

Art. 2:
(3) The main objectives of the development of the Black Sea coastal area are as follows:
1. Comprehensive social, economic and environmentally friendly development of the coastal area on the basis of its resources;
2. Protection of the coastal area as a primary national wealth.

Chapter Two

Coastal zoning and development plans of the black sea coastal area
Art. 3:

(1) Two zones are established in the Black Sea coastal area:

1. The first zone includes:
a) the sea around resorts and beaches including the areas of the existing and prospective water use for the purposes of recreation, tourism and medical treatment;
b) coastal lakes, river deltas and wet areas;
c) the coastal beach strip, dunes and natural reserved areas which constitute exclusive state property;

d) natural landmarks, protected areas, historic places and wet forests;
e) all other territories within the 200-meter strip parallel to the coast behind the beaches and dunes and beyond the construction borders of urban territories under item 2 (d).

2. The second zone includes:
a) the sea which covers the sanitary belt;
b) people's parks, reserve buffer areas, security zones of protected natural sites, protected and resort forests, forest parks, parks and green belts around settlements;
c) forests and farmlands within 5 km from the coast;
d) urban territories including the territories within the construction borders of settlements, industrial zones, resorts and tourist compounds, summer house zones and other areas on the territory of the settlements specified in Appendix No. 2.

(2) The borders of the two zones shall be precisely designated with the municipal territorial development plans.

Chapter Three
Development regimes for the black sea coastal area
Activities listed in Art. 7 and 8 are not permitted in the first zone, for example construction activities or the deterioration of the sea water quality.

Black Sea Coast Spatial Planning Act (promulgated in SG No. 48/2007)
Art. 1 This act shall provide for the public relations, related to:

1. The conditions and procedure for determining the territorial scope of the Black Sea coast and the coast beach line, the requirements, rules and norms for their planning, use, building and protection;
2. The authorizations and coordination of the activity of the central and territorial bodies of the executive and of the bodies of the local self government, as well as their relations with the natural and legal persons while carrying out the state policy of planning of the Black Sea coast.
3. (new - SG, 27/2013) the conditions and procedure for conducting the procedures for determining concessioners and leases of the sea beaches.

Art. 2 The basic purposes of the act shall be:

1. creating conditions for protection, sustainable integrated development and planning of the Black Sea coast;
2. (amend. - SG, 27/2013) provision of free access to the sea beaches;
3. protection, preservation and reasonable use of the natural resources;
4. prevention and reduction of pollution of the Black Sea coast;
5. protection of the sea shore from erosion, abrasion and landslide processes;
6. restoration and protection of the natural landscape and the cultural-historical heritage.

Art. 3 The Black Sea coast shall cover the:

1. territory of the country in the scope of the security zones under Art. 9 and the isles in the internal sea waters and the territorial sea;
2. (amend. - SG, 27/2013) aqua territory of the Black Sea up to a distance of 200 m, measured from the coast line.

Spatial Development Act (2 January 2001)

Art. 1

(1) The territory of the Republic of Bulgaria is national wealth. Its structure shall guarantee sustainable development and favourable conditions for living, work and recreation of the population.

(2) This Act shall provide the public relations, connected with the structure of the territory, the investment designing and the construction in the Republic of Bulgaria, and shall determine the restrictions of ownership for development purposes.

Art. 8 The concrete designation of the landed properties shall be determined with the detailed development plan and it can be:
…
4. protected territories - for protection of environment (reserves, national parks, natural sites, maintained reserves, nature parks, protected areas, beaches, dunes, water sources with their sanitary - protection zones, water areas, humid zones, protected coastal strips) and for preservation of the sites of the culture and historic heritage (archaeological reserves, separate quarters or landed properties in settlements with culture-historic, ethnographic or architectural significance);…

Art. 103
(1) The development plans shall be:

1) General development plans;
2) Detailed development plans.

(2) The general development plans shall determine the prevailing designation and spatial structure of the separate structural parts of the territories covered by the plan.
(3) The detailed development plans shall determine the concrete designation and development of the separate properties covered by the plan.
(4) Each development plan shall be in compliance with the provisions of the development schemes and plans of higher degree if there are such and is with respect to them a more full and detailed development.
…

Regional Development Act (promulgated in the State Gazette (SG) No. 50/2008)

Law of the Forests (29 December 1997)
Art. 1
(1) This law settles the relations in connection with the ownership and tenure - management, reproduction, use and protection of the forests in the Republic of Bulgaria.
(2) The purpose of the law is the preservation of the Bulgarian forests as national wealth - main environment forming factor through the reproduction and their steady development and multi-purpose use to the interest of the owners and the society.

Soils Act (6 November 2007)
Art. 1
1) This act shall regulate social relations in connection with the protection of soils and their functions, as well as their sustainable use and long-term restoration as an environmental medium.
…

Art. 3
Soil protection, use and restoration shall be based on the following principles:

1. An ecosystem and comprehensive approach...

7. Legislation regarding natural resources exploitation

Concessions Act (5 October 1995)
Art. 1
This Act shall govern the terms and procedure for granting concessions.

Art. 4
(1) Concessions may be granted for objects such as:

1. ores and minerals in connection with their extraction;
2. the waterfront beach strip;
3. the biological, mineral and energy resources of the continental shelf and in the exclusive economic zone, in reference to exploration, development, production, utilization thereof…

(2) Concessions for objects under paragraph (1) may include the adjoining infrastructure and facilities.

References:
Geodesy, cartography and cadastre agency: http://www.cadastre.bg/node/5380
Food and Agricultural Organization of the United Nations / FAOLEX: www.faolex.fao.org

GEORGIA:

1. Maritime boundaries

Law No. 1761-bc on the maritime zone of Georgia (24 December 1998)
The Law establishes the legal status of the internal waters, the territorial sea, the contiguous zone, the EEZ and the continental shelf of Georgia in the Black Sea in accordance with the principles of international law. It includes the following chapters:

- Chapter I - general provisions
- Chapter II - internal waters
- Chapter III - the territorial sea
- Chapter IV - the contiguous zone
- Chapter V - EEZ
- Chapter VI - the continental shelf
- Chapter VII - the right of inland states to free transit through the territory of Georgia to use the sea
- Chapter VIII - marine research
- Chapter IX - protection of the marine environment
- Chapter X - the pursue and arrest of foreign vessels
- Chapter XI - final provisions.

2. Environmental Protection Legislation

The Constitution of Georgia (24 August 1995)
Art. 3
1. The following shall fall within the exclusive competence of higher state bodies of Georgia:

b) the status, boundary regime and defence of the state frontiers; the status and defence of territorial waters, airspace, the continental shelf and Exclusive Economic Zone;
k) fishing in ocean and high seas;
r) legislation on land, subsoil and natural resources.

Art. 37
3. Everyone shall have the right to live in healthy environment and enjoy natural and cultural surroundings. Everyone shall be obliged to care for natural and cultural environment.
4. With the view of ensuring a safe environment, in accordance with ecological and economic interests of society, with due regard to the interests of the current and future generations the state shall guarantee the protection of environment and the rational use of nature.
5. A person shall have the right to receive a complete, objective and timely information as to a state of his/her working and living environment.

Law of the Republic of Georgia on Ownership
"The realization of the ownership by an owner shall not do damage to the environment, infringe on the rights and interests of citizens, legal entities and the state protected by the law" (Art. 1, para. 7).

Art. 13: Objects of State Ownership
Objects of state ownership may be all the objects stipulated by Article 2 of this Law.

In accordance with the rules of International Law, a state possesses single unalienable sovereignty for natural resources within the limits of the territory of Georgia – the right to use its own resources in accordance with its policy and to demand to respect this right by other states.

Law on environmental protection (10 December 1996)
Chapter 1 concerns general Regulations. The objectives of the Law include, inter alia, to "d) preserve biological diversity, rare, endemic and endangered species of flora and fauna typical for the country, protect the sea and ensure an ecological balance" and to "e) preserve and protect natural landscapes and ecosystems" (art. 3 I).

Art. 4
j) defines as "Protected Territory" "the land or area of water of special importance, where biological diversity, natural resources and cultural phenomena, involved in the natural surroundings must be preserved. Administration and protection of these territories are carried out on a long-term and stable legal basis. Protected territory is created in order to protect and restore the most important national inheritance – unique, rare and typical ecosystems, species of animals and plants, natural formations and cultural areas, to use them for scientific, educational or recreational purpose and for the development of the economy, which spends natural resources with care".

Art. 5 establishes the basic principles of environmental protection in Georgia (e.g. the polluter-pays-principle (art. 5 e)), the principle to conduct Environmental Impact Assessment (k)) and to provide for public participation (l)).

It includes the following additional chapters:

- Chapter II - the rights and obligations of citizens in the scope of environmental protection
- Chapter III - education and scientific research
- Chapter IV - administration of environmental protection by the state
- Chapter V - economic levers in the scope of environmental protection
- Chapter VI - licensing, Chapter VII provision of information
- Chapter VIII - environmental protection standards
- Chapter IX - ecological requirements to waste
- Chapter X - environmental protection requirements in the decision-making process
- Chapter XI - ecological emergencies
- Chapter XII - protection of natural ecosystems
- Chapter XIII - protected areas
- Chapter IV - global and regional administration of environmental protection
- Chapter XV - international co-operation
- Chapter XVI - liability for the violation of the law "On Environmental Protection"
- Chapter XVII - Conclusive Provisions

Art. 15 provides for environmental planning and states in item 2: The system of planning environmental protection includes the long-term strategic plan (strategy of stable development) and a five-year action and management plan, elaborated for specific activities.

For protected areas, the following provisions are important:

Chapter XII
Protection of Natural Ecosystems
Art. 45: Purpose of the Protection of Natural Ecosystems

1. Natural ecosystems, landscapes and territories must be protected against the pollution, damage, degradation, destruction…
2. The followings are subject to protection:

a) costal-sea zones;
b) moors, sources of the springs, reservoirs or rivers, glaciers and caves;
c) sub-alpine forests, flood plain forests;
d) forests of special value;
e) forests of green zones;
f) zones and territories of sanitary protection.
3. Any activity relating to the use and administration of natural ecosystems, landscapes and territories and the rules of their administration are performed in compliance with the standards and requirements of environmental protection.
4. The issues relating to the use and administration of natural ecosystems, landscapes and territories (including the planning of land use and the making of zones) are defined by law of Georgia.

Art. 46: Protection of Wild Plants and Animals

1. It is strictly limited, as well as subjected to licensing, to remove the wild animals and plants from the environment, in order to maintain their biological diversity and reproductive capacity.
2. Any action, which is likely to damage wild animals and plants, their habitats, reproduction areas and ways of migration, is prohibited.
3. The rule for the use and protection of wild animals and plants in the territory of Georgia is defined by law in Georgia.

Chapter XIII
Protection Areas
Article 48: Purpose of Setting up a System of Protection Areas
Setting up a system of Protection areas serves to the protection and maintenance of the natural environment, cultural heritage and their particulars.

Art. 49: Categories of the Protection Areas

1. There are the following categories of protection areas in Georgia: a state reservation, national park, a natural monument, a protected landscape and a territory used in different manner.
2. It is admitted in Georgia to establish the categories of protected areas, which are included in the international net-work of the protected areas. These categories include biosphere reserves, districts of cultural heritage of international importance, and wetlands of international importance.
3. The protected areas are established under the decision by the Parliament of Georgia.
4. The administration of the protected areas is carried out in accordance with the Georgia's law "On the System of Protected Areas".

Art. 54 concerns the Protection of the Black Sea against Pollution:

1. In order to protect the Black Sea against pollution and to maintain it, measures must be taken for the prevention, mitigation, remedy and control of the pollution of the sea with dangerous materials and substances. These harmful materials may originate from the sources of pollution located on the land, ships, the atmosphere and from the discharge of waters into the sea, as well as during transportation through the sea and the activities on the continent shelf.

2. The legal rules for the protection of the Black sea are provided by law of Georgia within the framework of Georgia's jurisdiction.

Wildlife Act (25 December 1996)
Art. 4 states that "1. This act is regulating the main legal relationships:

a) Among state authorities and physical and legal persons in the field of the protection of wildlife and use of its objects;
b) In the field of protection, reproduction and use of wildlife, constantly or temporarily, in conditions of natural freedom, semi-freedom or artificially created environment on land, in soil, water, atmosphere, territorial waters, continental shelf and special economic zone;…".

According to Art. 5, "The main goal of this act is to ensure protection and restoration of wildlife, its habitats, preservation and sustainability of species diversity and genetic resources, creation of conditions for sustainable development, taking into account the interests of present and future generations (I); The goal of the act is a legal basis, ensuring wildlife protection (including in-situ and ex-situ conservation, translocation and reproduction of wildlife) and state-based provision of use of wildlife objects (II)".

"The planning of the measures of protection of the wildlife is implemented on the basis of the strategy of sustainable development, national program on environmental protection activities, regional, departmental and local environmental protection management plans for different activities in accordance with Georgian laws and other legislative acts and statutes "On Environmental Protection" (Art. 15 II 1).

Art. 16 I requires that "with the purpose of protection of the wildlife the state is ensuring:
a) in-situ and ex-situ conservation of wildlife;
b) establishment of rules of in-situ and ex-situ protection (conservation) and increase of wildlife;
c) setting of prohibition and limitation of use of objects of wildlife;
d) protection of habitats, reproduction area, survival stations, migration ways, water-reaching ways and watering places of wild animals."

And Art. 17 II requires that "During the designing, arranging, constructing of populated areas, enterprises, buildings and other installations, the perfecting of existing ones and implementation of new technological processes, the getting of virgin lands, over humid territories, coastal territories and territories, covered by bushes into economic circulation, land reclamation, use of forests, the fulfilling of geological research works, the mining of minerals, the determining of pastures and driving places of agricultural animals, the working out of tourist routes and arranging of recreational areas, the measures for preservation of habitats and reproduction areas, survival stations, migration and water-reaching ways, watering places of wild animals must be taken into account and implemented. Also, inviolability of parts of especial value for normal existence of wild animals must be ensured".

Art. 19 on the protection of wildlife in protected territories says that "Hunting, fishing, catching of water invertebrates and marine mammals, also, other type use of objects of wildlife and other activity incompatible to designation of this category of protected territories is prohibited in natural reserves, natural monuments and zones of strict protection of nature of national parks. Only the use of non-manipulative scientific techniques and methods, having inconsiderable influence, is permitted."

3. Legal framework for creating Protected Areas and MPAs

Law on the system of protected territories (7 March 1996)
"The System of Protected Territories is to be established for the purpose of preserving distinctive natural and cultural environments, or their particular components, for the future generations, protecting mental and physical health of the people, and ensuring the creation of one of the most important conditions precedent to the civilized development of society.

In Georgia the protected territories shall be created for the purpose of protecting and renewal of the most important national heritage - unique, rare and distinctive ecosystems, plant and animal species, natural formations and cultural areas; ensuring the development of scientific, educational, recreational and natural resource preserving arrangements" (preamble).

Art. 3 Categories of Protected Territories

1. The categories of protected territories shall include: state reserve, national park, natural monument, prohibited, protected landscape, territory of multi-purpose use.
2. In Georgia it is permitted to recognize some categories of protected territories, which are included in the international network, such as biosphere reserve, site of the world heritage, ultra-humid territory of international importance.

Art. 13 Planning of the System of Protected Territories:

1. The planning of the System of Protected Territories is a part of the Georgia's Development Strategy and is closely linked with different (national, regional) levels of territorial planning and various programs of sectorial planning (environmental protection and preservation, science, education, health care, tourism, recreation, forestry, hunting, energy sector, agriculture, transport, housing and construction, protection of the monuments of history and culture, etc.).
2. The planning of the System of Protected Territories specifies planning regions, natural and natural/historical sites and complexes which should be protected; defines recommended categories, boundaries, and zones of protected territories, as well as permitted activities; develops priorities and phases of establishing the protected territories.
3. The planning of the System of Protected Territories shall be the responsibility of the Ministry of Environment and Natural Resources, the Ministry of Urbanization and Construction, and the Central Department of Protected Territories, State Reserves and Hunting Areas (hereinafter referred to as the "Protected Territory Service").

Art. 15 Protected Territory Management Plan

1. The first stage of the protected territory planning (system planning at national and regional levels) shall be managed in conformity with the obligatory Protected Territory Management Plan.
2. The Management Plan, which should establish exact boundaries, zones and territorial organization of the protected territories and their support zones (buffer zones), as well as integrated programs and budgets of the protection, scientific research, monitoring, education, recreation, tourism, administration and other activities related to such territories and zones, shall be developed by the Central Department of Protected Territories, State Reserves and Hunting Areas upon the establishment of protected territories and, in exceptional cases (where there is neither an urgent need of establishing a protected territory, nor available budget resources, and where there is a need to accumulate funds of donors or other non-budgetary agencies) within three years after their establishment.

3. In the view of peculiarities of each protected territory, the Management Plan shall set out specific steps aimed at generating adequate local financial resources, required for the functioning of protected territories. The Management Plan shall be developed for different periods of time; after the expiration of such a period a renewed Management Plan shall be developed.
4. The Management Plan, within one month after its submission, shall be subject to Presidential approval (the same rule applies to a renewed Management Plan). Private regulations of the protected territory and appropriate resolution shall be attached to the Management Plan.

Law No. 2209 on the protection of cultural heritage (25 June 1999)
According to Art. 1, "the objective of the present Law is legal protection of Georgia's cultural heritage and the regulation of legal relations arising in this field". The Law refers to "all immovable monuments, separable parts of immovable monuments, objects with monument signs and immovable monument protection zones existing on the whole territory of Georgia disregarding the form of ownership" (Art. 2 I).

A "system of protection zones is created with the aim of preserving immovable monuments, monument complexes and assemblages and their natural and man-made environments which consist of the following zones: … d) natural landscape protection zone" (Art. 32 I). The following articles concern the conditions of use of immovable and movable monuments.

4. Legislation regarding marine pollution

Law No. 936-Ic on water (16 October 1997)
The water of Georgia is the national property of Georgia and is protected by the state regardless of whether the water is located in the subsoil, on the continental shelf, in the territorial waters or in the EEZ. The provisions of the Law are applicable to surface and groundwater.

5. Legislation regarding navigation

Maritime Code No. 715-Ic (15 May 1997)
The Maritime Code concerns all issues related with navigation on the sea, on lakes and on rivers. Vessels are to be registered at the State registrar of shipping. The owner of a vessel is responsible for dumping at sea and for marine pollution from the ship.

6. Integrated Coastal Zone Management (ICZM)

Draft Law on ICZM
The World Bank and the GEF supported Georgia's Integrated Coastal Management Project (GICMP). A comprehensive draft law on ICZM has been developed, but not yet adopted.

Forest Code of the Republic of Georgia (22 June 1999)
Art. 3 c) states that one of the goals of the Forest Code is "conserving and protecting unique natural and cultural environment and its specific components - flora and fauna, biodiversity, landscape, cultural and natural monuments located in forests, and the endangered plant species; regulating harmonized interrelations between these components".

Title II concerns the management of the forest.
"Categories of protected areas or the usable State forest areas are established for the territories of the State Forest Fund according to environmental, social, and economic importance of these

territories.

The categories of protected areas are:

a) State natural reserve;
b) National park;
c) Natural monument;
d) Sanctuary;
e) protected landscape [area];
f) Multiple use area.

The categories of the usable State forest areas are:

a) Resort forest;
b) Green zone (hereafter –green zone forests);
c) Forest with soil protection and water regulation functions.

The following categories of protected areas may be established in accordance with the law of Georgia "On the System of Protected Areas":

a) Biosphere reserve;
b) World Heritage site;
d) Internationally protected wetland.

Areas with special function and landscape areas may be established in the territories of the State Forest Fund under the categories defined in Paragraph 3 of this Article" (Art. 20).

Art. 27 concerns Forest Management Planning:
"1. Forest management planning is done once in every 10 years (10 year cycle). The goals of forest management planning are to design and increase effectiveness of tending, protection, restoration, and rational use of forest resources, and to implement standardized scientific-technical policy of forest management".

Art. 35 provides for the participation of the public: "Citizens and the representatives of public organizations are authorized to: a) receive full, reliable and timely information on current condition of the State Forest Fund; b) fully participate in the planning of forest management of the State Forest Fund".

- Title III deals with the protection of the forest. It includes goals and the measures to be taken to achieve the goals.
- Title IV - forest use,
- Title V - forest restoration and tending
- Title VI - state monitoring and supervision
- Title VII - settlement of disputes and liability.

Law No. 599 IIs on tourism and health resorts (6 March 1997)
Resources of tourism and health-resorts are considered to be the national wealth and are protected by the state (Art. 4 I). The sector of tourism and health-resorts are recognized by the state to be one of the major priorities for the development of national culture and economy. The state creates favorable conditions for activities in the sector of tourism and health-resorts (Art. 4 II).

Natural medical resources include "health mineral waters, medicinal muds, karst caves fit for the treatment; sea, forests, medical climate and other natural resources used for the treatment,

rehabilitation and prophylaxis" (Art. 2 No. 5). Special sanitary zones shall be established. "Sanitary zone" means an area "especially protected under the laws of Georgia, when this area is in need of the prevention of pollution, damage or pre-term exhaustion of natural resources" (Art. 2 No. 8).

The body authorized to administer the tourism and health resorts sector shall, inter alia, "with a view to protect and preserve historical and cultural monuments, monuments of nature and health-resort areas, define jointly with the institutions interested, the limit to the number of tourists to be received, as well as to take control of the observance of this limit" (Art. 5 III i). Besides, activities in the tourism and health resort sector are subject to license.

Law No. 1296 IIs on protective sanitary zones of health resorts and resort localities (20 March 1998)
"Protective sanitary zones are established for health resorts and resort localities of Georgia within which the works that pollute soil, water, air, damage forests and other green plantations, give rise to erosion processes, or negatively impact upon natural medicinal resources and sanitary state of health resorts and resort localities shall be prohibited" (Art. 4 I).

"Three protective sanitary zones are established for health resorts and resort localities of Georgia: the first – of strict regime; the second – of restricted regime; the third – of observation regime" (Art. 6).

7. Legislation regarding natural resources exploitation

Concession Law (19 September 1996)
"The concession means a long-term leasing agreement made between and by the State and concessionary for the purpose of making foreign investments, exploitation of natural resources and doing business related thereto" (Art. 1 I).

Art. 3: Fundamental Principles of Concession
Fundamental principles of concession are as follows:

- longevity of concessional rights to use land and natural resources and to conduct specific business activities;
- competitive approach to the selection of concessionaries, based on the assessment of tenders, specific regulations of which will be provided by the Georgian legislation;
- compliance with labour, social security, nature exploitation and environment protection legislation of the Republic of Georgia.

National Regulations on performing oil and gas operations
"These Regulations govern the activities and relations arising in the course of Oil and Gas Operations in Georgia, including its territorial sea and exclusive economic zone" (Art. 2).

Prior to the commencement of any oil or gas operation, a permit has to be granted to the operator by the State Agency for Regulation of Oil and Gas Resources of Georgia (Art. 18). All oil and gas operation activities have to be consistent with an approved exploration (Art. 36), appraisal (Art. 51) or development plan (Art. 91). All drilling, completion, workover and abandonment operations require a written permit and shall be conducted with due regard for and in compliance with International Oilfield Practice (Art. 74). For Offshore Oil and Gas Operations, specific rules apply (Title XI).

Title IX of the Regulation concerns environmental protection:

"In furtherance of the recognized goals and policies of Georgia to secure the rational and effective use of Oil and Gas resources, to restore and preserve ecosystems and bioresources, to enhance the living conditions and health of the population, to preserve natural monuments and cultural heritage sites, the agency declares that it will require operators to conduct all Oil and Gas Operations in compliance with the Law in a manner calculated to foster and promote such goals and policies" (Art. 141).

As part of the application for a permit, the operator has to provide an "Environmental Impact Assessment ("EIA") containing an analysis of the potential environmental impacts that may result from the proposed Oil and Gas Operations and an Environmental Protection Plan ("EPP") that identifies the measures the Operator proposes to undertake to prevent adverse environmental impacts, including replanting and reclamation of that part of the Contract Area where Oil and Gas Operations were conducted as required" (Art. 143 I). A Monitoring plan and a Spill Contingency Plan are elements of the EPP.

References:

DLA Piper Georgia:
http://www.investingeorgia.org/uploads/How_to_Obtain_an_Environmental_Impact_Permit_-Guide.pdf
Kolhoff, Arend J., *Driessen,* Peter P. J., *Runhaar,* Hens A.C.: An analysis framework for characterizing and explaining development of EIA legislation in developing countries – Illustrated for Georgia, Ghana and Yemen, Environmental Impact Assessment Review, Elsevier (2012)
Food and Agricultural Organization of the United Nations / FAOLEX: http://faolex.fao.org/

ROMANIA

1. Maritime boundaries

Act concerning the Legal Regime of the Internal waters, the Territorial Sea and the Contiguous Zone of Romania (7 August 1990)
The Act provides the definition and delimitation of the territorial sea and internal waters (Chapter I), and the contiguous zone of Romania (Chapter II). Other chapter concern: innocent passage through the territorial sea (III), right of hot pursuit beyond the territorial sea (IV), scientific research in the territorial sea (V), protection of the marine environment (VI), penalties (VII), final provisions (VIII).

Chapter III outlines in detail rules applicable to the passage of foreign ships in general and commercial and war ships in particular through the territorial sea of Romania. Chapter VI specifies the requirements for the protection of the marine environment. Art. 30 states that "the competent Romanian authorities shall establish regulations concerning the prevention, reduction and control of pollution of the marine environment and shall ensure compliance thereof in the port facility, the internal waters and the territorial sea of Romania".

Decree of the Council of State concerning the Establishment of the Exclusive Economic Zone of the Socialist Republic of Romania in the Black Sea / No. 142 (25 April 1986)
Art. 2: The outer part of the exclusive economic zone shall extend to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured; owing to the narrow dimensions of the Black Sea, the effective extent of the exclusive economic zone of the Socialist Republic of Romania shall be determined by delimiting it within the framework of negotiations with the neighbouring States with coasts opposite or adjacent to the Romanian Black Sea coast…

Art. 4: The Socialist Republic of Romania may co-operate in its exclusive economic zone with the other coastal States of the Black Sea so as to ensure the conservation and rational exploration of the living resources and the protection and preservation of the marine environment, particularly in the areas adjacent to that zone, taking account of the specific characteristics of the Black Sea as a semi-enclosed sea with limited biological potential.

2. Environmental Protection Legislation

Law on the environment protection / No. 137 (29 December 1995)
Chapter I of that Law contains general principles and provisions. Art. 3 states that the Law is, inter alia, based on the precautionary principle, the "polluter-pays" principle and the principle of public participation. To implement the principles of Art. 3, Art. 4 names, for example, a compulsory procedure for environmental impact assessment and the correlation of environmental planning with territorial and urban planning.

Art. 5 confers extensive rights by stating that:
"The State recognizes the right of all persons to a healthy environment, and to this end it guarantees:

a) the access to information regarding environmental quality;
b) the right of association in organizations defending environmental quality;
c) the right of being consulted in the decision-making regarding the development of environmental policies, legislation and regulations, the issuing of environmental agreements and permits, including for territorial and urban planning;

d) the right to appeal directly or through some associations to the administrative or judicial authorities in view of prevention or in the case of direct or indirect damage occurrence;
e) the right of indemnification for the damage experienced."

Chapter II concerns the regulation of economic and social activities having an environmental impact. Its Section 1 is entitled "Permitting Procedure" and Art. 8 states that "the environmental protection authorities shall conduct the permitting procedure and shall issue environmental agreements and permits in accordance with Article 11. The environmental agreement application is compulsory for new investments, for the modification of the existent ones, and for the activities provided in Appendix No. II to the present law. The permit application is compulsory for putting new objects into operation which have an environmental agreement and, within one year from the date the present law comes into force, for the existing activities. Activities which do not involve construction and erection works shall only require environmental permits, except for those stated under item 8, subparagraphs g) and i) of Appendix No. II to the present law. The environmental agreement and/or permit shall be issued after all the other endorsements required by law shall have been obtained."

According to Art. 11, the procedure for environmental impact assessment consists of three stages:

1. Preliminary stage
2. Main stage
3. Analysis and validation stage

Section 2 of Chapter II concerns the "Regime of dangerous substances, hazardous waste, as well as of other wastes", Section 3 the "Regime of chemical fertilizers and pesticides" and Section 4 the "Regime for assuring the protection against ionizing radiation and safety of radiation sources".

Chapter III is entitled "Protection of natural resources and conservation of biodiversity".

Art. 34 : The central environmental protection authority, in consultation with the central specialized authorities which manages natural resources, shall draw up, on the basis of the present law, technical regulations regarding the measures for the protection of ecosystems, conservation of biodiversity, sustainable management of natural resources, and for assuring the human health.

On designing the works which may change the natural environment of an area, the procedure for the impact assessment shall be compulsory, followed by the submitting of technical solutions to maintain the natural habitat areas, to conserve the ecosystem functions, and to protect the vegetable and animal organisms, including the migratory ones, by assessing alternatives and meeting the conditions imposed by the environmental agreement and/or permit, in addition to carrying out monitoring acitvities until they have been fulfilled….

Section 1 then concerns the protection of waters and of aquatic ecosystems.

Art. 35: The protection of surface and underground waters and of aquatic ecosystems shall be conducted to maintain and improve the quality and natural productivity thereof, for the purpose of avoiding negative effects on the environment, human health and welfare.

Section 2 deals with the protection of the atmosphere, Section 3 with the protection of soil, subsoil, and of terrestrial ecosystems and Section 4 with the regime of protected areas and of natural monuments:

Art. 54: For the conservation of some natural habitats, of the biodiversity that defines the biogeographical specifics of the country, as well as of the natural structures and systems of ecological, scientific, and landscape value, the national network of protected areas and natural monuments shall be maintained and developed…

Finally, Section 5 deals with the protection of human settlements

Chapter IV concerns prerogatives and responsibilities (Section 1 prerogatives and responsibilities of the environmental protection authorities, Section 2 prerogatives and responsibilities of other central and local authorities and Section 3 obligations of natural and legal persons), Chapter V penalties and Chapter VI final and transitory provisions.

The Law is complemented by 2 Annexes, No. 1 defines the meaning of some terms to the interpretation of the present law and No. 2 contains the List with activities which are subject to the procedure for environmental impact assessment for the issuing of the environmental agreement and/or permit.

MO No. 647 / 6 July 2001
On the authorization procedure for harvesting and trading wild plants and animals

3. Legal framework for creating Protected Areas and MPAs

Law 462 / 18 July 2001
Concerning the approval of the Emergency Ordinance No. 236 / 2000 on the regime of natural protected areas and the conservation of natural habitats

GD No. 230 / 4 March 2003
On the delimitation of biosphere reserves, national parks and natural parks and the setting up of their administrations

MO No. 850 / 27 October 2003
On the approval of the zoning of natural and national parks

MO No. 374 / 3 September 2004
On the approval of the Action Plan regarding Cetaceans Conservation in the Romanian waters of the Black Sea

GD No. 2151 / 30 November 2004
On setting up the protected area regime for new zones

4. Legislation regarding marine pollution

Water Law / No. 107 of (25 September 1996)
In Art. 1 (Chapter 1 / General provisions) it says that "(1) water represents a regenerable but vulnerable and limited natural resource, an indispensable element to life and society, a raw material for productive activities, a source of energy and a way of transport, a determinant factor for the preservation of the ecological balance. (2) Waters are an integral part of the public patrimony. The protection, revaluation and sustainable development of the water resources are actions of general interest".

According to Art. 2, the provisions of the water law have, inter alia, the following objectives:

a) the conservation, development and protection of water resources, as well as the ensuring of a free water flow;
b) the protection against any form of pollution and modification of the characteristics of the water resources, of their banks and beds, or basins;
d) the conservation and protection of the aquatic ecosystems.

Then, Art. 3 (1) states that “the public domain shall own the surface waters and their minor beds, up to a length of >5 km, and river basins > 10 square kilometres, the banks and basins of lakes, as well as the ground waters, the inland marine waters, the sea beach and the cliff, with their natural riches and the energetic potential that can be revaluated, the territorial sea and the marine water beds.”

Art. 6 deals with water management, paragraph 2 states that “the water management shall be based on the principle of human solidarity and common interest through the close, all-level collaboration and cooperation of the public administration, water users, representatives of the local communities and population, in order to obtain the maximum social benefit”.

The two main institutions responsible for the implementation of the Water Law are the Ministry of Waters, Forests and Environmental Protection, which is responsible for the national water strategy and policy, for coordinating and monitoring the application of national and international laws, and the self-managed public company "Romanian Waters" and its river basin branches.

Chapter II concerns “Waters and River Beds Use Regime”. Here, Art. 15 states in paragraph 1 that “the water resources pollution of any kind shall be forbidden”.

Chapter III then specifies what is meant by “Water Management”. In this Chapter, Section 4 concerns the “Regime of the Works That Are Built on Waters or Are Related to Waters”. These works consist inter alia of:

“i) works, constructions and installations built up on the beach, on the bottom of the inland marine waters and of the territorial sea, on the continental plateau, or shore protection constructions;
j) terrestrial or maritime prospecting and exploring / exploiting drilling works, hydrometric installations, topo-hydrographic marks and any others in situ water-related studies” (Art. 48 (1)).

According to Art. 50 (1), these works “can be carried out only on the basis of the water management permit issued by the territorial branches of the Ministry of Waters, Forests and Environmental Protection”. And “the elaboration of the documentation necessary to substantiate the water management permit application must be based on meteorological, hydrological or hydrogeological studies, as appropriate, on studies or water management and of assessment of the impact of the respective works on the water resources and riparian areas” (Art. 52).

The water management license may be modified or withdrawn by the issuer, without indemnification, inter alia, “in case of danger to aquatic environment, especially if the aquatic environments are subject to some critical conditions, incompatible with their protection” (Art. 56 (1) c)).

Finally, Chapter IV is entitled “Inspections of the Water Management Activity”, Chapter V “Water Economic Mechanism”, Chapter VI “Penalties” and Chapter VII “Transitory and Final Provisions”.

5. Legislation regarding fisheries management

Law on Fishing Fund, Fishery and Aquaculture No. 192 / 2001

Order No. 179 / 1 June 2001
Regarding the register and transmission of the data on marine fishing activity

Order No. 262 / 16 July 2001
Regarding the Preparation of the Directory of Vessels and Fishing boats

Order No. 422 / 30 October 2001
Regarding the approval of the Regulation on the conditions for the development of the commercial fishing activities in the Black Sea

Order No. 277 / 4 July 2002
Regarding the approval of the Regulations for the organization of the National Company for the Management of Fishery Resources

Annual Order on the Fishing Prohibition (140/247/2002)

6. Integrated Coastal Zone Management (ICZM)

Governmental Emergency Ordinance (GEO) No. 202/2002 regarding coastal zone management, approved with amendments through Law No. 280/2003 (Annex I):

The GEO provides the general framework for the delineation of the coastal area that belongs to the public domain. Regulating the use of this coastal area is the exclusive right of the Government and is executed by the central public authority for environmental protection and water management. Furthermore, the territorial sea and the natural resources of the EEZ and of the continental shelf are public property (Territorial Water Law 107/1996) and their management forms an integral part of the management of the coastal zone.

The GEO contains provisions for the free use, easements and the expropriation of the coastal area. The use of the coastal area, for example for agriculture, military activities, energy production, the exploitation of natural resources, fishing, industrial activities, tourism or transport is regulated as well. Where there is a risk of landslides, flooding and erosion, constructions works are restricted. Some areas are protected (habitats, wetlands, archaeological sites etc.) by the GEO, independently of their status as public domain. There are provisions regarding financial mechanisms for coastal zone management and the access to environmental information.

A special section of the GEO is dedicated to the Integrated Coastal Zone Management Plan. This Plan is to be detailed by local plans of the local public authorities for environmental protection and water management. Existing territorial and urban plans have to be updated accordingly.

Finally, through the GEO no. 202/2002, the National Committee for the Coastal Zone has been established in order to ensure a sustainable management of the coastal zone.

Government Decision No. 1015/2004 regarding the organization and the responsibilities of the National Committee of the Coastal Zone

Government Decision No. 749/2004 regarding the administration and the establishment of a buffer zone adjacent to the coastal zone to preserve the environment as well as patrimonial and landscape values

Government Decision No. 5467/2004 regarding the methodology for the delineation of the public state domain in the coastal zone

Government Decision No. 898/2004 concerning the exploitation of groundwater and the areas between freshwaters and marine waters

Government Decision No. 317/2004 concerning the use of coastal wetland as anchorage ground

Law on land resources (20 February 1991)
Art. 5: The public domain consists of land occupied by public interest constructions, markets, communication lines, streets and public parks, ports and airports, land for forestry use, creek and river beds, basins of public interest lakes, the bottom of interior maritime waters and of the territorial sea, the shore of the Black Sea including beaches, natural reservations and national parks, monuments, archaeological and historical constructions and sites, natural monument, land used for defence or for other purposes which according to law are in the public domain, or which by their nature are of public use or interest.

Land that is part of the public domain is withdrawn from civilian ownership unless otherwise stipulated by law. Property right to this land is inalienable.

Law No. 5 / 6 March 2000 on territorial planning

Law No. 247 / 2005 on the land use planning system

Forest Code / No. 26 (24 April 1996)
Art. 7: Legal, organizational, economic, and technical relations with regard to the national forest fund, the hunting fund, the piscicultural fund from mountain waters, as well as those with regard to forest vegetation on plots of land situated outside the national forest fund shall be subject to the provisions of the present Forest Code, and completed with any other provisions in the matter, as the case may be.

Art. 22: Forest management rules shall be applied to the regeneration of forests, aiming at the conservation of the genofund and the realization of high quality standards as well as the continuous exercise of protective environment functions…

Art. 111: The conservation of biodiversity and of woodland scenery shall be insured mainly by the constitution of national parks and other protected areas in the forest fund and in the forest vegetation outside it, as the case may be…

Governance Ordinance / No. 58 (1998)

7. Legislation regarding natural resources exploitation

Mining Law / No. 85 (18 March 2003)
This Law sets out the basic regulations concerning mining activities in Romania. It determines in Art. 1 that "the mineral resources located on the territory and in the subsoil of the country and of the continental shelf in the Romanian economic area of the Black Sea, delimited in accordance with the principles of international law and of international regulations to which Romania is a party, are the exclusive object of public property and they belong to the Romanian State."

It also contains detailed provisions concerning the right to use land for the exploration and exploitation of mineral resources and regulates the procedure for the issuance of mining and exploration licenses as well as the respective fees, taxes and royalties.

Art. 20 (1) states that the exploitation license shall be granted, through negotiation, based on an application, accompanied, inter alia, by:

c) the environmental impact study and the environmental audit, as the case may be, prepared in accordance with the law;
(d) environmental rehabilitation plan and technical project, prepared in accordance with the technical instructions issued by the Competent Authority.

Further provisions concern areas in which mining shall be forbidden, as well as expropriation procedures. The National Agency for Mineral Resources is responsible for the implementation of the Law.

Reference:
Food and Agricultural Organization of the United Nations / FAOLEX: http://faolex.fao.org/

RUSSIA

1. Maritime boundaries

Federal Law on internal waters, territorial sea and contiguous zone / No. 155-FZ (31 July 1998)
This Federal Law deals with the rights and obligations in the internal waters, territorial sea and contiguous zone of the Russian Federation. Chapter V concerns the protection and conservation of the marine environment and the natural resources.

Federal Law on the Exclusive Economic Zone / No. 191-FZ (17 December 1998)
This Federal Law establishes the sovereign rights and jurisdiction of the Russian Federation in its Exclusive Economic Zone. Chapter II concerns the rational use and the preservation of living resources. Chapter III deals with the exploration and exploitation of non-living resources and Chapter V with the protection and preservation of the marine environment.

Continental Shelf Act / No. 187-FZ (25 October 1995)
This Act determines the status of the continental shelf of the Russian Federation and its sovereign rights and jurisdiction. The external limits of the continental shelf lie at a distance of 200 nautical miles or, where the submarine border of the continent extends beyond a distance of 200 nautical miles, they coincide with the external limits of the submarine border of the continent (Arts. 1 and 2).

The Continental Shelf Act also contains provisions on the conservation of the environment. Thus, one reason for the termination of the permit to exploit living resources is, according to Art. 15, "the reduction in productivity and worsening of qualitative composition of animate resources species, systematic pollution of waters covering the continental shelf, through the user's fault".

A permit for the erection of artificial islands, installations and structures may, inter alia, be denied, where they are "oriented upon reservations, reserves, protected areas or other expressly protected natural territories of the continental shelf which are of key importance for the preservation, reproduction and migration of valuable species of animate resources" (Art. 19 (3)).

2. Environmental protection legislation

The Constitution of the Russian Federation (12 December 1993)
Article 9

> 1. Land and other natural resources shall be utilized and protected in the Russian Federation as the basis of life and activity of the people living on the territories concerned.
> 2. Land and other natural resources may be subject to private, State, municipal and other forms of ownership.

Article 36

> 2. Possession, utilisation and disposal of land and other natural resources shall be exercised by the owners freely provided that this is not detrimental to the environment and does not violate the rights and lawful interests of other people.

Article 42
Everyone shall have the right to a favourable environment, reliable information on the state of the environment and compensation for damage caused to his (her) health and property by violations of environmental laws.

Article 58

Everyone shall have a duty to preserve nature and the environment and to treat natural resources with care.

Article 71
The Russian Federation shall have jurisdiction over:

f) establishment of the basic principles of federal policy and federal programmes in the sphere of State, economic, ecological, social, cultural and national development of the Russian Federation.

Article 72
1. The following shall be within the joint jurisdiction of the Russian Federation and constituent entities of the Russian Federation:
e) use of natural resources, protection of the environment and provisions for ecological safety; specially protected natural territories, protection of historical and cultural monuments.

Federal Law on environmental protection / No. 7-FZ (10 January 2002)
The Law on environmental protection implements the state policy for the protection of the environment, of the biological diversity and of the natural resources. It aims to strengthen law enforcement and to ensure ecological safety.

The Federal Law is based upon the following principles: 1) the right of citizens to a favourable environment; 2) sustainable development; 3) protection, conservation and management of natural resources; 4) compensation for ecological damages; 5) precautionary principle; 6) priority of ecosystem preservation.

Section 1 (Arts. 1-4) and 2 (Art. 5-10) lay down general provisions. Section 3 (Arts. 11-13) determines the rights and duties of citizens and of social and other non-commercial associations with regard to environmental protection. Section 4 (Arts. 14-18) deals with economic regulation and section 5 (Arts. 19-31) with rate setting. Section 6 (Arts. 32 and 33) concerns environmental impact assessment and environmental audit. Section 7 (Arts. 34-56) sets environmental standards for economic activities and section 8 (Art. 57) regards ecological disasters and emergencies.

Section 9 (Arts. 58-62) regards the conservation of protected areas and of the cultural heritage, section 10 (Art. 63) state environmental monitoring and section 11 (Arts. 64-69) ecological inspection. Section 12 (Art. 70) provides for environmental research and section 13 (Arts. 71-74) for the education of the population. Section 14 (Arts. 75-79) establishes the liability for the infringement of environmental legislation and the modalities of dispute settlement. Section 15 (Arts. 81 and 82) regards international cooperation and section 16 (Arts. 83 and 84) final provisions.

Federal Law on wildlife / No. 52-FZ (24 April 1995)
“Wildlife is the patrimony of the peoples of the Russian Federation, an inalienable element of natural environment and biological diversity of the Earth, a renewable natural resource, an important regulating and stabilizing component of biosphere, protected in every possible way and rationally used for meeting spiritual and material demands of the citizens of the Russian Federation” (Preamble).

The Law on wildlife provides inter alia for the participation of the public (Art. 10), for environmental monitoring (Art. 15) and for an impact assessment with regard to the effects of activities on wildlife

and their habitats (Art. 20), for restrictions on the use of wildlife (Art. 21) and for the protection of wildlife habitats (Art. 22).

Order of the Ministry of Ecology and Natural Resources regarding setting up common state system of ecological monitoring of Russia / No. 13 (27 November 1992)
The Minister, to improve ecological safety and to provide the state executive bodies and the public with data regarding the ecological situation, orders to set up and develop a state system of ecological monitoring in Russia.

Ministerial Decree validating the list of objects subject to state environmental monitoring / No. 777 (29 October 2002)
This Ministerial Decree validates the list of objects subject to state environmental monitoring, including: (a) federal energy systems; (b) forests; (c) internal waters, territorial seas and EEZ of the Russian Federation; (d) objects recorded in the List of world cultural heritage, protected areas, rare and endangered soil recorded in the Red Book of soil of the Russian Federation; and (e) the ecosystem of the Baikal lake area.

Ministerial Decree regarding organization and carrying out state environmental (ecological) monitoring / No. 177 (31 March 2003)
This Ministerial Decree establishes the ecological monitoring programme that aims to assess the state of the environment and to forecast the changes of the environment due to the impact of natural and anthropogenic factors. It includes the monitoring of air, land, forests, water bodies, wildlife species, the Baikal lake, the continental shelf, the EEZ, the internal waters and the territorial sea of the Russian Federation and its subsoil.

Ministerial Decree regarding validation of the Regulation on setting up protected areas of permanent observation points for environmental monitoring and pollution control / No. 972 (27 August 1999)
The document establishes the modalities of setting up permanent observation points for environmental monitoring and pollution control.

Federal Law on hydro-meteorological service / No. 113-FZ (19 July 1998)
This Federal Law establishes the legal basis for public access to the information on hydro-meteorological, helio-geophysical issues and on the state of environment.

Ministerial Decree of the Ministry of Environmental Protection and Natural Resources regarding the validation of the Regulation on the modalities of state ecological control by the officials of the Ministry and its territorial (local) branches / No. 1076 (17 April 1996)
The state ecological control is carried out to protect the environment. Part 1 of the Decree lays down general provisions. Part 2 establishes the duties of the state inspectors, Part 3 their rights and Part 4 their liability. Part 5 regards the adoption of measures to stop the infringement of environmental legislation and legal action against infringers.

3. Legal framework for creating Protected Areas and MPAs

Federal Law on protected areas / No. 33-FZ (14 March 1995)
This Federal Law regulates the organization, protection and use of protected areas in order to conserve unique and representative ecosystems, notably natural formations, plant and wildlife species and their genetic basis. Furthermore, it promotes research on natural processes and the ecological education of the population.

The first chapter concerns the different types of protected areas and their management as well as information on the state cadastre of protected areas. The second chapter deals with the strict natural reserves, their creation, their management and the activities prohibited in the reserves. The third chapter is about national parks, their goals and the organisation of recreational activities. Chapters 4-8 contain information on the nature sanctuaries, natural monuments, nature parks, resort and health spas and dendrological parks and botanical gardens.

Order of the Ministry of Environmental Protection and Natural Resources regarding validation of Model Regulations on state natural reserves and natural monuments / No. 20 (16 January 1996)
State natural reserves are territories or areas of water that have particular importance for the conservation of ecosystems or their components and the maintenance of ecological balance. Natural monuments are unique, irreplaceable and ecologically, scientifically, culturally or aesthetically valuable natural complexes, as well as objects of natural or artificial origin. State natural reserves and natural monuments receive special protection.

Order of the Ministry of Environmental Protection and Natural Resources validating General Regulation on Federal Nature Reserves / No. 14 (25 January 1993)
State Nature Reserves of Federal Importance can be classified as 1) landscape; 2) biological (protection of flora and fauna, including fish stocks); 3) paleontological (conservation of minerals of scientific value); 4) hydrological (marshland, lakes, rivers, marine areas); 5) geological (conservation of mineral deposits).

The proclamation of areas as State Nature reserve does not entail the expropriation of the land from the land owners, landlords or tenants. However, economic, recreational and other activities can be prohibited completely, partially, temporarily or permanently if they are likely to cause damage to the environment (for example fishing activities).

Order of the Ministry of Environmental Protection and Natural Resources validating the Regulation on Federal Nature Monuments / No. 15 (25 January 1993)
Federal Nature Monuments shall be proclaimed natural objects that have a particular ecological, scientific, historical, cultural, aesthetic or educational value and therefore require the protection of the state.

Nature monuments shall be classified as follows: 1) parts of dry land and water surface and natural objects; 2) landscape of cultural heritage; 3) growing grounds of rare and endangered plants; 4) forests of particular value. The proclamation of nature monuments does not entail the expropriation of the land from the land owners, landlords or tenants. The use of nature monuments can be authorized for the following purposes: 1) scientific or environmental monitoring; 2) educational purposes; 3) recreational purposes; 4) conservation of natural habitats of rare and endangered species.

Order of the Ministry of Environmental Protection and Natural Resources validating Model Regulations on nature reserves and cultural heritage / No. 33 (13 December 1992)
State nature reserves shall be declared areas of mainland or water of high environmental, ecological and aesthetic value. Natural complexes located on the territory of protected areas and national parks cannot be declared nature reserves.

The purposes of nature reserves shall be: 1) conservation of natural complexes in their natural state; 2) conservation and restoration of natural resources; and 3) maintenance of the ecological balance.

Nature reserves shall be classified as: 1) landscape; 2) biosphere; 3) paleontological; 4) hydrological; and 5) geological. The following activities shall be prohibited or restricted on the territory of nature reserves: 1) ploughing; 2) wood felling; 3) hunting and fishing; 4) the creation of zoological, botanical and mineralogical collections; 5) gardening; 6) land reclamation; 7) construction; 8) use of chemical weed-killers, pesticides and fertilizers; 9) logging and blasting operations.

Cultural heritage monuments shall be declared natural objects and complexes of high environmental, ecological, educational or aesthetic value. The main purpose of the declaration shall be the conservation of those monuments in their natural state.

Cultural heritage can be declared: 1) picturesque surroundings; 2) cultural landscape; 3) forest tracts; 3) small dendrological parks; 4) geological features; 5) natural hydro mineral complexes; and 6) thermal springs.

Order of the Ministry of Environmental Protection and Natural Resources validating Common Regulation on Federal Biosphere Reserves / No. 14
Federal Biosphere Reserves shall be declared areas that need special protection. Natural complexes located on the territory of state nature reserves and national parks shall not be considered Federal Biosphere Reserves. Federal Biosphere Reserves shall be classified as: 1) landscape; 2) biological; 3) paleontological; 4 hydrological; and 5) geological reserves. Federal Biosphere Reserves shall be declared at the request of the authorized environmental institution by agreement with regional executive bodies. The declaration of an area as state biosphere reserve usually does not entail the expropriation of the land. The following activities shall be prohibited on the territory of state biosphere reserves: 1) ploughing up; 2) wood felling; 3) hunting and fishing; 4) construction; 5) irrigation; 6) use of chemicals and pesticides; 7) rafting; and 8) explosions.

Ministerial Decree regarding the validation of the Regulation on the National Parks / No. 769 (10 August 1993)
National Parks are territories or defined areas of water that contain natural habitats or that are of particular ecological, cultural or aesthetic value and that therefore need special protection. Part I of the Decree lays down the general provisions. Part II establishes the main objectives of the National Parks. Part III determines the modalities for setting up a National Parks. Part IV regards management and Part V organisational issues. Part VI deals with scientific research and educational activities and Part VII with economic activities. Part VIII establishes the legal status of the National Parks. Part IX regards the supervision of the functioning of the National Parks.

Presidential Decree regarding natural resources of the sea-coast of the Black sea and the Sea of Azov / No. 1470 (6 July 1994)
With that decree the initiative of the regional administration of the Krasnodar Territory is approved to attribute some of the natural resources of the sea-coast of the Black sea and the Sea of Azov to the “federal natural resources” in order to conserve and restore those resources. The Government of the Russian Federation validates the list of those natural resources and determines the federal executive bodies authorized to carry out jointly with the regional authorities the management functions.

Ministerial Decree regarding validation of the Regulation on water conservation zones and adjacent protective zones / No. 1404 (23 November 1996)
Water conservation zones are territories adjacent to rivers, lakes and other water basins where economic activity is restricted to prevent pollution, contamination and the exhaustion of water

resources and to protect wildlife and plants. For seas, the width of water conservation zones and adjacent protected areas depends on the maximum rising tide.

Ministerial Decree validating criteria for the classification of water bodies subject to federal and regional government protection / No. 640 (4 November 2006)
This Ministerial Decree sets forth the criteria for the classification of water bodies subject to federal and regional government protection: (a) surface waters located on the territory of two or more regions of the Russian Federation; (b) water bodies located on the land of defence, federal energy or transport systems; (c) internal waters; (d) territorial seas; (e) protected water bodies and protected areas; (f) protected fish stock enhancement areas; (g) water bodies that are natural habitats for anadromous and catadromous fish species; (h) trans-boundary water bodies; and (i) water bodies serving cities with a populations of over 100,000 residents or subject to water abstraction of over 15 million cubic metres annually.

Methodical Instructions regarding the modalities of legal proceedings concerning infringement of the status and other protection arrangements, environmental management and use of natural resources in protected areas and their protection strips (25 December 1995)
The present Methodical Instructions regulate inter alia the following issues: 1. the modalities of expropriation of hunting gear or illegally obtained products; 2.the calculation of the damage caused to the environment and its compensation.

4. Legislation regarding marine pollution

Ministerial Decree regarding validation of the list of hazardous substances the discharge of which from vessels, other floating objects, flying objects, artificial islands, plants and constructions in the exclusive economic zone of the Russian Federation is prohibited / No. 251 (24 March 2000)
The Government approves the list of hazardous substances that are not allowed to be dumped in the sea. The list includes all types of plastic materials and chemicals.

Ministerial Decree on the validation of the maximum allowable limits of concentration and the conditions of discharge of hazardous substances in the Exclusive Economic Zone of the Russian Federation / No. 748 (3 October 2000)
The Government of the Russian Federation approves the list of the maximum allowable limits of concentration of hazardous substances in the Exclusive Economic Zone of the Russian Federation.

Instruction of the Ministry of Environmental Protection and Natural Resources regarding the modalities of reporting marine pollution (12 May 1994)
The Instruction establishes general rules of reporting regarding the discharge of oil and hazardous substances from ships and other objects (floating objects, artificial islands, plants and constructions).

5. Legislation regarding fisheries management

Federal Law FZ-166 on Fishing and Conservation of Aquatic Biological resources
This law contains basic principles for fishing and for the conservation of aquatic biological resources. It deals with all types of fisheries, thus for commercial, scientific and recreational purposes and aquaculture and with permits, management, control, protection of the resources and dispute resolution.

Ministerial Decree validating the Regulation on federal state control (supervision) in the sphere of fisheries and conservation of aquatic biological resources / No. 1394 (25 December 2012)

This Ministerial Decree regulates the control with regard to fisheries and to the conservation of aquatic biological resources by the Federal Fisheries Agency. It is not applicable to vessels that fish trans-boundary and migratory fishes and to fisheries in protected areas of federal significance. The control includes: (a) control of state bodies, local self-government, legal persons, officials, enterprises and citizens; (b) control of compliance with mandatory fishery management and conservation requirements; (c) legal and administrative procedures for the suppression of offences; and (d) success control.

Order of the Federal Fisheries Agency validating marine fish protection areas / No. 943 (29 December 2010)
This Order establishes marine fish protection areas in the seas that belong totally or partially to the Russian Federation, such as the Black Sea.

Ministerial Decree regarding the issuance, registration, suspension and cancellation of fishing authorizations / No. 775 (22 October 2008)
This Ministerial Decree establishes the modalities of the issuance, registration, suspension and cancellation of fishing authorizations. The Decree is not applicable to rare, endangered and protected species recorded in the Red Book of the Russian Federation. Fishing authorizations are necessary for (a) industrial fisheries; (b) fisheries research; (c) fisheries for educational and cultural purposes; (d) fisheries for stock enhancement and fish farming; (e) traditional fisheries; (f) foreign fisheries; and (g) fisheries in the EEZ. The Federal Fisheries Agency and its territorial bodies are responsible for issuing the authorizations.

Order of the Federal Fisheries Committee regulating fisheries for scientific research, control and fish farming purposes / No. 309 (27 September 2001)
According to this Order, the purpose of such fisheries shall be: (a) to control the state of the aquatic biological diversity; (b) to explore new fishing areas; (c) to determine the total allowable catch; and (d) to develop measures for the conservation, rational management, reproduction and acclimatization of fishing resources. Fisheries for scientific research, control and fish farming purposes shall be carried out in conformity with the annual plans and quotas set by the Government.

Ministerial Decree regarding setting up a branch system of monitoring of aquatic biodiversity resources, observation and control over fishing vessels / No. 226 (26 February 1999)
The Government, to ensure economic security, the rational use and the conservation of the aquatic biodiversity of the internal waters, the territorial sea, the continental shelf and the EEZ of the Russian Federation, decrees as follows: 1) Russian fishing vessels must be equipped with technical means to guarantee the permanent automatic transmission of data regarding the position of the vessel, the amount of fish products on board and other fisheries data as determined by the Federal Fisheries Committee. 2) The Federal Fisheries Committee shall cancel licences and revoke quotas for the period of up to two years in the case of non-compliance.

Order of the Federal Fisheries Committee validating Fisheries Regulation in the Sea of Azov / No. 139 (1 July 1996)
The Regulation regulates the catch of aquatic biological resources (fishes, mammals, invertebrates and plants) in the Sea of Azov and in the Gulf of Kerch by natural and legal persons and aims to ensure the conservation of those aquatic biological resources and their natural habitats. Therefore, national quotas are fixed annually by the authorized institutions of Ukraine and the Russian Federation. Fishing gear is to be marked for the purpose of its identification. Fishing of white sturgeon, starlet and dolphins is prohibited everywhere.

Order of the Federal Fisheries Committee regarding validation of the list of activities pertaining to industrial fisheries and fish breeding and subject to licensing and the instructions on industrial fisheries and fish breeding / No. 228 (29 December 1995)
The activities of industrial fishing and fish breeding contained in the list require licensing to ensure the conservation of the aquatic biodiversity, the safe navigation of the fishing vessels and the prevention of pollution.

Order of the Fisheries Ministry validating the Regulation on conservation and catch of marine mammals / No. 349 (30 June 1986)
The Regulation is applicable on the national territory, the internal waters, the territorial sea and the EEZ of the Russian Federation. The Fishing Inspection is responsible to protect marine mammals: 1) by protecting their habitats, their mating grounds and their migration routes; 2) by issuing hunting authorizations; 3) by allocating fishing areas/hunting grounds; 4) by taking measures for the stock enhancement of marine mammals; 5) by protecting their breeding grounds; 6) by restricting the utilization of marine mammals; 7) by preventing the injury of marine mammals by navigation; 8) by helping marine mammals in case of natural disasters; 9) by the establishment of protected areas.

Regulation on artisanal and sporting fisheries (7 April 1982)
Artisanal and sport fishing activities for personal consumption are permitted to all citizens free-of-charge in all waters outside of protected areas, fish-farming areas, ponds and other artificial water reservoirs on the condition of the strict observance of fisheries regulations and regulations on the use of waters.

6. Legislation regarding navigation

Federal Law No. 22-FZ on navigation (14 February 2009)
This Federal Law regulates navigation activities and the installation of navigation equipment on board of vessels.

Ministerial Decree on licensing sea and inland waters transportation / No. 490 (13 August 2006)
This Ministerial Decree establishes the terms and conditions of obtaining a licence for sea and inland waters transportation, including safe navigation requirements, compliance with the International Management Code for the Safe Operation of Ships and for Pollution Prevention.

Order on the State Committee for Environmental Protection regarding state marine inspection for environmental protection attached to the Committee / No. 461 (6 August 1998)
The President of the State Committee for Environmental Protection orders to set up a state marine inspection for environmental protection to protect the marine area, to conserve its biological diversity and to control the observance of the regulations on ecological safety in the internal waters, the territorial sea, the continental shelf and the EEZ.

Order of the State Committee for Environmental Protection regarding validation of the Regulation on state marine inspection for environmental protection attached to the Committee / No. 643 (2 November 1998)
The tasks of the State marine inspection are to ensure the protection of the marine environment, to prevent ecological disasters, to ensure the compliance with the regulations on ecological safety in the internal sea, the territorial sea, the EEZ and on the continental shelf, to register pollution and other activities having a negative impact on the environment of the sea and to help preparing programmes for the protection of the marine environment.

Ministerial Decree regarding validation of the Regulation on state inspection on small size vessels / No. 65 (13 February 1985)
The main task of State inspection on small size vessels is to ensure their safe navigation, their compliance with relevant legislations and their respect of the environment.

Ministerial Decree validating Technical Regulation on safety of marine transport infrastructure / No. 620 (12 August 2010)
This Ministerial Decree is applicable to marine vessels navigating in the sea and in harbours. The purpose of the Decree is to prevent damages to human life and to the environment by ensuring compliance with the safety regulations.

Federal Law No. 81-FZ enacting the Mercantile Marine Code (30 April 1999)
According to the Code, mercantile navigation includes also the harvest of marine living resources by fishing vessels. The Code is applicable to inland and marine navigation and its application is supervised by the Federal Department of Transport and by the Federal Fishery Department. The Code aims to ensure the protection and preservation of the marine environment and lists the substances that can be hazardous to the environment.

7. Integrated Coastal Zone Management (ICZM)

There is no special law on ICZM in Russia.

Water Code / No. 74-FZ (1 January 2007)
The Water Code is applicable to surface waters and to the groundwater and is inter alia aimed at water protection, at the prevention of negative impacts on the environment and at securing the drinking water supply.

Land Code / No. 136-FZ (25 October 2001)
The Land Code recognizes the importance of land as the basis of economic activities and also recognizes immovable property and corresponding rights. It also takes into consideration the importance of land for the conservation of the environment, obliges the owner not to damage the environment and provides special rules for ecologically valuable and protected areas.

Forest Code / No. 22-FZ (29 January 1997)
“RF forest legislation shall be aimed to ensure the rational and non-depletion use of forests, the conservation, protection and reproduction thereof, proceeding from the principles of stable management of forests and preservation of the biological diversity of forest ecosystems, enhancement of the ecological and resource potential of forests, and satisfaction of the society's requirements in forest resources on the basis of scientifically grounded, multipurpose use of forests” (Art. 2).

Urban Code / No. 73-FZ (7 May 1998)
This Code aims to ensure access to adequate housing, to regulate urban and rural planning, the development of infrastructure, the rational use of natural resources and the protection of the environment as a prerequisite for a good standard of living.

Federal Law on land use planning / No. 78-FZ (18 June 2001)
This Law establishes the legal basis for land use planning. It aims to ensure a rational use of the land, to achieve a good environmental status and to improve the landscape.

Federal Law on tourism / No. 132-FZ (24 November 1996)
This Federal Law establishes the following objectives with regard to tourism: (a) environmental protection; and (b) preservation of the environmental and cultural heritage. The main provisions of the law are: Tourism shall be subject to certification and licensing (Art. 5). Tourists shall be granted access to information on nature monuments, protected areas, objects of cultural heritage and the state of environment (Art. 6). Tourist shall have the duty to preserve the environment and to treat with due care nature monuments and objects of cultural heritage (Art. 7).

KRASNODAR KRAY

1. Environmental protection legislation

Regional Law on environmental protection / No. 657-KZ (31 December 2003)
This Regional Law aims to ensure a good state of the environment and environmental security by protecting certain areas and by monitoring the state of the environment. According to the law, economic activities have to be compatible with the protection of the environment.

2. Legal framework for creating Protected Areas and MPAs

Regional Law on protected areas / No. 656-KZ (31 December 2003)
This Regional Law concerns the management of protected areas and aims to conserve unique and representative ecosystems and wild fauna and flora species. Protected areas shall be classified as follows: (a) natural parks; (b) nature monuments; (c) dendrological parks and botanical gardens; and (d) health resorts and spas. Protected areas are declared by the supreme executive body of the Regional Administration upon recommendation by the authorized state institution for environmental protection. Protected areas are to be registered in the State Register of protected areas.

The chapters of the law concern the categories of protected areas, procedures for determining the areas, powers of the legislative body of Krasnodar Kray, planning and management as well as the State Register.

3. Legislation regarding fisheries management

Regional Law on fisheries / No. 1211-KZ (27 March 2007)
This Regional Law is applicable to inland waters, the territorial sea and to coastal fisheries. Fishery management shall be based on the following principles: (a) sustainable management of fisheries; (b) a stable annual total allowable catch; (c) mandatory delivery of fish and fish products for processing and trade to the territory of the Russian Federation; and (d) equitable distribution of fishing zones and fishing quotas.

Decree of the Head of Administration regarding protection of aquatic biodiversity in the basins of the Sea of Azov and the Black Sea on the territory of the Krasnodar Territory / No. 850 (29 July 2002)
Illegal fishing represents a threat to the sustainability of fish stocks and marine biodiversity in the Sea of Azov and in the Black Sea. To protect the marine biodiversity, the regional branch of the Federal Fisheries Committee determines annually the number of organizations authorized to carry out fishing activities in the waters of the territory of Krasnodar Kray and controls the compliance with fishing regulations.

Regional Law on fisheries and fish-farming activity / No.663-KZ (4 February 2004)

This Law is aimed at ensuring a scientifically sound management of fishing and fish-farming activities at the regional level, the rational use and protection of marine biodiversity and stable catch limits.

Regional Decree on an interdepartmental commission for the determination of the quotas for catch of aquatic biodiversity for coastal zone to be distributed among regional applicants / No. 124 (5 February 2004)
An interdepartmental commission is established by that Decree to determine the allowable catch of aquatic resources and to distribute it between regional applicants.

Regional Decree validating Regulation on artisanal and sport fishing / No. 8 (9 January 2004)
Artisanal and sport fishing is authorized for natural persons. The maximum allowable daily quota of catch is 8 kg per fisherman. This Regional Decree lists prohibited fishing gear and prohibited fishing methods and protected species.

4. Legislation regarding Integrated Coastal Zone Management / Marine Spatial Planning

Regional Law on tourism / No. 938-KZ (25 October 2005)
This Regional Law aims to ensure the right of citizens to recreation and to access to the cultural heritage of the country by promoting a sustainable development of the tourist industry. Restrictions are possible to prevent negative impacts on the environment.

References:
Contribution of RSHU: CoCoNet questionnaire on legal base for Russian MPA on Krasnodar coasts (Julia Lednova)
International Energy Agency: www.iea.org
Food and Agricultural Organization of the United Nations / FAOLEX: http://faolex.fao.org/

TURKEY

1. Maritime boundaries

Act No. 2674 on Territorial Sea of the Republic of Turkey (20 May 1982)
Art. 1
The sovereignty of the Republic of Turkey extends beyond its land territory to its territorial sea.
The breadth of the territorial sea shall be six nautical miles.
The Council of Ministers has the right to establish the breadth of the territorial sea, in certain seas, up to a limit exceeding six nautical miles, under reservation to take into account all special circumstances and relevant situations therein, and in conformity with the equity principle.

Decree by the Council of Ministers on the Territorial Sea of the Republic of Turkey No. 8/4742
…it is hereby decided that, in view of the characteristics of the seas surrounding Turkey and the principle of equity, the situation prevailing in the Black Sea and in the Mediterranean before the entry into force of the aforementioned law with regard to the breadth of the territorial sea will be maintained.

Decree by the Council of Ministers No. 86/11264 (17 December 1986)
Art. 1
The Turkish exclusive economic zone in the Black Sea is established for the purpose of exploring and exploiting, conserving and managing the living and non-living resources of the waters subjacent to the seabed and of the seabed and its subsoil of maritime areas, adjacent to the Turkish territorial sea. It exists to protect other economic interests in the Republic of Turkey to a distance of 200 nautical miles from the baseline from which the breadth of the territorial waters of Turkey in this sea is measured.

Taking into account the dimensions of the Black Sea, delimitation agreements shall be effected with States with coasts opposite or adjacent to the coast of Turkey to determine the boundaries of the exclusive economic zone.

2. Environmental protection legislation

The Constitution of the Republic of Turkey (9 November 1982)

III. Public Interest
A. Utilisation of the Coasts
Art. 43:
The coasts are under the sovereignty and disposal of the state.
In the utilisation of sea coasts, lake shores or river banks, and of the coastal strip along the sea and lakes, public interest shall be taken into consideration with priority.
The width of coasts, and coastal strips according to the purpose of utilization and the conditions of utilization by individuals shall be determined by law.

VIII. Health, the environment and housing
A. Health services and protection of the environment
Art. 56 I / II
Everyone has the right to live in a healthy and balanced environment.
It is the duty of the State and citizens to improve the natural environment, to protect the environmental health and to prevent environmental pollution.

XI. Protection of historical, cultural and natural assets
Art. 63 I
The State shall ensure the protection of the historical, cultural and natural assets and wealth, and shall take supportive and promotive measures towards that end.

Environment Law No. 2872 (9 August 1983)
According to Art. 1, this law has the objective "to protect and improve the environment which is the common asset of all citizens; make better use of, and preserve land and natural resources in rural and urban areas; prevent water, land and air pollution; by preserving the country's vegetative and livestock assets and natural and historical richness, organize all arrangements and precautions for improving and securing health, civilization and life conditions of present and future generations in conformity with economical and social development objectives, and based on certain legal and technical principles".

The law concerns environmental issues in general. However, some articles have strong implications for the management of the coastal zone. Several by-laws that have been passed subsequently deal with issues such as air pollution, noise, water quality, solid waste management and environmental impact assessment (EIA).

In Art. 3 e) (Amendment: 3/3/1988 - 3416/art.1) the law states that "in principle, all the costs concerning the prevention, limiting and combatting pollution will be borne by the polluting party". Thereby, the "polluter-pays" principle is implemented which is detailed in Art. 28 (Amendment: 3/3/1988 - 3416/art. 8). According to its para. 1, parties polluting the environment and parties causing environmental destruction will be held responsible "regardless of the existence of any misconduct".

Art. 8 par. 1 says that "it is prohibited to diffuse, directly and indirectly, all kinds of waste and scraps into recipient environment, store, transport, avert, and conduct similar activities by violating the standards and methods determined by corresponding regulations, and causing damage to the environment".

Art. 9 (Amendment: 3/3/1988 - 3416/art.4) concerns protected areas.
It states (para. 1-3): "Protected areas that have been determined in conformity with land utilization resolution within the rural and urban areas, and the protection and utilization principles that will be implemented in these areas, are determined by a regulation.
Within the framework of these principles, overexploitation and misconduct; degradation of the country's fundamental ecological equilibrium, endangering livestock and vegetative varieties and destruction of the natural richness integrity due to importation of all kinds of wastes and scraps are prohibited.
The Council of Ministers is authorized to declare the areas vulnerable to environmental pollution and degradation that have countrywide and worldwide ecological importance, as "Special Environmental Protection Area" enabling the necessary arrangements for securing natural areas for the access of future generations, and to specify which Ministry will be responsible for preparing and implementing the protection and utilization principles, and plans and projects that will be implemented in these areas."

Under Art. 10, a report on possible environmental impacts is required for activities that can be detrimental to the environment. It states (par. 1): "The institutions, agencies and establishments that can lead to environmental issues due to their planned activities will prepare an "Environmental

Impact Assessment Report". In this report all impacts on the environment will be considered and the methods for eliminating the harmful impacts of wastes and scraps that may cause environmental pollution and the corresponding precautions will be specified."
Arts. 20-22 set fines for the violation of the law. Art. 22 sets the fines for "all vessels and sea transportation instruments that violate the prohibitions indicated in para one of article 8 of this Law operating in all our coasts and inner seas of Marmara, Bosporus and Dardanelles, ports and bays, natural and artificial lakes and rivers". The metropolitan municipalities collect these fines within their borders. 20 % of the fines can be kept by the municipalities and 80 % are transferred to the Environmental Pollution Protection Fund. Beyond the boundaries of the metropolitan municipalities, the commander of the coast guard boat is authorised to collect the fines (Art. 24).

The law also provides for incentives. In Art. 29, it states that activities that help to prevent and eliminate pollution will benefit from encouragement measures.

This Law No. 5491 (26 April 2006) amends the Environment Law No. 2872. It substitutes some articles and adds new provisions. The purpose of the law is redefined as follows: "to ensure the preservation of the environment, which is a common asset of all living beings, through sustainable environment and sustainable development principles". In Art. 6, the Law highlights the importance of protecting biological diversity. A Supreme Environment Board, chaired by the Prime Minister, shall be established, and its main tasks include the formulation of the targets, policies and strategies, the definition of legal and administrative measures to take into account environmental concerns in economical decisions, the resolution of environment-related disputes among the ministries and agencies. Agencies, institutions and enterprises whose activities may damage the environment shall be obliged to prepare an Environmental Impact Assessment Report.

3. Legal framework for creating Protected Areas and MPAs

Natural Parks Law No. 2871 (9 August 1983)
The text consists of 28 articles divided into 8 Parts: Purpose and definition (I), Designation, planning and nationalization (II), Granting of permissions (III), Duties (IV), Protection (V), National Park Fund (VI), Penalties (VII) and Final provisions (VIII).

The purpose of this law is "to establish the principles governing the selection and designation of national parks, natural monuments and nature reserve areas of national and international value, and protection, development and management of such places without spoiling their characteristics" (Art. 1).

The classified protected areas (National Parks, Nature Parks, Natural Monuments and Nature Reserve Areas) are defined in Art. 2. National parks shall be designated by the Council of Ministers upon suggestion of the Ministry of Agriculture and Forestry and in consideration of the opinion of the Ministries of National Defence, Public Works and Settlements, Culture and Tourism and whenever necessary of other concerned ministries (Art. 3).

For each of the national parks, a development plan and a reconstruction implementation plan is to be prepared or approved by the Ministry. Art. 5 regulates the nationalization of immovable property within the boundaries of designated areas. Part III provides for the permission for all types of plans, projects and investments that are carried out by "public institutions and organizations". Those plans, projects and investments have to be in conformity with the applicable plans. Real people can obtain the permission to build touristic buildings and facilities only if those buildings and facilities are in the public interest. No permission of use may be granted nor an usufruct established "by reserving the

applicable provisions of Law No. 2863 for the Protection of Cultural and Natural Assets" of 21 March 1983 in the areas of natural monuments and nature reserves (Art. 10).

Provisions of Part V prohibit various activities in the classified areas. Art. 14 states that “the following actions shall not be permitted in the areas falling within the scope of the law:

a) the natural and ecological equilibrium and natural ecosystem value may not be spoiled;
b) wildlife may not be destroyed;
c) interferences of all kinds which may cause disappearance or change or future change of the characteristics of these areas as well as activities or works that will create soil, water and air pollution or similar environmental problems may not be performed;
d) production of forest products, hunting and grazing which will spoil the natural equilibrium may not be carried out;
e) unless otherwise required definitely by public interest and excepting the structures and facilities specified in the approved plans as well as the facilities required for the defence systems for the requirements of the Turkish General Staff, no facility may be built, nor operated…”.

Forest Guards have the authority to enforce the law (Art. 16). Penalties are provided for in Arts. 20 and 21. Besides, a National Parks Fund is established under Art. 17-A.

Regulation on wildlife preservation and wildlife development areas (8 November 2004)
This regulation determines the procedures and principles regarding the establishment, the management and the permitted activities in wildlife preservation and development areas. Areas chosen for wildlife preservation should be large enough to accommodate a large population of migrating animals. Areas found appropriate by the General Directorate of Nature Preservation and National Parks are proclaimed as wildlife preservation areas by the Ministry of Forestry for areas under the forestry regime, and by the Council of Ministers for all other areas. Wildlife preservation areas are managed by the regional directorate of the Ministry of Environment and Forestry, in accordance to management and development plans. These plans are prepared by the General Directorate of Nature Preservation and National Parks. Activities other than specified in the management plans are not allowed in those areas, and constructions of any kind that could damage the ecosystem and objectives of the areas are prohibited.

Regulation on wetlands (17 May 2005)
The regulation defines the principles and rules for the protection and management of wetlands. It is prohibited to drain natural wetlands larger than 8 ha. Discharging waters from wetlands or diverting streams feeding wetlands is prohibited. The extraction of sand and gravel as well as peat from protected areas needs the approval of the Ministry of Environment and Forestry. Besides, collecting plant species and hunting in wetlands is not allowed except for scientific research purposes with the permission of the Ministry. Wetlands that are to be included in the Ramsar List are determined by the National Wetlands Committee. The National Wetlands Committee is also responsible for preparing national wetland policies and strategies. Activities prohibited in in the buffer zone of not less than 2500 meters are listed in the Annex.

Law on the Protection of Cultural and Natural Wealth No. 18113 (2 July 1983)
The purpose of this Law is “to establish definitions for mobile and immobile cultural and natural wealth which needs protection, to regulate processes and activities to be carried out, to identify the institution and its duties, which will decide on principles and practices needed in this respect” (Art. 1).

Cultural wealth is defined as “all mobile and immobile wealth, on land or water, which reflects science, culture, religion and fine arts of historical periods”, whereas natural wealth is defined as “values on land, below land or water, which belong to geological, prehistoric or historical periods, and which need to be protected because of their scarcity or their values and attractions”. “Sites” are defined as “being products of the civilisations from prehistoric periods to the present, city and city ruins which reflect social, economic, architectural and other characteristics of their periods; places where important historical activities were staged; and areas which need to be protected on the basis of their established nature characteristics” (Art. 3). Besides, “historical caves, rock shelters, special trees and forests, and the like” are used as examples of natural wealth in Art. 6. Movable and immovable cultural and natural resources are subject to protection and any cultural and/or natural resource that is known to be on any government and/or private property belongs solely to the State.

Immovable cultural and natural resources that are to be protected are listed in the text. The Ministry of Culture and Tourism is responsible for the registration, survey and inventory of those resources. The Supreme Board of Cultural and Natural Resources specifies the principles regarding the protection of cultural and natural resources, ensures coordination among protection boards and assists the Ministry on any matter related to these resources. Regional Boards define the boundaries of registered cultural and natural resources and are entitled to grant construction permits within these boundaries.

The Law focuses mainly on cultural sites and cultural wealth. The definitions of natural sites and natural wealth do not seem to be precise enough to ensure an effective protection. However, some coastal areas have already been designated as “natural sites” according to this Law and many coastal areas as “historical sites”. Restrictions then apply to the development of these areas.

Council of Ministers’ Decree on the Establishment of an Agency for Specially Protected Areas No. 383 (19 October 1989)
This Agency shall take the necessary precautions to address existing environmental problems in the areas defined as “Special Environmental Protection Area” (Art. 9 of the Environment Law No. 2872). Art. 1 states that it shall take “all kinds of measures to solve environmental problems and to protect environmental wealth, to establish principles of protection and utilisation in these areas, to prepare land use plans, to revise and approve plans of all scales and planning decisions”. Any kind of construction within the protection area is subject to a written consent of the Institution.

Since 1991, the higher authority is no longer the Prime Minister’s Office, but the Ministry of Environment. The central organisation of the Agency is located in Ankara and has two major departments: the Department of Planning and Project Implementation and the Department of Environmental Protection, Research and Investigation (Art. 11).

Regulation on reconstruction plans in protected areas (23 March 2012)
The Regulation sets for the principles and procedures for reconstruction plans in protected areas.

4. Legislation regarding marine pollution

Regulation on water pollution control (31 December 2004)
This Regulation sets forth principles and procedures aimed at ensuring the protection of underground and surface waters. Sea and coastal waters are classified in: (i) fishery areas; (ii) recreational areas; and (iii) areas destined for commercial, industrial and other uses. Activities with

an impact on water resources, discharge conditions as well as disposal and treatment procedures are also regulated.

Law pertaining to principles of emergency response and compensation for damages in pollution of marine environment by oil and other harmful substances (11 March 2005)
The objective of this Law is to define the obligations and responsibilities with regard to emergency response in case of sea pollution by oil and oil products.

Art. 6
Under this Law liable parties of ships and coastal facilities shall be liable (both jointly and individually) for compensation of expenditures for cleaning, expenditures for preventive measures, any damage to living resources and marine life, reinstatement of degenerated environment, expenditures for transport and disposal of any waste collected, damages to natural or living resources that are exploited for subsistence purposes, damage to private property, losses stemming from personal injury or death, loss of income, damage to capacity to earn income or revenues, and other public losses, as caused by pollution or risk of pollution stemming from any incident involving vessels or coastal facilities in any area of enforcement.

Art. 13
Any person involved in an incident, or having seen or heard of it or somehow having been informed about it, shall be obliged to notify the relevant authorities and emergency response units about the pollution or risk of pollution thereof. Authorities to be notified and procedures and principles pertaining to notification shall be established in regulation.

Regulation regarding protection and management of water basins (17 October 2012)
The aim of this Regulation is the protection of surface waters and groundwater. Therefore, the Regulation deals with management plans for water basins that aim to ensure sustainability, rehabilitation and protection. The Regulation covers basins of coastal waters, surface waters and groundwater resources.

Regulation on the management of surface water quality (30 November 2012)
This Regulation sets forth the rules and procedures for the determination and classification of the biological, chemical, physicochemical and hydro-morphological quality of surface waters, coastal waters and transitional waters. It also provides for the rules and procedures of monitoring of the water quality and quantity. The Regulation further sets forth provisions concerning the sustainable use of water and the measures to be taken to maintain or achieve good surface water status.

5. Legislation regarding fisheries management

Fisheries Law No. 1380 (22 March 1971)
The Fisheries Law concerns the “protection, production and inspection of aquatic products” (Art. 1). Fishing, if it is not small-scale fishing for sporting and non-commercial purposes, is subject to a licence (Art. 3). It is prohibited to use explosives or dangerous materials (Art. 19) or to dump material detrimental to the health of aquatic products or people (Art. 20). Bottom trawling is prohibited in inland waters, the Sea of Marmara and in the Straights. In territorial waters it is allowed if it is executed in accordance with the relevant regulations (Art. 24). Fishery products which are prohibited to catch out of season and prohibited varieties, types, weights and sizes can neither be sold, transported or processed during the closed fishing season (Art. 25).

The Ministry of Agriculture and Rural Affairs is responsible for the inspection and control of the producers of aquatic products, production areas, fishing gear, fish-markets and merchants and industrial establishments (Art. 31).

Fisheries Regulation No. 22223 (10 March 1995)
Art. 1
This regulation concerns fishery licences, sport fishing, changes in the production, the usage of explosives and harmful substances in fishing, hazardous materials and pollutants which are prohibited to be discharged, specifications, conditions and usage of fishing gears, regulations of fishing, trawling, accidental catches, fish health, the processing of the manufactured and semi-manufactured fishery products, marketing procedures and prohibitions, limitations, liabilities, precautions, quality control and safety inspection and the proper management of stocks.

Circular No. 35/1 regulating marine and inland waters fishing activities (2 August 2002)
This Circular regulates fishing activities in maritime and inland waters in order to increase production and subsequent exportation, to preserve fish quality, to foster stock enhancement and to prevent water pollution. Fishing with a trawl is forbidden in inland waters, in the Marmara Sea, the Bosporus, the Dardanelles and in certain areas of the Black Sea, the Aegean and the Mediterranean Sea. Fish quota and size requirements are detailed in the Circular. Fishing seasons and forbidden fishing methods are determined.

Aquaculture Regulation No. 25507 (29 June 2004)
The objective of this Regulation is to foster an efficient exploitation of water resources, sustainability, environmental protection and certified fish product quality.

Notification No. 2012/65 regulating commercial fisheries (18 August 2012)
This Notification regulates commercial fishing between 1 September 2012 and 31 August 2016 to protect fisheries resources and to ensure sustainability. The Notification consists of eight Chapters: Purpose, Scope, Basis and Definitions (I), Specific Prohibitions Concerning Mediterranean Sea, Aegean Sea, Marmara Sea and Black Sea (II), Prohibitions on Hunting Means and Methods (III), Regulations on Specific Species (IV), Regulations Related to Lagoons (V), Regulations Related to Inland Waters (VI), Other Provisions on Marine and Inland Waters (VII), Final Provisions (VIII).

Notification No. 2012/66 regulating non-commercial fisheries (18 August 2012)
This Notification regulates non-commercial fishing between 1 September 2012 and 31 August 2016. The Notification deals inter alia with permits for sport fishing tourism, restrictions for certain species, non-commercial fishing in inland waters and non-commercial fishing in marine waters.

6. Legislation regarding navigation

Coast Guard Command Law No. 2692 (9 July 1982)
The Turkish Coast Guard Command was established in 1982.There are also regional Coast Guard Commands for the Black Sea, the Aegean Sea, and the Mediterranean.
The mission of the Turkish Coast Guard Command is to “enforce national and international laws and to ensure the safety of life and property within its area of maritime jurisdiction”. The Coast Guard is inter alia entitled to control fishing activities and to conduct inspections in order to prevent the pollution of the marine environment.

7. Integrated Coastal Zone Management (ICZM)

Coastal Law No. 3621 (4 April 1990)
Art. 1 of that Law states its purpose: "to set out the principles for protection of the sea, natural and artificial lakes, and river shores, and the shore strips, which are extensions of these places and are under their influence, by paying attention to their natural and cultural characteristics, and for their utilisation towards the public interest, and access for the benefit of society".

The law defines the term "shoreline" as "the line along which water touches the land" and the term "shore" as the area between the shoreline and the "shore edge line" which is "the natural limit of the sand beach, gravel beach, rock, boulder, marsh, wetland and similar areas, which are created by water motions in the direction of land". The shore strip has a minimum width of 100 m horizontally to the "shore edge line".

The coast "is under the provision and possession of the State" (Art. 5) and "is open to benefit of all, equally and freely" (Art. 6). Most constructions are forbidden on the first 50 m of the shore strip, and behind, they are subject to a land use planning permit. Only some facilities that have to be built on the shore (e.g. fish farms) are allowed.

Moreover, the Coastal Law outlines the rules for gaining land through reclamation or drainage. These activities require not only a permit, but they also have to be carried out to serve a public interest and due regard has to be paid to environmental concerns.

The Coastal Law is to be enforced by the municipalities within their borders and in adjacent areas and by the provincial governors in all other areas (Art. 13). The final authority for planning is the Ministry of Public Works and Settlements. n coastal areas declared as tourism centres by the Council of Minister's decrees, the final authority is the Ministry of Tourism.

Law on Land Development Planning and Control No. 3194 (3 May 1985)
The purpose of this Law is "to ensure that settlements and development therein come into being in compliance with plans, science, hygiene and environmental conditions" (Art. 1). "All development plans and plans to be made and public and private structures to be constructed inside and outside municipal boundaries and adjacent areas shall be governed by this Law" (Art. 2).

In Chapter II, the different planning stages are specified. According to Art. 6, plans are to be prepared as "Regional Plans" and "Land Development Plans" in terms of area coverage and purpose; and land development plans as "Master Plans" and "Implementation Plans".

Regional Plans determine the development potential of settlements, sectorial objectives and the distribution of activities and infrastructure. Land Development Plans within municipal boundaries are prepared by the municipalities and have to comply with the provisions of the Regional Plans and the environmental plans. Outside municipal boundaries, those plans are prepared by the governorship or the relevant administration. Building activities are not allowed to be contrary to the plan and most are subject to a permit.

The Law also provides for public participation. The Land Development Plans have to be made available to the public for one month. Within that time period, objections can be raised.

The Law on Land Development Planning and Control does not specifically concern the coastal zone.

Law for the Encouragement of Tourism No. 2634 (16 March 1982)

The purpose of the Law is to ensure that the necessary measures are taken for the regulation and development of the tourism sector and for giving this sector a dynamic structure and mode of operation (Art. 1). In determining cultural and tourism preservation and development regions, the natural, historical, archaeological and socio-cultural assets of the area as well as its potential for winter hunting and water sports, for health tourism and other types of tourism have to be taken into account (Art. 4). To benefit from incentives, exceptions, exemptions and rights, a tourism investment certificate or a tourism establishment certificate is required (Art. 5 a)).

Art. 6 states that structures, buildings and facilities may be constructed and operated in the interests of the general public and are subject to the prior permission of the Ministry in cultural and tourism preservation and development regions and in tourism centres. Such structures, buildings and facilities, however, shall not disrupt the natural and cultural features of the region or harm tourist enterprises and they have to conform to the land use plan. Seas, lakes and streams and their shores and banks may not be exploited in such a way that their characteristics are destroyed. The exploitation of such resources, for example through the extraction of sand, gravel and rocks, shall be conditional upon obtaining the permission from the Ministry. Structural projects that may affect the environment are subject to the approval of the Ministry as well (Art. 7).

Incentives for tourism include tourism loans, low rates for utilities such as electricity, gas and water, priority supply with telecommunication facilities and the establishment of a “Tourism Development Fund”. Those incentives resulted, especially in the coastal zone, in a boom in investments in tourism development projects.

Forest Law No. 6831 (31 August 1983)
The Ministry of Forestry (renamed as Ministry of Environment and Forestry in 2003) allocates, plans and manages the suitable forests and forest lands as national parks, nature parks, nature reserves, natural monuments and forest recreation sites for the purposes of promoting scientific uses, protecting the environment, contributing to the natural beauty of the country, satisfying the sport and recreational needs of the public and supporting tourism (Art. 24). The management of coastal forests is carried out according to this law as well.

Law on Ports No. 618 (20 April 1925)
Management, cleaning, deepening and enlargement of ports as well as all other port related works are under the responsibility of the Ministry of Transport. The construction of piers, boat shelters, factories or recreational facilities is subject to the issue of a permit from the harbour master. The harbour master also decides where debris and wastes can be dumped (Art. 4). The law also regulates activities such as diving, the removal of shipwrecks or the loading and unloading of ships.

8. Legislation regarding natural resources exploitation

Minerals Act No. 3213 (4 June 1985)
The objective of this Act is to define the principles and methods of exploring and processing minerals, and to regulate the proprietary rights.

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Food and Agricultural Organization of the United Nations / FAOLEX: http://faolex.fao.org/

UKRAINE

1. Maritime boundaries

Law No. 1777-XII on the National Borderline of Ukraine (4 November 1991)
The Law establishes a territorial sea of Ukraine with a width of 12 nautical miles. It further regulates navigation and the use of land, forest and wildlife in the border area.

Law of No. 162/95-BP on the Exclusive (Maritime) Economic Zone of Ukraine (16 May 1995)
The Law establishes an Exclusive (Maritime) Economic Zone of 200 nautical miles. In this region Ukraine has the full jurisdiction over the management and conservation of biodiversity, living resources and natural resources.

2. Environmental protection legislation

Constitution (28 June 1996)
Art. 13
The land, its subsoil, atmosphere, water and other natural resources within the territory of Ukraine, natural resources of its continental shelf and of the exclusive (maritime) economic zone shall be the object of property rights of the Ukrainian people. State authorities and local self-government bodies shall exercise the ownership rights on behalf of the Ukrainian people within the limits determined by this Constitution.
Every citizen shall have the right to utilise the natural objects of the people's property rights in accordance with the law…

Art. 16
Ensuring environmental safety, maintaining ecological balance in the territory of Ukraine, overcoming the aftermath of the Chornobyl catastrophe – the catastrophe of global scale – and preserving the gene pool of the Ukrainian people, shall be the duty of the State.

Art. 66
Everyone shall be obliged not to harm nature or cultural heritage, and to compensate for any damage he/she inflicted.

Law No. 1264-XII on environmental protection (26 June 1991)
The purpose of environmental legislation is to regulate the use of natural resources, to ensure ecological safety, to prevent the negative impacts of economic and other activities on the environment and to conserve ecosystems, unique landscapes and the cultural heritage of the country. Section XII (Arts. 60-64) regards protected areas.

Law No. 2894-III on wildlife (13 December 2001)
The Law on wildlife regulates the protection and management of wildlife.

Law No. 591-XIV on plant life (9 April 1999)
The Law regulates the protection, use and reproduction of wild plants and other species not cultivated for agricultural purposes.

Ministerial Decree No. 459 validating the Regulation on the modalities of issuing authorization for special management of natural resources of national importance (10 August 1992)

The present Regulation establishes the modalities for the authorization of special management of natural resources of national importance. This concerns the following natural resources: 1) natural resources of the continental shelf and the EEZ; 2) biological diversity, fish, aquatic invertebrates, marine mammals in state of natural freedom and other animals recorded as natural resources of national importance; 3) natural resources within the boundaries of protected areas; 4) protected animals and protected plants recorded in the Red Book of Ukraine; 5) minerals except those widely distributed; 6) protected natural forested areas recorded in the Green Book of Ukraine.

Decree on the Red Book of Ukraine (October 1992)

Law of Ukraine - On the Red Book of Ukraine / No. 3055-III (7 February 2002)

Decree of the President of Ukraine on the Amount of Compensation for the Excavation of the Species of Flora and Fauna Included into the Red Book of Ukraine and the Damage Caused / No. 399 (1 June 1993)

Governmental Ordinance No. 675-r validating the basic principles of the fundamental program of the conservation of biological diversity for the period of 2005 – 2025 (22 September 2004)
This Governmental Ordinance implements the Convention on Biological Diversity. The conservation of biological diversity is recognized as one of the priorities of Ukrainian state policy. The main targets of the Program are: 1) minimization of the negative impacts on the biological diversity; 2) promotion of biological diversity; 3) promotion of scientific research and ecological education on the value of biological diversity.

Resolution of the Verkhovna Rada of Ukraine on main directions of the State Policy for Ukraine on Environmental Protection, Natural Resources and Environmental Security / No. 188/98 BP (5 March 1998)

On the List of Activities Relating to Environmental Measures / No. 1147 (17 September 1996)

Resolution of the Cabinet of Ministers of Ukraine on the Concept of Biodiversity Conservation in Ukraine / No. 439 (12 May 1997)

Law on the National Program for Biodiversity Conservation on 1998-2015 years / No. 2057 (8 August 1998)

Law of Ukraine on the Basic Principles (strategies) State Environmental Policy of Ukraine for the period up to 2020 (2011)

Decree of the Cabinet of Ministers of Ukraine on the National Action Plan for Environmental Protection for 2011-2015 / No. 577-r (25 May 2011)

Presidential Decree No. 176/2004 validating the Regulation on the Ministry of Environmental Protection (10 February 2004)
The Ministry of Environmental Protection is, according to that Decree, responsible for environmental protection, ecological safety, nature reserves and hydro-meteorological activity. The main tasks of the Ministry are, inter alia, to ensure the realization of the state policy on environmental protection and on the sustainable use of natural resources (land, surface water, atmospheric air, forest, wildlife and resources of the territorial sea, the continental shelf and the EEZ of Ukraine), to carry out environmental monitoring and to manage the nature reserves and the national ecological network.

Resolution of the Cabinet of Ministers of Ukraine on approval of the Procedure of usage of the lands of water fund / No. 502-96-P (13 May 1996)

Decree of the President of Ukraine on Approval of the Environment Fund for Environmental Protection / No. 634 (7 May 1998)

Governmental Ordinance validating the basic principles of the State program of environmental monitoring / No. 992-r (31 December 2004)

According to that Ordinance, the main targets of environmental monitoring are: 1) data collection and storage on the state of environment; 2) creation and keeping of the databases; 3) analysis of the state of the environment and the impact of pollution; 3) ensuring access to reliable environmental information.

Law on information / No. 2657-XII (2 October 1992)
This law aims to ensure the right of the citizens to access to information.

Decree on Approval of the Procedure for Environmental Information / No. 169 (18 December 2003)

Decree of the President of Ukraine on the Participation in the Decision-Making Process in the Sphere of Natural Environment Protection / No. 168 (18 December 2003)

3. Legal framework for creating Protected Areas and MPAs

Law on natural reserves / No. 2456-XII (16 June 1992)
This law on natural reserves aims to regulate the establishment and the management of natural reserves. Nature reserves are areas of land or water that have a particular environmental, scientific, aesthetical or recreational value. Those areas are to be protected to preserve the natural landscape, the balance of the ecosystems and the genetic diversity of wildlife and plants.
The law contains in section 1 general provision, section 2 regards the management, section 3 the status of natural reserves, section 4 the provisions on the protection, section 5 research activities, section 6 finance, section 7 the modalities to proclaim a natural reserve, section 8 the state register, section 9 the control of the reserve, section 10 the liability for the infringement of the law and section 11 international cooperation.

Order of the State Service of Ministry of Environment of Ukraine on Regulations on the procedure to create reserves, natural monuments and protected areas / No. 30 (25 December 2003)

Ministerial Decree validating the Regulation on the modalities of elaboration of the land use planning projects on the territories of protected areas, and territories of recreation and cultural heritage / No. 1094 (25 August 2004)
Land use planning projects on territories of protected areas, and territories of recreation and cultural heritage have to be compatible with the decisions of the local administration and the courts and before the project starts, information on the organization, size and persons involved in the project has to be provided.

The Law of Ukraine on ecological network of Ukraine / No. N1864–IV (24 June 2004)

The purpose of the legislation on the ecological network is the management of the ecological network to ensure the sustainable development of Ukraine and to reconcile economic, social, ecological and other public interests (Art. 2).
An ecological network is a contiguous territorial system set up with the purpose to protect the environment, the landscape and biological diversity and the natural habitats of animals and plants. The principles of management of ecological networks include ensuring the functioning of ecosystems and of single components thereof and the unification of the Ukrainian ecological network with the networks of the neighbouring States and the Pan-European ecological network. With the monitoring of the ecological network, the preservation of the integrity of the ecological network through preventive action is facilitated (Art. 20).

The Law of Ukraine on National program of forming the national ecological network of Ukraine for years 2000–2015 / No. 1989 (21 September 2000)
"The principal objective of the Programme is to increase the area of land of the country under the natural landscapes to the level sufficient for the preservation of their diversity close to their initial natural condition and the development of their territorially integrated system built to ensure the possibility to use the natural ways of the migration and propagation of species of plants and animals, which would ensure the preservation of natural ecosystems, species and populations of the flora and fauna" (Point 5/3). One of the major tasks of the Programme is "to develop and take actions aimed at the preservation of coastal landscapes of the Sea of Azov and the Black Sea, to create a network of marine objects of the natural reserve fund"(3).

Decree of the President of Ukraine on the preservation and development of natural reserve fund of Ukraine / No. 392/93 (8 August 1993)

Decree of the President of Ukraine on measures for further development of natural reserves in Ukraine / No. 838 (23 May 2005)

Decree of the President of Ukraine on additional measures for the development of natural reserves in Ukraine / No. 611 (14 August 2009)

Decree of the President of Ukraine on Approval of the Wetlands of National Importance / No. 166 (8 February 1999)

Decree of the President of Ukraine on the Order of Giving Wetlands the Status of Ramsar Lands / No. 1287 (29 August 2002)

4. <u>Legislation regarding marine pollution</u>

Water Code No. 213/95-VR (6 June 1995)
All water resources on the territory of Ukraine are the national property of the people of Ukraine. The Water Code aims to ensure the environmental safety of the population of Ukraine, as well as an efficient water management and its protection against pollution, litter and exhaustion. In the coastal protection zone (up to 2 km), construction of industrial facilities, the use of dangerous pesticides, the deposit of industrial waste and sludge and cesspools for household wastewater are prohibited.

Law No. 2333-III of 2001 regarding validation of the National program of protection and rehabilitation of the areas of the Sea of Azov and the Black Sea (22 March 2001)
The purpose of the National program is to improve the ecological situation of the Sea of Azov and the Black Sea. The document consists of VII Sections. Section I introduces the terminology. Section II

establishes the targets of the Program. Section III defines the current ecological situation of the Sea of Azov and the Black Sea. Section IV specifies the main problems in the Sea of Azov and the Black Sea and outlines ways to solve them. Section V concerns environmental protection arrangements aimed at the gradual improvement of the ecological situation of the Sea of Azov and the Black Sea. Section VI establishes the mechanism to realize the tasks of the Program. Section VII regards international cooperation.

Order of the Ministry of Environmental Protection validating the Regulation on the State Ecological Inspection of the Sea of Azov and the Black Sea / No. 65 (23 February 2004)
The State Ecological Inspection is a special sub-division of the Ministry of Environmental Protection. The Inspection shall ensure the realization of the state policy on environmental protection, on the rational use of natural resources and on radiation safety within the Crimea peninsula. The main tasks of the Inspection shall be: 1) ensuring environmental protection and rational use of the natural resources of the continental shelf and the EEZ of Ukraine and environmental monitoring; 2) ensuring radiation safety; 3) carrying out the state supervision over the observance of the legislation on environmental protection; 4) ensuring the observance of limits of emissions in the atmosphere and of discharge of pollutants into the water basins; 5) ensuring an environmental compatible waste disposal. The State Ecological Inspection shall inspect harbours, enterprises, institutions and organizations carrying out activities that can have a negative impact on the marine environment and Ukrainian and foreign vessels.

Order of the Ministry of Environment on Regulations on the Interdepartmental Committee on Ecology of the Azov and Black Seas / No. 47 (10 February 2004)

Order of the Ministry of Environmental Protection validating the Regulation on quarterly information of the population by mass media on the most polluting sites / No. 397 (1 November 2005)
This order deals with the access to environmental information. The main principles shall be: 1) timeliness; 2) objectivity; 3) completeness and accessibility of the information. The Ministry of Environmental Protection analyzes the collected information and shall accurately define the most polluting sites.

Resolution of the Cabinet of Ministers of Ukraine on Order of Charging the Special Use of Water Resources / No. 75 (8 February 1994)

Rules of Protection of Territorial Seas and Internal Waters against Pollution and Contamination / No. 269 (29 February 1996)

Resolution of the Cabinet of Ministers of Ukraine on the rules for the protection of internal marine waters and territorial sea from pollution and littering / No. 431 (amended 29 March 2002)

Resolution of the Cabinet of Ministers of Ukraine on the Regulation of the State Water Monitoring / No. 815 (20 July 1996)

Resolution of the Cabinet of Ministers of Ukraine on the procedure of development and approval of norms maximum allowable discharge of polluting substances and list of substances to be regulated during discharge / No. 1100 (11 September 1996)

Law of Ukraine - On Waste / No. 187 (5 March 1998)

Resolution of the Cabinet of Ministers of Ukraine on the rules for the protection of surface waters from the pollution by wastewaters / No. 465 (1999 amended in 2002)

Law of Ukraine - On the State Program of the Development of Water Industry (2002)

Resolution of the Cabinet of Ministers of Ukraine on Approval of the Procedure for the Order of Determining the Size and Boundaries of Water Protection Zones and the Relevant Regime of Economic Activities / No. 486 (8 May 1996)

Resolution of the Cabinet of Ministers of Ukraine on the legal regime of sanitary protection zones of water bodies / No. 2024 (18 December 1998)

5. Legislation regarding fisheries management

Law on fishery, industrial fisheries and protection of fishing resources / No. 3677-VI (8 July 2011)
This Law sets forth basic principles with regard to fisheries and the conservation and rational management of aquatic biological resources in inland waters, the internal sea, the territorial sea, the continental shelf and the EEZ of Ukraine. The state policy has the following objectives: (a) ensuring food security; (b) conservation and raising the amount of aquatic biological resources; (c) protection and reproduction of aquatic biological resources; (d) promotion of aquaculture; and (e) observation of international fishery agreements signed by Ukraine (Art. 5).

Law on Fish, other Alive Water Resources and Food Products from Them (2003)

Order of the State Fisheries Department validating the Regulation on industrial fisheries in the fishing water bodies of Ukraine / No. 33 (18 March 1999)
The Regulation determines the modalities of carrying out industrial fisheries.

Order of the State Fisheries Department validating the Regulation on industrial fisheries in the Black Sea / No. 164 (8 December 1998)
The present Regulation establishes the modalities for carrying out industrial fisheries and is compulsory for enterprises, institutions and organizations regardless of the form of ownership, for Ukrainian and foreign nationals in the internal waters, the contiguous zone, the territorial sea, EEZ and the continental shelf as well as in the rivers flowing in the Black Sea.

The total allowable catch shall correspond with the established quota. Fisheries shall be carried out in conformity with the fishing authorization and the permits issued by the state fishing inspection (item 5). The fishing enterprises must provide for the registration of their total catch, respect stock enhancement measures, provide for fishing gear marking, timely report to the fishing inspection of the amount of the catch and for the release into the natural environment of the by-catch of protected species (item 6). The following activities shall be prohibited: 1) discharge of effluent water; 2) removal of illegally installed fishing gear and illegal catch; 3) stop with fishing vessels in areas where fishing is prohibited; 4) use of pesticides in fishing water bodies (item 9). Item 10 establishes fishing areas and the allowed fishing methods and fishing gear for each single water body pertaining to the Black Sea basin.

Decree of the Cabinet of Ministers of Ukraine on approval of the terms, use fish and other aquatic resources of the exclusive (maritime) economic zone of Ukraine / No. 1490 (13 August 1999)

Joint Order of the State Committee for Regulatory Policy and of the Ministry of Agrarian Policy validating Licensing conditions for industrial fisheries within the fishing areas of the fishing water bodies except for inland water bodies (ponds) of fish farming enterprises / No. 132/336 (14 November 2001)
Licenses for industrial fisheries are issued by the State Fisheries Committee.

Ministerial Decree validating the Regulation on the modalities of carrying out artisanal and sport fishing / No. 1126 (18 July 1998)
Artisanal and sport fishing for is permitted in all water bodies of Ukraine except in water bodies pertaining to protected areas, fish farming enterprises or artificial water reservoirs.

Law on aquaculture / No. 5293-VI (18 September 2012)
State policy with regards to aquaculture aims, inter alia, to reconcile ecological, economic and social interests, to enhance fish stocks and to conserve biological diversity.

Law on Fixing Rates for the Compensation Calculation of Damages Caused Due to Illegal Catch or Kill of Valuable Species of Fish and Other Objects of Fisheries / No. 32 (19 January 1998)

Ministerial Decree validating the Regulation on State Fisheries Department / No. 1226 (4 August 2000)
One of the main tasks of the State Fisheries Inspection is the conservation, stock enhancement and rational management of living aquatic resources.

Joint Order of the Ministry of Agrarian Policy and of the Ministry of Environmental Protection validation the Instruction on the modalities of special management of fish and other living aquatic resources / No. 623/404 (11 November 2005)
The Order sets forth the modalities for the management of fish and other living aquatic resources (except for species recorded on the Red Book of Ukraine) in the fishing water bodies including the internal sea, the territorial sea, the EEZ and the continental shelf of Ukraine. Fishing quotas shall be set for species (groups of species) fished in those waters.

Order of the Ministry of Agrarian Policy validating the Regulation on the modalities of stock enhancement of living aquatic resources / No. 215 (8 June 2004)
The Order determines the modalities of stock enhancement and is applicable to all entities engaged in fish farming activities.

Joint Order of the Ministry of Agrarian Policy and of the Ministry of Finance validating the Regulation on the modalities of utilization of budgetary funds for the purpose of stock enhancement of living aquatic resources in the inland water bodies and the Sea of Azov and the Black Sea water basins / No. 132/278 (15 April 2004)
Activities to enhance stocks of living aquatic resources include the release of marketable fishes, hydro-technical works, acclimatization of fishes and measures against epizootic diseases.

Order of the Ministry of Agrarian Policy validating the Regulation on setting up the system of distant monitoring of the fishing vessels / No. 466 (25 December 2003)
The Order determines the modalities of carrying out distant monitoring of the fishing vessels in order to control their compliance with the legislation that aims to manage and protect aquatic living resources.

6. Legislation regarding navigation

Mercantile Marine Code / No. 176/95-VR (23 May 1995)
The Mercantile Marine Code regulates mercantile navigation which includes the use of vessels for transportation of cargo, fishing vessels, the exploration and extraction of minerals, towing and ice-breaking operations.

Code of Trading Navigation / No. 277/94 (1994)

Resolution of the Cabinet of Ministers of Ukraine on the adoption of rates for the estimation of compensation and harmfulness caused by pollution from ships and other floating facilities in territorial and internal marine waters of Ukraine / No. 484d (3 July 1995)

Decree of the Cabinet of Ministers of Ukraine on the Order of Compensation Calculation and Reparation of Damages caused by Pollution from Vessels, Ships and Other Floating Means of Territorial Seas and Internal Waters of Ukraine / No. 116 (26 October 1995)

UMTC Rules of Registration of Operations with Harmful Substances on Ships, Marine Installations and Ports / No. 452/5643 (10 April 2001)

7. Integrated Coastal Zone Management (ICZM)

Land Code / No. 2768-III (20 October 2001)
Land is considered as national wealth and is under special protection of the State. The right of land ownership is guaranteed. However, the rights of the other citizens, the interests of the society and the ecological value of the land are to be respected. The land of Ukraine shall be classified in the following categories: 1) agricultural land; 2) land of protected areas and environmental protection; 3) health; 4) recreational land; 5) cultural heritage land; 6) forests; 7) water; 8) energy. The land that is not owned or leased by the citizens can be classified as reserve land (Art. 19). A land survey is conducted to ensure the rational use and protection of the soil, the creation of a good state of the environment and the improvement of natural landscapes (Art. 182). The main target of the land monitoring is to know the ecological consequences of the use of the land and to prevent negative impacts (Art. 192). A State land cadaster is the basis for cadasters of other natural resources (Art. 193).

On Planning and Development of Territories (May 2001)

Law of Ukraine on the General Scheme for Spatial Planning in Ukraine Territory / No. 3059-III (7 February 2002)

Law of Ukraine on Lands Protection / No. 962-IV (19 June 2003)

Law on tourism / No. 1282 (1 January 2004)
This Law lays down the main principles of Ukraine's state policy with regard to tourism and its sustainability.

Law on Resorts (2000)

Law of Ukraine on Tour Activity in Ukraine" / No. 1115-IV (10 July 2003)

Forest Code / No. 3852-XII (21 January 1994)

The Forest Code aims to protect the forests and to ensure their rational use.

Order of Limitation, Temporary Suspension or Termination of Activities of Enterprises, Institutions, Organization and Objects in Case of Their Violation of Natural Environment Protection (1992)

8. Legislation regarding natural resources exploitation

Presidential Decree validating the Regulation on the State Committee of Natural Resources / No. 177/2004 (10 February 2004)
The State Committee of Natural Resources regulates the geological exploration, research and management of the subsoil and topographic, geodetic and cartographic activities.

Law on oil and gas / No. 2665-III (12 July 2001)
This Law regulates the oil and gas industry, the management of oil-and-gas bearing subsoil and the extraction, transportation, conservation and management of oil and gas.

Decree on the Order of Permit Issuing for Special Natural Resources Use / No. 459 (10 September 1992)

Resolution of the Cabinet of Ministers on approval of the use of water fund lands / No. 502 (13 May 1996)

Major Directions of State Policy of Ukraine in the Sphere of Natural Environment Protection, Natural Resources Use and Nuclear Safety Provision (March 1998)

Resolution of the Cabinet of Ministers of Ukraine on approval of the issuance of permits for works on lands of water fund / No. 557 (12 July 2005).

References:
Milchakova, Nataliya “Report on Environmental Legislation of Ukraine, Use of Natural Resources in the Marine Area and Coastal Marine Region”, 4 January 2014, provided for CoCoNET
“Attracting Investment in Renewable Energy in Ukraine”, Private Sector Development Policy Handbook (November 2012), OECD,
http://www.oecd.org/countries/ukraine/UkraineRenewableEnergy.pdf
Ukraine Sustainable Energy Lending Facility (USELF) “Strategic Environmental Review: Scoping Report“ (January 2011) by BLACK & VEATCH
International Energy Agency “Ukraine 2012 – Energy Policies Beyond IEA countries”:
http://www.iea.org/publications/freepublications/publication/Ukraine2012_free.pdf
Food and Agricultural Organization of the United Nations / FAOLEX: www.faolex.fao.org

Chapter 3b – Mediterranean Legal Inventory

Authors: Laurence Marril (CNRS)

The Mediterranean Basin

"*In its physical landscape as in its human landscape, the Mediterranean presents itself in our memories as a coherent image, as a system where everything mixes and rearranges itself in an original unit. This obvious unity, this deep being…it is not only nature that, to this end, has done much; it is not only the man, who has linked everything together stubbornly; it is both the graces of nature or its curses – both numerous - and the many efforts of men, past and present ...* ".

This statement of Fernand Braudel highlights the need to encourage greater unity amongst the Mediterranean. [817]

The research of this chapter is essential in terms of understanding environmental protection. The health of the marine environment suffers from ever growing pollution problems, coastal development, overfishing, destructive fishing practices, navigation, and climate change impacts. The search for viable solutions has therefore become a priority. There is an increasing interest in the role of support that marine protected areas (MPAs) can play, when they are designed and managed effectively in the maintenance and rehabilitation of healthy seas[818].

Currently, 4.23% of the Mediterranean is classified as "protected" (see Figure 3). The largest site is the Pelagos Sanctuary which represents 3.84% of the total protected area. For the moment MPAs are limited to coastal areas and are almost entirely located in the north-west Mediteranean.

[817] **N°449- ASSEMBLEE NATIONALE- 5 déc 2007-RAPPORT D'INFORMATION** déposé *en application de l'article 145 du Règlement,* par LA COMMISSION DES AFFAIRES ÉTRANGÈRES *en conclusion des travaux d'une mission d'information constituée le 31 juillet 2007* [(1)]*, sur le thème* **« Comment construire l'Union méditerranéenne ? »** http://www.assemblee-nationale.fr/13/rap-info/i0449.asp

[818] Gomei M. et Di Carlo G. 2012. Assurer l'efficacité des aires marines protégées. Leçons tirées en Méditerranée. WWF Méditerranée. 56 pages.

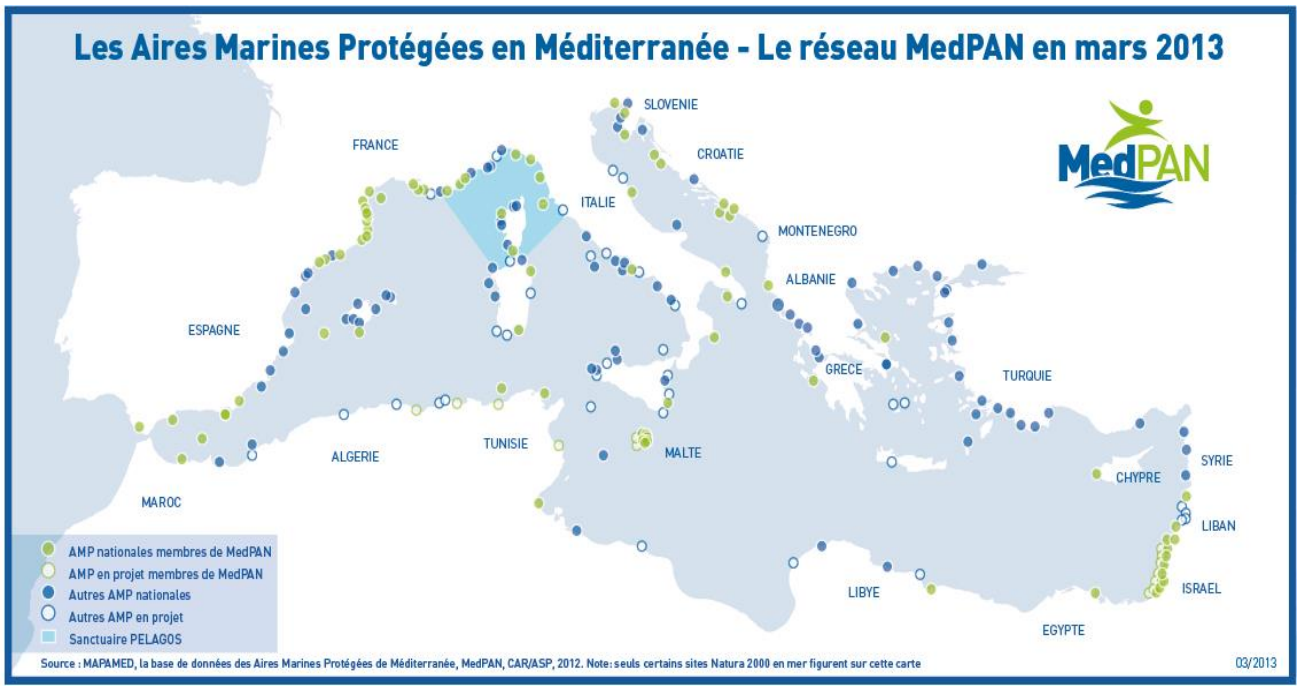


Figure 3: MPAs in the Mediterranean

This inventory will look beyond the coverage and biodiversity protection provided by MPAs. It will also assess MPAs as a tool for the management of marine space.

"Unfortunately, on too many occasions, the debates on the role and potential of MPAs as management tools have been dominated by two radical designs. On the one hand, some argue that MPAs can certainly help to protect specific sites that are of particular scientific interest or aesthetic value. But, in this case, no overall benefit, such as supporting sustainable fisheries, can be drawn from it. On the other hand, others believe that MPAs are a panacea for all ills affecting the marine world.

The truth lies somewhere between these two simplistic visions, all of which are unnecessary distractions. MPAs can make a significant contribution to the protection and preservation of goods and services offered by a healthy sea; a well designed and effectively managed network of MPAS can be a key element of the management process that ensures durability of fisheries. We also know that protected areas which provide habitat and a rich diversity, attract marine tourism. Effective MPAs are a valuable asset and provide benefits to each, non-functional MPAS are not."[819]

We adhere to this vision of John Tanzer, *Director of the Global Marine Programme WWF International*, which explains the difficulty of ensuring that MPAs are an integral part of a management framework, and recognized for this role, as well as preserving ecosystems services. In this context it is necessary to allow different regulations and arbitrations requested by society. The sea is foremost, for administrative law experts, a public good.

[819] *Gomei M. et Di Carlo G. 2012. Assurer l'efficacité des aires marines protégées. Leçons tirées en Méditerranée. WWF Méditerranée. 56 pages. Avant propos*

Currently at the basin level, there is an increasing number of local protected areas (providing strict protection for habitats and species) and the development of large protected areas, with multi-use purposes. Both use different legal regime for protection.

"*The multiplication of marine protected areas and (especially the largest ones), is a new political phenomenon. Their legal content is often poorly defined and it appears that their normativity is generally quite low and inversely proportional to their size. But these initiatives mark a new step in the law of the sea in which coastal states now assert their sovereignty over natural resources through science and environmental protection, in order to better monopolize them*.[820]"

The use of the IUCN categories by different countries is important, in order to recognize the adopted legal status.

In 2007, according to the IUCN, the national country names for each IUCN category were analyzed[821]:

"*In the case of MPAs, 3 possible legal ranks have been compared with the IUCN category:*

- *Order (departmental or sectoral)*
- *Decree (Presidential)*
- *Law (Parliamentary)*

There is considerable variation between countries. Some have used the maximal rank (the Law) for MPAs (e.g. National Parks: Croatia, Italy and Lebanon). Other countries do not have laws designating MPAs, the use of a decree being more common, even in the case of some national parks (e.g. France, Greece, Italy, Morocco, Tunisia). More frequently sectoral Orders are used (in almost all countries) in the case of Categories IV and V.

As the sea is of public heritage, the predominant form of MPA management is through the Ministries of Environment, Fisheries, Integrated Municipal committees or other jurisdictions."

This inventory will maintain the notion of effectiveness of MPAs, which is dictated by the institutions which govern them. This will be achieved by focusing the inventory on national laws, institutions and administrative procedures that frame them.

In fact, the country inventory corresponds to the historical reality of management of the basins, as specified in the IUCN report[822]:

[820] François Feral, « L'extension récente de la taille des aires marines protégées : une progression des surfaces inversement proportionnelle à leur normativité », *VertigO - la revue électronique en sciences de l'environnement* [En ligne], Hors-série 9 | Juillet 2011, mis en ligne le 06 juillet 2011, consulté le 08 juillet 2014. URL : http://vertigo.revues.org/10998 ; DOI : 10.4000/vertigo.10998

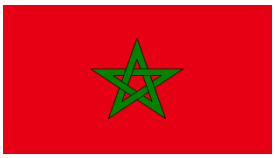
[821] (2007).Arturo López Ornat, Anna Pons Reynés (Pangea Consultores S.L.) en colaboration avec Mika Noguera, *Utilisationdes catégories de gestion des aires protégées de l´UICN en Méditerranéene*. Consejeria de Medio Ambiente de la Junta deAndalucia, Sevilla, Espagne et UICN, Gland, Suisse et Malaga, Espagne. 211 p.

[822] Barbara Lausche (2012) Guidelines for protected areas legislation Gland, Switzerland. IUCN. xxviii + 406 p.87

"*The governance of marine areas is firstly built around the State or within its control*".

If new forms of governance and management of MPAs appear, through transnational or regional cooperation, the national commitments remain essential.

This is especially important as the Mediterranean Sea is in transition towards a generalized EEZ system. Within this new system it will be the responsibility for coastal states to protect areas which fall within their new, expanded, jurisdictions.



MOROCCO

L'AMP marocaine d'Al Hoceima, située entre Ceuta et Nador (photo MedPAN) in Econostrum : http://www.econostrum.info/Developper-les-Aires-marines-protegees-un-defi-pour-la-Mediterranee_a12731.htm

With the contribution of Prof. Sarra Sefrioui, Université Abdel Malek Essaâdi – Tanger-Observatoire des études Méditerranéennes.

1. PRESENTATION AND HISTORY[823]

Morocco's Mediterranean coastline is approximately 512 km long. It has a further 2934km of coastline boarding the Atlantic.

From the physical point of view, the Moroccan coast is relatively straight, except for some very prominent caps in the Mediterranean. It has few bays often largely opened, with the exception of the bay of Dakhla.

Among the open bays the areas of Al Hoceima, Tangier, Azemmour, Essaouira, Agadir and Cintra are located.

[823] Extraits des Rapports nationaux sur l'état de l'environnement du Maroc: Biodiversité et milieu Naturel, chapitre III, 2001 et rapport de diagnostic, 2010 http://www.environnement.gov.ma/PDFs/REEM/Biodiversite_Milieu_Naturel.pdf

The Mediterranean coast consists of sandy beaches, rocky shores, steep cliffs and high dunes along the coastal strip. These are interspersed with wadis and lagoons.

The fisheries resources of Morocco are large and diverse but have yet to be sufficiently evaluated. It is among the largest producers of sardines in the world, and the second largest producer of fish in Africa.

The marine and coastal biodiversity of Morocco is enhanced by its position on the Mediterranean border between Europe and Africa.

Morocco's maritime space is also extremely important as, since claiming its EEZ, it has expanded to >1,000, 000, km2. It is now thought that approximately 10% of the Moroccan marine fauna has a socio-economic interest.

State of biodiversity of fauna and flora

The fauna and flora of Morocco's have been the subject of previous national inventories. These include the National Study on the Biodiversity, prepared by the Department of Environment in 1997, and the Study on protected Areas (Ministry in charge of Water and Forests, 1995), as well as other sectoral or specialized studies.
These evaluations showed that Moroccan biodiversity is one of the richest in the Mediterranean, in terms of the total number of species, and endemic species.

Protected Areas Legislation

Morocco has both international and national commitments and frameworks to support establishing protected areas:

International

Morocco has ratified and signed a series of agreements concerning the protection of natural resources (including the marine environment and the atmosphere)

Morocco is also a signatory of the International Convention on Biological Diversity (CBD) which is seeking to establish a network of protected areas covering at least 10% of the oceans by 2020.

National

The following national legislations are relevant to establishing MPAs:

Director plan of protected areas 1996
This is mostly concerned with establishing terrestrial protected areas.

Law No. 22-07 of 16 July 2010
This law on protected areas was recently enacted.

The Halieutis strategy

This is an important strategic point regarding the sustainability of fisheries resources.

National Charter for the Protection of the Environment and the Sustainable Development (CNEDD)

Establishing Protected Areas
Between 1942 and 2008 Morocco declared 10 national parks. These include approximately 810,400 ha of Atlantic marine areas.

Additionally, three Biosphere Reserves have been established:

- The Biosphere Reserve of the Argan tree
- The Biosphere Reserve of the Southern of Morocco oasis
- The Intercontinental Biosphere Reserve of the Mediterranean.

All Moroccan MPAs are built around the following model described by FAO:

"An MPA is a marine geographic area which, for the purpose of biodiversity conservation or fisheries management, has a better protection than the surrounding waters"

Under the IUCN criteria this is described as: an area managed for multiple-use (Category 6 IUCN).

Three MPA pilot sites are currently being established in the Alboran Sea. These cover an area of 750 km².

This project will allow for the development of national strategies of MPAs and the preparation of legal texts.

Within the project the national strategy for the development of MPAs for fisheries will be developed in cooperation with the department of marine fisheries. This will be implemented by the Agency for the Partnership for Progress and funded by the Millennium Challenge Corporation (USA).

2. LEGAL FRAMEWORK

At a national level it is the Moroccan government's objective to maintain all types of ecosystems and habitats represented in the country. In order to achieve this two laws have been passed:

Law (of 11th September 1934) on the establishment of national parks
This does not expressly deal with establishing MPAs or extending national parks into the adjacent marine areas. However, it has been the basis for the creation of Al Hoceima National Park.

Law No. 22-7 (16th July 2010) on protected areas
This law provides basic rules and general principles of the national policy for the protection and enhancement of the environment. The main objective is to preserve biodiversity and natural heritage. It includes the process of creation and management of protected areas and their

management bodies. It also includes guidelines for involving local authorities, local populations and stakeholders in the sustainable development of protected areas.

At an international level, four main pieces of legislation are relevant to the establishing MPAs in Morocco:

Convention for the Protection of the Mediterranean Sea against Pollution (Barcelona Convention)

Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean June 10th, 1999.

Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean on 14th December 1999.

Action Plan for the conservation of marine turtles in the Mediterranean in 1989, revised in October 1999

3. INSTITUTIONAL FRAMEWORK[824]

The field of environmental protection belongs to a multitude of ministerial departments, public, semi-public and private bodies. These represent the management, coordination or consultation institutions for the environment. This diversity of responsibilities has both advantages and disadvantages.

In terms of benefits, it allows for specialist sectorial management (e.g. water, forest, land-use planning, etc.) and a macro-economic vision. This means agencies to the multidisciplinary issues with a more focussed manner. For this to be successful it is necessary for there to be a high level of co-operation between agencies/sectors.

However, multiple levels of specialist management can also create problems. This includes a lack of consensus between specialists and lack of accountability where there are overlaps.

The Department of the Environment, created in 1992, is responsible for developing and implementing government policy in the field of environmental management. It is also called to intervene in matters of coordination of environmental protection actions at the national level. However, due to a lack of local representatives and means of direct action, the departments efforts are often confined to animation, promotion and advocacy actions for the protection of the environment. As Morocco has opted for a decentralised political system, the environmental responsibilities are now the responsibility of the local authorities according to the municipal charter.

Nevertheless, the transfer of powers to the local authorities has not been accompanied by a transfer of sufficient resources, allowing them to ensure a rational and sustainable management of the local environment.

[824] Extraits des Rapports nationaux sur l'état de l'environnement du Maroc: Biodiversité et milieu Naturel, chapitre III, 2001 et rapport de diagnostic, 2010 http://www.environnement.gov.ma/PDFs/REEM/Biodiversite_Milieu_Naturel.pdf

To fulfill its mission, and to ensure the necessary coordination with the other ministerial departments, the Department of the Environment organizes periodic sessions of the National Environment Council (CNE). This body provides guidance and coordination for government action concerning environmental protection.

Ministerial departments
The ministerial departments responsible for the biodiversity are:

- The Department of Environment
- The Department for Development of Territory
- The Department of Water and Forestry
- The Department of Agriculture
- The Department of Marine Fisheries
- The Department of Scientific Research
- The Department of Culture

Other departments or agencies are involved with biodiversity to a lesser degree. These include:

- The Department of Foreign Affairs
- The Department of National Education
- The Department of Infrastructure
- The Department of Energy and Mines

Bodies for scientific research

Additionally, there are a number of bodies conducting scientific research in relation to biodiversity. These include:

- Scientific Institutes
- National Centre for Coordination and Planning of Scientific and Technical Research
- National Institute for Agricultural Research
- National Centre for Fisheries Research
- Agronomic and Veterinary Institute Hassan II
- National School of Forestry Engineers
- Universities

Consultation Bodies

In Morocco external bodies also provide advice on biodiversity management. These include:

- National Environmental Council (CNE)
- National Committee on Biodiversity

- National Board of Forestry
- Superiors councils
- The Advisory Committee on National Parks
- The Committee on Inland Fisheries
- Moroccan Committee for IUCN
- Commissions of Distraction for the Coastal and Forest and CICATEL

Non-Governmental Organizations (NGOs)

NGOs have become an increasingly visible and important part of Moroccan nature conservation in recent years. These organizations often represent the civil society and the voluntary initiatives of groups of local people. The increasing numbers of these organisations has been an important development of these for the protection of the environment and natural resources.

4. LEGISLATION REGARDING MARINE POLLUTION

Legal framework for prevention against marine pollution

In order to protect its waters from marine pollution Morocco has implemented a monitoring programme as part of the Action Plan for the Mediterranean (PAM). This is an implementation of the 1976 Barcelona Convention and its protocols.

Law No. 11-03 of 12 May 2003 - protection and enhancement of the environment.
This law provides the basis for the following:

- Protection of the environment against all forms of pollution
- Implementation of a specific regime of responsibility for the compensation of damage caused to the environment
- Victim compensation
- The Section V of Chapter II of the Framework Law concerns the specific protection of marine and coastal environments, of space and marine resources, including the coastline
- Future intervention of legislative and regulatory dispositions

Law No. 28-00 - relating to international standards of waste management and disposal

Law No. 10-95 – water
This law gives the administration the power to fix "the quality standards that must be met by a water according to the use that will be made" (Article 51.)

Decree No. 2-04-523 of 24th January 2005
This relating to spills, discharges, releases, and direct or indirect deposits in surface water or groundwater. It also defines the discharge limit value. It is revised every 10 years.

Joint Order No. 1606-1606 of 25th July 2006
This describes the specific discharge limit values for industries of pulp, paper and paperboard.

Joint Decree No. 1180-1106 of 12th June 2006
This describes the rates of charges applicable to wastewater discharges.

Decree N° 2-95-717 of 22nd November 1996
This relates to the preparation and response National Accidental Pollution events (Plan National Urgent (PNU)).

Law N° 3-3-00 of 16th July 2003
This concerns activation of the PNU, roles of different actors, staff training, etc.

Ministry of Spatial Planning, Water and Environment (MATEE) has the overall responsibility for preventing marine pollution.

To fulfil this role they involve inter-ministerial institutions in cooperation with the government, professionals, academicians and specialist experts. These include:

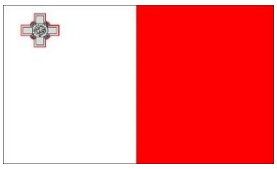
- La Commission du Littoral, qui détermine de manière générale la politique sur le développement du tourisme et de l'espace
- L'Observatoire National de l'Environnement et son réseau régional d'observation, qui surveillent la qualité de l'environnement
- Le Conseiller national de l'Environnement
- La Commission Nationale des Etudes d'Impact sur l'Environnement
- Le Conseiller supérieur de la sauvegarde et de l'exploitation du patrimoine halieutique
- Le Conseil le supérieur de l'eau et du climat
- Le Conseiller supérieur de la gestion territorial
- Le Comité National sur la Biodiversité
- Le Comité National sur les Zones Humides

Additional ministries dealing with the environment include:

Le **Conseil supérieur de l'aménagement du territoire** (CSAT): forum de concertation sur les questions fondamentales d'intérêt national ayant trait à l'utilisation des terres.

Le **Conseil national de l'environnement** (fondé en 1980 et réorganisé en 1995) : forum de concertation entre l'ensemble des parties prenantes concernées (ministères, communautés locales, industriels, ONG, universités) sur des questions environnementales d'importance nationale.

La **Commission interministérielle permanente pour l'utilisation des terres** examine les modalités de la mise en œuvre des résolutions prises par le Conseil supérieur de l'utilisation des terres.



MALTA

Une AMP à Malte, entre Rdum Majjiesa et Ras ir-Raheb. Photo : M. Otero, in *Otero, M., Garrabou, J., Vargas, M. 2013. Les AMP méditerranéennes et le changement climatique : guide dédié au suivi régional et aux opportunités d'adaptation. Malaga, Spain : UICN. 52 pages*.

1. PRESENTATION AND HISTORY[825]

The Maltese Islands supports a variety of important and unique habitats and species, a number of which are protected through legislation. It is also important to protect the wider areas where these are found. In view of this, Malta has designated a series of protected areas under both national and international legal instruments.

Legal instruments under which protected areas have been designated include:

National Legislation

This consists of Government Notices and Legal Notices issued under the auspices of the Development Planning Act (DPA) and the Environment Protection Act (EPA)

Multilateral Agreements

These include: Bern Convention, EU Birds Directive, EU Habitats Directive, Ramsar Convention, Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA & Biodiversity Protocol)

[825] Malte : section environnement du site gouvernemental, Malta Environment & Planning Authority

Table 1 sumerises the types of legally protected areas in Malta and the legal instruments used to declare them.

Table 1: Designated types of protected areas and their legal instruments

Designation	Legal Instrument
Areas of Ecological Importance & Sites of Scientific Importance	national DPA
Bird Sanctuaries	national EPA
Nature Reserves	national EPA
Special Areas of Conservation (national importance)	national DPA & EPA
Special Areas of Conservation (international importance)	national DPA & EPA form part of the Natura 2000 Network under the EC Habitats Directive
Special Protection Areas	national DPA & EPA form part of the Natura 2000 Network under the EC Birds Directive
Ramsar Sites	Ramsar Convention
Specially Protected Areas	SPA & Biodiversity Protocol

The Malta Environment and Planning Authority (MEPA) is the competent authority with regards to setting up and regulating protected areas in Malta.

At the end of 2008, the Maltese Islands had over 20% of its land area protected, at under at least one of the above-listed designations. Work is currently in progress to enhance the network of MPAs.

A complete list of the important natural areas afforded protection, *specifically under national legislation* is available through the Common Database on Designated Areas (CDDA).

The management of protected areas is of utmost importance. MEPA has enhanced capacity-building in this respect in recent years, with assessment, management and enforcement being considered. Additionally, MEPA is continuously involved in projects aimed at the establishment of protected areas, as well as the drafting and implementation of management plans. A project has been proposed for funding (EAFRD 2007-2013) under the Rural Development Programme for Malta, with the aim of developing management plans for the Natura 2000 sites designated to date.

Historically, MEPA has received technical support related to protected areas through participation in externally funded projects. These include:

- EC ERDF project on the Filfla candidate marine protected area
- EC LIFE Third Countries project on the Dwejra Special Area of Conservation
- EC Interreg IIIC MedPAN project on a network of marine protected areas
- EC Interreg IIIC Parks Network Project on a network of terrestrial protected areas
- EC SMAP MedMPA project coordinated by RAC/SPA
- EC Transition Facility Funds Natura 2000 Twinning Project with Austria and Italy

- Mission on the Marine Protected Area Strategy and designation of Special Area of Conservation

To date, Malta has declared five MPAs (See Figure 4). The first MPA, declared in 2005 under the Environment Protection Act 2001, is between Rdum Majjiesa and Ras ir-Raħeb on the west coast of the island. This area is now included in the Natura2000 network.

The second MPA, originally designated in 2007 and re-designated in 2010, is adjacent to Dwejra, on the western coast of the island of Gozo. Another three MPAs were declared in 2010. The first of these is a significant stretch of sea along the North East of the islands, while the two smaller areas are at Mġarr ix-Xini in Gozo and an area between Għar Lapsi and the island of Filfla on the south coast of Malta.

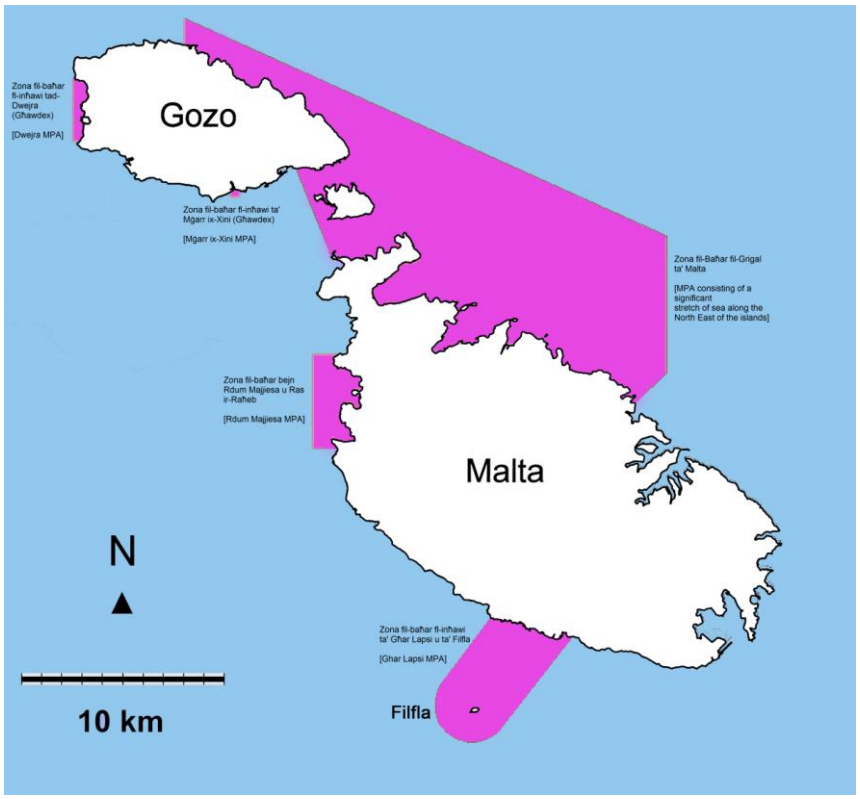


Figure 4: Map of the Maltese Islands showing the location of the five marine protected areas declared to date.

At present there are no specific management plans for any Maltese MPAs, although the sea and coastal areas included within their boundaries are subject to the provisions of national legislation. Both the Rdum Majjiesa to Ras ir-Raħeb MPA and the Dwejra MPA are adjacent to, and contiguous with, terrestrial protected areas (NATURA 2000 sites) for which specific management plans exist.

In the case of the Dwejra MPA, a management plan (termed 'Action Plan') covers both terrestrial and marine areas. However, the marine part of the plan, including the zoning proposals for the MPA, has yet to be formulated into legally enforceable provisions.

In the case of the Rdum Majjiesa to Ras ir-Raħeb MPA, a framework management plan, that includes zoning proposals, has been formulated. However, this is still awaiting approval by the Board of MEPA.

Categories of protected areas

Zona fil-Baħar Bejn Rdum Majjiesa u Ras ir-Raħeb

This site was designated a Special Area of Conservation (Candidate Site of International Importance) via Government Notice 112 of 2007. This was declared through the provisions of the Flora, Fauna and Natural Habitat Protection Regulations, 2006.

Zona fil-Baħar fl-Inħawi tad-Dwejra (Għawdex)

This site was originally designated a Special Area of Conservation (Site of National Importance) through Government Notice 161 of 2007. This designation was repealed and the same area was designated a Special Area of Conservation of International Importance by Government Notice 851 of 2010. It was declared through the provisions of the Flora, Fauna and Natural Habitat Protection Regulations, 2006.

Zona fil-Baħar fil-Grigal ta' Malta

This site was designated a Special Area of Conservation of International Importance via Government Notice 851 of 2010. It was declared through the provisions of the Flora, Fauna and Natural Habitat Protection Regulations, 2006.

Zona fil-Baħar fl-Inħawi ta' Mġarr ix-Xini (Għawdex)

This site was designated a Special Area of Conservation of International Importance via Government Notice 851 of 2010. It was declared through the provisions of the Flora, Fauna and Natural Habitat Protection Regulations, 2006.

Zona fil-Baħar fl-Inħawi ta' Għar Lapsi u ta' Filfla

This site was designated a Special Area of Conservation of International Importance via Government Notice 851 of 2010. It was declared through the provisions of the Flora, Fauna and Natural Habitat Protection Regulations, 2006.

The site is also afforded some degree of protection under the Malta Maritime Authority Act (Cap. 352) through Government Notice 173 of 1990 (issued in terms of Legal Notice 117 of 1975 - Berthing Regulations), which refers to berthing in an area of one nautical mile radius around the island of Filfla.

2. LEGAL FRAMEWORK

Flora, Fauna and Natural Habitat Protection Regulations, 2006 published as Legal Notice 311 of 2006

These regulations transcribe the EU Habitats Directive into Maltese legislation and allow the designation of protected areas. They also incorporate the requirements of the Bern Convention and the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (SPA

& Biodiversity Protocol) of the Barcelona Convention. These regulations are also responsible for managing MPAs and protected areas.

Legal Notice 322 of 2013 - Flora, Fauna and Natural Habitats (Amendment) Regulations, 2013
The schedules forming part of these regulations were amended by the above legal notice. These regulations are published is the Environment and Development Planning Act (Cap. 504).

Environment and Development Planning Act (Cap. 504)

Legal Notice 79 of 2006 - Conservation of Wild Birds Regulations, 2006

Official designations of protected areas are published as Government Notices. The following notices are have been used to declare MPAs in Malta:

- Zona fil-Baħar Bejn Rdum Majjiesa u Ras ir-Raħeb- (Government Notice 112 of 2007)
- Zona fil-Baħar fl-Inħawi tad-Dwejra (Għawdex)- (Government Notice 161 of 2007, re-designated by Government Notice 851 of 2010)
- Zona fil-Baħar fil-Grigal ta' Malta- (Government Notice 851 of 2010),
- Zona fil-Baħar fl-Inħawi ta' Mġarr ix-Xini (Għawdex)- (Government Notice 851 of 2010)
- Zona fil-Baħar fl-Inħawi ta' Għar Lapsi u ta' Filfla- (Government Notice 851 of 2010)

[Note: 'Cap.' refers to the relevant chapter of the Laws of Malta]

3. INSTITUTIONNAL FRAMEWORK

The Maltese Parliament is the overriding legislative body responsible for protected areas

Within the Maltese Parliament, MEPA is the competent authority with regards to setting up and regulating protected areas.

4. LEGISLATION REGARDING MARINE POLLUTION

Merchant Shipping Act (Cap. 234)

Legal Notice 194 of 2004 (Water Policy Framework Regulations, 2004)
This legislation transposes the obligations of the EU's Water Framework Directive 2000/60/EC

Legal Notice 24 of 2011 (Water Policy Framework Amendment) Regulations, 2011

Legal Notice 73 of 2011 (Marine Policy Framework Regulations, 2011)
This legislation transposes the obligations of the EU's Marine Strategy Framework Directive 2008/56/EC

Legal Notice 10 of 2013 – Industrial Emissions (Integrated Pollution Prevention and Control) Regulations, 2013

Legal Notice 341 of 2001 - Quality required of Shellfish Waters Regulations, 2001
Legal Notice 340 of 2001 – Urban Waste Water Treatment Regulations, 2001

Legal Notice 233 of 2004 - Protection of Waters against Pollution caused by Nitrates from Agricultural Sources (Amendment) Regulations, 2004

Legal Notice 278 of 2004 - Port Reception Facilities for ship-generated wastes and cargo residues Regulations, 2004 / Legal Notice 332 of 2012 – Port Reception Facilities for Ship-Generated Wastes and Cargo Residues (Amendment) Regulations, 2012

5. LEGISLATION REGARDING FISHERIES MANAGEMENT

Fisheries Conservation and Management Act (Cap. 425)
As amended by Legal Notice 426 of 2007; and Acts XV of 2009 and IV of 2013)

Legal Notice 354 of 2013 - Implementation and Enforcement of Certain Fisheries Management Plans Order, 2013

Legal Notice 209 of 2011 - Enforcement of Sea Fishing Conventions Order, 2011 / Legal Notice 273 of 2013 - Enforcement of Sea Fishing Conventions (Amendment) Order, 2013

Legal Notice 407 of 2013 - Management of the Lampara Fishery Order, 2013

Legal Notice 407 of 2004 - Fishing Vessels Regulations, 2004 / Legal Notice 313 of 2008 - Fishing Vessels (Amendment) Regulations, 2008

Notice to Mariners 5 of 2008 - Conservation Areas Around Wrecks

Notice to Mariners 67 of 2004 - Conservation Area Off il-Merkanti Shoals

6. LEGISLATION REGARDING NAVIGATION

Merchant shipping Act (Cap. 234)

Authority for Transport in Malta Act (Cap. 499)

7. INTEGRATED COASTAL ZONE MANAGEMENT (ICZM)

There is no currently legislation on ICZM in Malta. However, there are the following policy documents:

Coastal Strategy Topic Paper [Malta Environment and Planning Authority (2002). Coastal Strategy Topic Paper. Floriana: MEPA. Accessible from the Malta Environmental and Planning Authority portal at: www.mepa.org.mt/file.aspx?f=3022]

Report (2011) on the implementation of the recommendation of the European Parliament and of the Council concerning the Implementation of Integrated Coastal Zone Management in Europe (2002/413/EC) – Malta

Legal Notice 185 of 2013 - Infrastructure for Spatial Information Regulations, 2013

8. LEGISLATION REGARDING NATURAL RESOURCES EXPLOITATION

Malta Resources Authority Act (Cap. 423)

Continental Shelf Act (Cap. 194)

ITALY

AMP de Torre Guaceto (Italie). Photo: F. De Franco Tempesta M., In Otero M. 2013. *Guide pour l'évaluation rapide de la gestion des AMP méditerranéennes*. WWF Italie, UICN. 68 pages

Authors: Valentina Grande[1], Francesco De Leo[2], Federica Foglini[1], Simonetta Fraschetti[2]

1. **CNR-ISMAR Bologna, Italy**
2. **CONISMA, Lecce, Italy**

1. PRESENTATION AND HISTORY[826]

The first Italian marine protected areas (MPAs) were established in the 1970s. The first MPAs were prepared on the basis of the Law on Marine Fisheries and were implemented as "biological protection zones."

Since 1971 several protected areas have been created on this basis. This period corresponds with the early development of a mass tourism in the Mediterranean, a decline in professional fishing in favour of recreational activities. Since this period, all Italian coastlines have experienced a similar evolution with the addition of new industrial activities (e.g. Oil exploration). Additionally, marine protection policies have also evolved by developing tools better suited for multi-use areas.

[826] Extraits, S.MABILE, **Contribution volontaire :** L'elaboration d'un réseau d'aires marines protégées dans le cadre d'une décentralisation marquée : les exemples italiens et Espagnols, UICN, 2007

In 1982, a Law on the Protection of the Marine Environment introduced the concept of protected areas. 20 years after its adoption, this law remained the only legal framework specifically designed for MPAs in the Mediterranean.

The concept of natural MPAs is defined in the Article 25 of the 1982 Law as:

"*Composed of marine natural environment, the waters, from the depths and the adjacent coastline which present a considerable interest for their natural, geomorphological, physical or biochemical characteristics, especially regarding the marine and coastal flora and fauna, as well as the scientific, ecological, cultural, educational and economical importance they assume*"

The implementation of the provisions of the 1982 Law, reinforced by the adoption of new laws related to MPAs, has led to a substantial increase in the number of Italian MPAs.

Italy currently has 27 MPAs and one Underwater Park (See Figure 5).

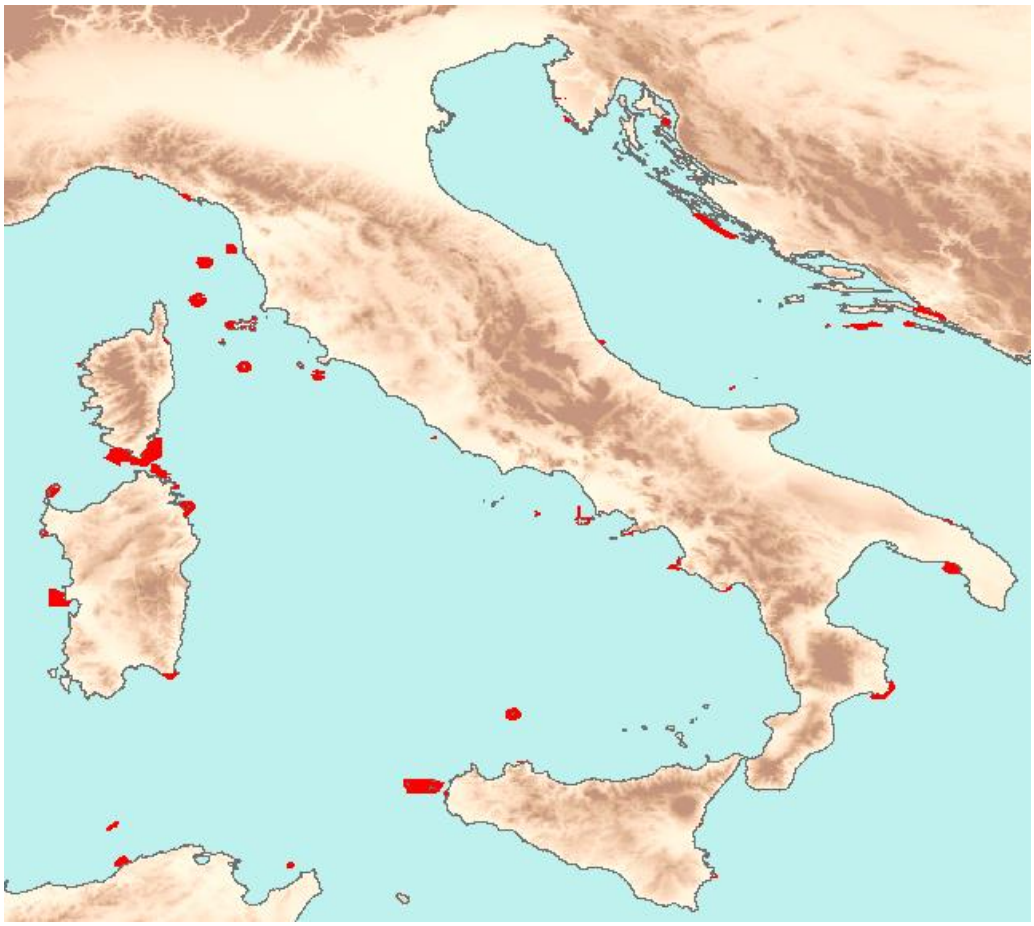


Figure 5: Map of Italian MPAs and Underwater Parks

2. LEGAL FRAMEWORK

The procedure for selecting and creating of MPAs[827]
The Technical Secretariat of Marine Protected Areas under the Ministry of the environment plays a central role in selecting and creating MPAs. This organization consists of experts, members of the Board of Directors of the Central Institute for Scientific and Technological Research applied to the Sea Fisheries (ICRAM), as well as representatives of associations of environmental protection.

Under the law of 31 December 1982 the Council for the Defence of the sea and pollutions is responsible for identifying areas suitable for MPAs. They do this by assessing the following criteria:

- The natural conditions present within the site
- The ecological, scientific, cultural, educational, economic and extractives activities which will take place within the site
- Prospective study and research programs
- The implications of protection for marine navigation and exploitation of natural resources
- Derivative effects of the MPA on the marine and coastal environment
- Derivative effects of the MPA on the local economy and stakeholders
- The protective and recovery measures, necessary to achieve the objectives of the marine reserve

Based on the available information provided by scientific institutes, laboratories and research organizations, the Technical Secretariat of Marine Protected Areas (formerly the Council for the Defence of the Sea) on whether an MPA should be declared.

[827] Extraits, S.MABILE, **Contribution volontaire :** L'elaboration d'un réseau d'aires marines protégées dans le cadre d'une décentralisation marquée : les exemples italiens et Espagnols, UICN, 2007

The 1982 law initially established a list of 20 sites with the potential to be declared MPAs. The list consisted of sites already under protection (e.g. Miramare, Montecristo, etc.), as well as those subject to academic research.

Only sites identified in the 1982 law can be declared MPAs. This establishes a control of the legislation for the establishment of MPA networks.

Once a site is registered, the administration can initiate the preliminary studies of the area and its users. However, the real creation occurs through the publication of a specific decree which defines the zoning, regulations and also the management body. Management bodies can be formed of NGOs (e.g. WWF-Italy in Miramare), the management body of an adjacent terrestrial protected area, or more frequently, a consortium of local governments (municipality or province).

Universities are also involved in the management of the MPAs. For some of the first MPAs, a near-by port was often responsible for its management. Due to conflicts of interest this is no longer practiced.

A national system is in place which classifies MPAs according to 'Zoning'. This is shown in Figure 6.

Figure 6: Italian MPA Zoning System

There ae three types of zone:

Zone A

An integral reserve. All activities that disturb or damage the marine environment are forbidden. Some service activities are allowed and research activity is regulated.

Zone B

A general reserve. Multiple activities are allowed and are regulated by the management body. Permitted activities are decided on a case-by-case basis but they are only allowed if they have minimal impacts on the environment.

Zone C

A partial reserve. This is a buffer zone between strictly protected areas and areas where all activities are permitted. All the sustainable activities are regulated by the management body.

Occasionally a Zone D is implemented which acts as a further extension of the MPA.

The management body can regulate several activities in the different zones, with the aim of a gradually increasing protection and to meet the requirements of the territory.

Designating an MPA[828]

There are four distinct lists of sites/MPAs. Progress through these lists eventually reaches the ultimate goal of being declared an MPA. The lists are:

1. List of declared MPAs
2. List of MPAs to be declared (these are subject to consultation which will define the site characteristics e.g. size, zoning regulations, etc.)
3. List of sites being studied to assess their suitability
4. List of sites identified as potential MPAs

The 1991 framework law added 26 additional potential sites to the original 1982 list. This brought the number of potential MPAs up to a maximum of 46.

One of its provisions of the 1998 law took into account the creation of the Pelagos Sanctuary for Marine Mammals Protection in the Ligurian Sea (Article 2, paragraph 10) under an international agreement between France, Italy and Monaco.

The 1991 framework law on protected areas helped to develop this, by integrating it into a global strategy for nature protection.

The law of December 6, 1991 (394/91) also introduced a system of macro planning at the national level, both for the terrestrial environment and for the marine environment.

The law established the following forbidden activities:

[828] Extraits, S.MABILE, **Contribution volontaire :** L'elaboration d'un réseau d'aires marines protégées dans le cadre d'une décentralisation marquée : les exemples italiens et Espagnols, UICN, 2007

- Capture, collection and damage of flora and fauna, as well as the exploitation of minerals and archeological sites
- Alteration of the geophysical environment and of the chemical and hydrobiological characteristics
- Promotion and advertising activities
- Arms, explosives and equipment for capture and destruction activities
- Navigation with motorboats
- Solid and liquid discharges (pollution)
- Access for unauthorized people

3. INSTITUTIONNAL FRAMEWORK

In Italy, the national government in Rome has the authority to designate MPAs. The Nature Protection Service in the Ministry of Environment and Territorial Protection administers and manages the MPA program in Italy.

Once an Italian MPA is designated, the national government delegates management authority to a local entity or consortium of entities to manage the site. In some cases, a city will solely be the managing entity. In other cases, a consortium of one or two local cities and a provincial government (similar to a county) will be formed for management, with one party having the controlling share.

Several sites are wholly, or partially (as part of a consortium), managed by a national environmental organization. A university also sits on at least two managing consortiums. Nearly all of the MPAs adjoin terrestrial national, regional or provincial parks, and at least two of the MPAs are managed by the terrestrial park's management entity.[829]

The **ministère de l'Environnement, de la Protection du territoire et de la Mer de l'Italie**[830] (*Ministero dell'Ambiente e della Tutela del Territorio e del Mare*, MATTM) is a ministerial department of the italian Republic. :
La struttura organizzativa del Ministero dell'ambiente e della tutela del territorio e del mare è disciplinata dal Decreto del Presidente della Repubblica 3 agosto 2009, n. 140 *recante "Regolamento recante riorganizzazione del Ministero dell'ambiente e della tutela del territorio e del mare".*
Il Decreto Ministeriale 2 dicembre 2009 n. 135, come modificato dal Decreto Ministeriale 21 ottobre 2010, n. 177, ha individuato gli uffici di livello dirigenziale non generale (Divisioni) con cui sono articolate le Direzioni Generali del Ministero.
Gli Uffici di diretta collaborazione del Ministro dell'Ambiente" sono disciplinati dal Decreto del Presidente della Repubblica 6 marzo 2001, n. 245.
The 1991 law[831]

[829] International Studies and Collaborative Management Program of the National Marine Sanctuary Program, THE ITALIAN SYSTEM OF MARINE PROTECTED AREAS, Final Report William J. Douros, Superintendent Monterey Bay National Marine Sanctuary, April 25, 2005
[830] - See more at: http://www.minambiente.it/pagina/organizzazione#sthash.ruxrB7tB.dpuf

Planning for protected areas at the national level takes place through the "three-year program for protected areas" (TPNPA). This is an essential element for environmental planning. The TPNPA is preceded by three documents:

1. The "map of nature" (Carta della Natura), technical document. This specifies the conditions of the natural environment in Italy

2. The "fundamental lines of territory fittings with reference to the natural values". This takes are a more political and pragmatic approach.

3. And finally the "Plan for the Protection of the Sea". This is based on the application of the 1982 law on protection of the sea and is prepared by the Ministry of Environment in collaboration with regional authorities.

Based on these documents, the Committee for Protected Areas adopts the TPNPA. The TPNPA then identifies areas requiring protection, specifies the g criteria for the creation of new protected areas and establishes a calendar of implementation.

The identification criterion for MPAs has remained the same since the 1982 Law. The Technical Secretariat for MPAs is associated with the work of the Committee for protected areas, which must take into account the "Plan for the Protection of the Sea" in the development of the TPNPA.

4. LEGISLATION REGARDING THE PUBLIC DOMAIN[832]

To determine the regime for the coastal zone, it is first necessary to take into account the provisions regarding the public domain. According to Art. 822, para. 1 of the Civil Code (Royal decree March 16, 1942, No. 262), the edge of the sea, the beach, harbors and ports are, among others, included in this domain:

«Appartengono allo Stato e fanno parte del demanio pubblico il lido del mare, la spiaggia, le rade e i porti; i fiumi, i torrenti, i laghi e le altre acque definite pubbliche dalle leggi in materia; le opere destinate alla difesa nazionale».

Goods of the public domain are the property of the state and cannot be sold. It is only on the basis of rules and limits prescribed by law, that rights to third parties can be established on these goods (art. 823 c. Civ.).

- *Gazzetta Ufficiale del Regno d'Italia* no. 93 du 18 avril 1942.

[831] Extraits, S.MABILE, **Contribution volontaire :** L'elaboration d'un réseau d'aires marines protégées dans le cadre d'une décentralisation marquée : les exemples italiens et Espagnols, UICN, 2007

[832] **Tullio Scovazzi**, « La gestion de la zone cotière d'après le droit italien », *VertigO - la revue électronique en sciences de l'environnement* [En ligne], Hors-série 5 | mai 2009, mis en ligne le 06 mai 2009, consulté le 23 juillet 2014. URL : http://vertigo.revues.org/8236 ; DOI : 10.4000/vertigo.8236

In the Navigation Code (Royal Decree 30 March 1942, No. 3276.), we find more specific details on property in the maritime public domain. Lagoons, estuaries, basins of salt or brackish water, the channels are added to the list:

«Fanno parte del demanio marittimo:

1. il lido, la spiaggia, i porti, le rade;
2. le lagune, le foci dei fiumi che sboccano in mare, i bacini di acqua salsa o salmastra che almeno durante una parte dell'anno comunicano liberamente col mare;
3. i canali utilizzabili ad uso pubblico marittimo» (art. 28 c. nav.).

Without prejudice to the requirements of the public use, the Administration may grant to other subjects, by acts of concession, the occupation and the use of public goods, and areas of the territorial sea for a fixed period (art. 36, para. 1 c. nav.). The concession is subject to the payment of a rental and may be revoked or modified. Priority criteria are established, according to the most profitable use, or the use most in accordance with the public interest:

«Nel caso di più domande di concessione, è preferito il richiedente che offra maggiori garanzie di proficua utilizzazione della concessione e si proponga di avvalersi di questa per un uso che, a giudizio dell'amministrazione, risponda ad un più rilevante interesse pubblico» (art. 37, par. 1, c. nav.).

This provision has sometimes allowed the administration to grant concessions to non-governmental organizations with the aim of preserving certain areas and coastal waters.

5. LEGISLATION REGARDING INTEGRATED COASTAL ZONE MANAGEMENT (ICZM)

"In Italy there is no specific regime for the coastal zone in itself. It is only through other matters, such as maritime demesne or protection of landscape, that the coastal zone is indirectly regulated. Some competences in matters important for the coastal zone have been granted to regions, even if the criteria of distribution of competences between the State and the regions are not completely clear.

The recent legislation of the region Sardinia is particularly interesting as far as restrictions to the urbanization of the coastal zone are concerned."[833]

6. LEGISLATION REGARDING ECOLOGICAL PROTECTION ZONES[834]

Law N° 61 February, 8th 2006.E

[833] **Tullio Scovazzi**, « La gestion de la zone cotière d'après le droit italien », *VertigO - la revue électronique en sciences de l'environnement* [En ligne], Hors-série 5 | mai 2009, mis en ligne le 06 mai 2009, consulté le 23 juillet 2014. URL : http://vertigo.revues.org/8236 ; DOI : 10.4000/vertigo.8236

[834] UNEP-MAP-RAC/SPA. 2011. Note sur la création d'Aires Marines Protégées au-delà des juridictions nationales ou dans des zones en mer Méditerranée pour lesquelles les limites de souveraineté ou de juridiction ne sont pas encore définies. Scovazzi, T. Ed. RAC/SPA,Tunis : 51pp.

In 2006, Italy adopted a legislation on ecological protection zones (Law No. 61 of February 8, 2006) to be consolidated by decrees.

In these ecological zones, Italy will exercise powers, which will not be limited to the prevention and control of pollutions, but will also be extended to the protection of marine mammals, to biodiversity and the archaeological and cultural heritage.

7. LEGISLATIONS REGARDING FISHERIES[835]

The main legislation governing Italian fisheries consists of Law 963/1965 and Decree of the President of the Italian Republic no. 1639/1968 regarding "Regulation for the execution of the law of 14 July 1965, no. 963, concerning the discipline of marine fishing".

These statutes also contain delegation provisions for the adoption of subsequent secondary legislation for specific sectors. The secondary legislation includes other regulations *(decreti legislativi)* adopted by the whole executive, and ministerial decisions *(decreti ministeriali)* adopted by the individual competent ministries.

As an autonomous region Sicily also has some legislative competencies through regional legislation (*legi regionali*, *decreti assessore*, *decreti dirigente generale, circolari e directive)*.

Fishery management is based on Law no. 41 of 1982. This act is aimed at promoting the rational utilization and enhancement of marine biological resources through an equitable development of sea fishing. To these ends, the Ministry of Agriculture approves three-year national fisheries plans concerning the management of biological resources, the promotion of production and placing on the market of fishery products. With regard to the legal framework regulating aquaculture activity and protecting the environment, the most significant act is Law no. 152, which deals with water quality management and control.

Legislative Act no. 66 of 1993, Legislative Act no. 110 of 1995 and Legislative Act no. 47 of 1997 were promulgated in order to control the use of drugs in reared animals, with the primary aim being protection of the health of human consumers.

Institutions

In Italy overall responsibility for the fishery industry is in the hands of the Ministry of Agriculture, Food and Forestry Policies (MiPAAF - *Ministero delle Politiche Agricole Alimentari e Forestali*), through its Directorate-General for Fisheries and Agriculture *(Direzione Generale della Pesca e dell'Aquacoltura)*. In addition, other ministries supervise certain public activities related to fishery monitoring and control, i.e. the Ministry of Defence, with its Coast Guard, the Italian Navy and separate militia *(Carabinieri)* force; the Ministry of the Interior, with the State Police; the Ministry of Economy and Finance, with its own policy force for economic matters *(Guardia di Finanza)*; and the Ministry of Health, responsible for public health and veterinary services.

[835] Directorate general for internal policies, policy department b: structural and cohesion policies, fisheries, Fisheries in sicily,Note, 2010, p.15, http://www.europarl.europa.eu/studies

Administrative duties are carried out at regional and local levels by the coastal administration *(Capitanerie di Porto* and *Guardia Costiera)*, which is organized hierarchically.

Since 1997 administrative decentralisation aimed at consolidating the autonomy of local authorities. The Ministry of Agriculture, Food and Forestry Policies is responsible for the central administration, managing the fleet and national fishery resources and for leading, coordinating and planning. The local authorities have responsibility for certain matters that were previously managed by the Directorate-General for Fisheries and Agriculture, such as the development and protection of resources, aquaculture, maintaining the fishing ports, processing, trade and fishing in internal waters.

GREECE

Ile de Santorini, Greece, Flickr/PictFactory; lexpansion.lexpress.fr, publié le 31/05/2011

With the contribution of: Michalis Skourtos, Barbara Zanou, Christos Tourkolias, Areti Kontogianni

1. PRESENTATION AND HISTORY

In Greece there are five formally established MPAs with their own specific legal authority (i.e. Management Agency). These are:

- The National Marine Park of Zakynthos
- The National Marine Park of Alonnisos / Northern Sporades
- **The National Park of the Lagoons Messolonghi – Aitoliko**
- The Karpathos and Saria Protected Area
- *The Schinias Marathon National Park*

The designation of the marine parks of Zakynthos and Alonnisos is mainly for the protection of Caretta caretta and *Monachus Monachus, respectively.*

All others are designated for the protection of *Posidonia oceanica* (Annex I of the Directive 92/43/EEC - Natura 2000).

The National Marine Park of Zakynthos

The National Marine Park of Zakynthos (N.M.P.Z.) **is** situated at the southern most part of the island of Zakynthos. The Presidential Decree for the establishment of the N.M.P.Z. was signed on the 1st of December 1999 by the President of the Greek Republic. The Marine Park's objectives are to preserve the natural environment and conserve the ecological balance of the marine and coastal area of the Bay of Laganas and of the Strophadia Islands.

Within the Marine Park is the most important loggerhead sea turtle *Caretta caretta* nesting rookery in the Mediterranean, a habitat essential for protection.

The National Marine Park of Zakynthos is the first of its kind in Greece comprising of a Management Body. The board consists of eleven members from: Ministry of Environment, Ministry of Rural Development and Food, Ministry of Mercantile Marine, the Regional Authority, the Prefecture of Zakynthos, the Municipalities of Zakynthos and Laganas, local farmers and hoteliers and an NGO.

The Marine Park encompasses the marine area of the Bay of Laganas, the sea turtle nesting beaches and a zone of land adjoining them, the wetland of Keri Lake and the two small islands of Strophadia, which are 50 miles south of Zakynthos.

It is worth noting that Greece is the only European country where the loggerhead sea turtles nest, with. Additionally, Zakynthos is the most important nesting area in Mediterranean.

Furthermore the area is characterised by a variety of habitats of European interest including sand dunes, *Posidonia oceanica* beds, submerged reefs, as well as hundreds of species of flora and fauna, some of which are of great importance. This includes the critically endangered Sea daffodil *Pancratium maritimum*.

It should also be noted that a resident population of the critically endangered species of monk seal *Monachus monachus* is present on the west coast of Zakynthos.

Within the marine area of the Park there are three zones:

Zone A - no boat activity is allowed

Zone B - boats are allowed with speed limit of 6 miles per hour; no anchoring is allowed

Zone C - boats are allowed with speed limit of 6 miles per hour; anchoring is allowed

On land several restrictions protect the nesting beaches (no building, visitors are allowed on the nesting beaches from 7:00pm to 7:00am, control of the number of visitors etc). Restrictions on building and tourist development are also applied to the zones of land adjoining the nesting beaches.

The National Marine Park of Alonnisos Northern Sporades

The National Marine Park of Alonnisos Northern Sporades (NMPANS) has been established in order to protect the population of the Mediterranean *Monk* Seal (*Monachus Monachus*)

http://www.alonissos-park.gr/index.php?option=com_content&view=category&layout=blog&id=43&Itemid=67

The National Marine Park of Alonnisos Northern Sporades ranges over a wide sea area covering around 2.260 Km2, located at the northwest of the Aegean Sea, north of Evia and east of Pelion. The Park is subject to specific legislation which aims: to protect and conserve rare habitats and threatened species, the cultural and heritage values and the development of the area, by the sustainable use of its natural resources. The legislation, which includes the regulations and the management framework of the NMPANS, is the Common Ministerial Decision 23537/2003.

NMPANS is divided into two main protection zones (A and B). Zone A has a more rigorous protection with strict measures in force in some of its areas. This is due to the high urgency for protection, uniqueness and wilderness of the plant and animal which live there. In zone B, which includes inhabited areas, protection measures are less strict.

Zone A

In zone A, hunting is forbidden and specific restrictions on professional fishing (coastal and idle fishing vessels) exist. In areas where approaching is permitted, the following activities are allowed: swimming, observation of the sea bed (snorkelling), amateur photography, filming, visit to cultural monuments and anchoring. There are specific restrictions on amateur fishing and free camping and the lighting of fires are not permitted.

Zone B

Zone B is open to visitors and there are no specific restrictions, with the exception of free camping and the lighting of fires and in some areas boat speed limits. There are specific restrictions on amateur fishing in addition to the rules laid down in the Fisheries Code. Specific restrictions on professional fishing (Middle fishing vessels) also exist.

To summarize, only Zakythos and Alonnisos – National Marine Parks - are regulated by measures reminiscent of the MPA concept (zoning, restriction of access, restriction of fishing gears, etc). In these areas partial enforcement of the existing environmental legislation is in place. Port authorities are largely responsible for this. Due to lack or resources (patrolling boats, personnel, etc) a very small part of these areas is systematically under surveillance. There is the need to identify the legislative gaps as well as the differences between written and law and its practical implementation.

2. LEGAL FRAMEWORK

In Greece, National Parks is a special category of protected areas (Law 1650/1986, articles 18 and 19). When a National Park occupies marine areas it is classified as a National Marine Park. This is the general term under which MPAs are established in Greece. MPAs are based on a number of international and national legislative initiatives. Important international initiatives ratified by the Greek state are:

Law 3937/2011 (G.G. 60A) and **Law 2204/15-4-1994 (G.G. 59A)**

These ratify the Convention on Biological Diversity (CBD) (Rio de Janeiro, 1992).

Joint Ministerial Decision (JMD) 37338/1807/E/103/2010 (G.G. 1495 B)
This relates to avifauna and their habitats in compliance with the Directive 79/409/EEC as codified by Birds Directive 2009/147/EC.

JMD U.S.; 14849/853/E 103/2008 (G.G. 645 B) and Joint Ministerial Decision 33318/3028/1998 (G.G.1289 B)
These ratify the Directive for the Conservation of natural habitats and of wild fauna and flora: Habitats and Birds Directives (92/43/EEC and 2009/147/EC).

Law 2719/1999 (G.G.106/A)
This ratifies the Convention on Migratory Species (CMS).

Law 2055/1992
Ratification of the Convention on International Trade in Endangered Species of Wild Fauna and Flora and Appendices I and II, (C,C, 105 A).

Legislative Decree 191/1974 (GG 350/A), Law 1752/1988 (GG 26/A), Law 1950/1991 (GG 84/A).
These ratify the Ramsar Conventions and its amendments.

P.D. 67/1981 (G.G. 23A)
Ratification of CITES *(Convention* on *International Trade* in *Endangered Species* of *Wild Fauna* and *Flora)* "Protection of native flora and wildlife and determination process coordination and monitoring of research on them"

This was latterly corrected by **G.G. 43A/1981** and amended by **P.D.256/1987 (G.G. 114A).**

Law 1335/1983
This ratifies the Bern Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 1979).

Under the above international conservation context and based on the **Framework Law 1650/1986** for the protection of the natural environment in Greece, criteria and methods are established for the prevention of marine pollution and degradation. These are focused on areas which have important biological, ecological, aesthetic or geomorphologic value. These include the following Greek MPAs:

- National Marine Park of Zakynthos (Ν.Μ.Π.Ζ) (NATURA 2000) Presidential Decree - Gov. Gazzettes 906D, 22/12/1999 and 1272 D/2003). This designation was based on the protection of *Caretta caretta*.

- National Marine Park of Alonissos Northern Sporades (NMPANS) (NATURA 2000), Presidential Decree 519/16-5-1992, to protect the Mediterranean Monk Seal (*Monachus*

Monachus) and also Joint Ministerial Decision 621/19-6-2003 amended the zoning system of NMPANS.

- **The National Park Lagoons Messolonghi - Aitoliko:** *National Park including a marine part (Ramsar site-important birdarea–NATURA 2000)* (http://www.fdlmes.gr/index.php/law.html)

- *The Schinias Marathon National Park: National Park including a marine part (NATURA 2000 –important bird area) (*http://itia.ntua.gr/greenmarathon/eng_index.html*)*

- The Karpathos and Saria Protected Area (http://www.fdkarpathos.gr/?id=8)

- The monk seal habitats in the north-west part of the coasts of Samos island **(Presidential Decree 100/1995**)

Within Greece, the following categories of protected area are recognized:

- National Canyons (Law 996/71)
- National Parks (Law 1650/86
- Aesthetic Forests (Law 996/71)
- Natural Monuments (Law 996/71)
- Wild Life Sanctuaries (Law 177/75,
- Controlled Hunting Areas (Law 177/75)
- Wild Life Nurseries (Law 177/75)
- Areas of Nature Protection (Law 1650/86)
- Areas of Absolute nature Protection (Law 1650/86)
- Protected Forests (Law 86/1969)
- Protected Natural Landscapes (N. 1650/86)
- Eco-development Areas (N. 1650/86)

The regulatory framework for the management of MPAs and Protected Areas are established through the following legal documents:

- **Ministerial Decision 160182/2011** of the Minister of Environment, Energy and Climate Change (G. G. 3186 B/2011): Regulations of function of the National Committee for the Marine Environmental Strategy.

- **Joint Decision** of Minister of Finance and Economy and Rural Development and Food **99098/5881/2006** on Trade of Species of Wild Fauna and Indigenous Flora (G.G.1570 B).

- **Joint Ministerial Decision 1726/2003** on the appointment of a special authorization issuing office for constructions in protected areas (Ramsar, Natura 2000, etc) (G.G. 552 B).

- According to Article 9 of the Presidential Decree for the establishment of the National Marine Park of Zakynthos (N.M.P.Z) (**G.G. 906 D/1999)**, the Management Agency aims at the compilation and application of the regulation management and project management of N.M.P.Z. in the framework of: existing national and Community legislation (http://www.nmp-zak.org/index.php?l=EN).

- **Joint Ministerial Decision (JMD) 197/2002**, establishing the Management Body of the National Marine Park of Alonissos-Northern Sporades (NMPANS) and Common Ministerial Decision 23537/2003 including the management framework. This includes the establishment of a management body responsible for the management of the Karpathos-Saria area.

- **Laws 3044/2002** (Article 13), 2742/1999 and 1650/1986 are related to the operation and management of the protected areas.

- **Ministerial Decision 336107/2000** (G.G. 223B) for the establishment and operation of wildlife treatment and rehabilitation facilities.

- **Joint Ministerial Decision** 414985/1985 management measures for wild avifauna (arrangements related to Directive 79/409/EC).

3. INSTITUTIONNAL FRAMEWORK

The main legislative authority behind the establishment of the above MPAs is the Ministry of Environment and Climate Change (YPEKA) in joint jurisdiction with the Ministry of Merchant Marine and Island Development. Local municipalities in the areas where MPAs are established are not signatories of the legal enactment.

National Marine Park of Zakynthos
The Management Body is responsible for monitoring, organizing and implementing protection and action plans in the area. Additionally they are responsible for: environmental education, information and awareness regarding conservation activities and informing the public and relevant stakeholders about construction within the boundaries of the marine park.
In the national park there are activities such as tourism and recreation in accordance with the principles of sustainability as well as the preservation of traditional uses (fishing, grazing, agriculture, etc.) and the preservation of the natural and cultural landscape.

However, it has not taken the necessary measures to establish and implement an effective system of protection for the sea turtle (*Caretta caretta*) on Zakynthos during its breeding period and to prevent activities that would degrade or destroy its breeding sites.

The European Court of Justice (ECJ) ruled that the Greek authorities had not done enough to stop the use of mopeds on a beach the turtles used for breeding, and to prevent the presence of small boats near the breeding beaches. The Court underlined that promulgation of rules and regulations

by Greece was not enough and that Greece had to ensure that the turtles were not disturbed during the laying period, the incubation period, the hatching of the eggs, as well as during the baby turtles' migration to the sea. The Court also ruled that from then and thereafter Greece had to make sure that there were no sources of danger to the life and physical well being of the turtles

Furthermore, several other Greek State bodies and agencies are involved in the protection of the environment. For instance, the Hellenic Public Real Estate Corporation and the Urban Planning Services of the Prefectures of the country are not able to have illegal buildings demolished in the protected areas. Many cases of illegal building on some breeding beaches within the boundaries of NMPZ have been reported to the Greek Ombudsman for the Environment.

A major disadvantage of having so many bodies and ministries involved is that there is no accountability.

Moreover, it should be stressed that the suggested measures provided for the national legislation are not socially accepted as they are mainly repressive and they are enacted after the local social groups (e.g. land owners, inhabitants) have already developed their interests. These are coupled with the inefficiency of the public administration at a central and regional level.

National Marine Park of Alonnisos The office of the National Marine Park of Alonnisos is the Authority responsible for giving entry permits and authorization for any special activities within the Park. A Public Information Centre is hosted within the Management Body Office.

The NMPANS remained unmanaged from its establishment in 1992 until 2002. The Management Body of the NMPANS was appointed 11 years after its establishment under a joint ministerial decision. It is based on Alonissos Island.

It is governed by a ten-member board, which serves on a three-year basis; it is entitled to enforce State regulations and to perform park management on a daily basis; and it is funded by State and European funds. The board is made up of a president (an expert scientist appointed by the Minister of Environment, Planning and Public Works) and representatives of the federal government, local government, and non-governmental organizations.

Decisions of the Management Body are based on a majority, and they need to be approved by the Ministry of Environment, Planning and Public Works. The first Management Body appointed for the period of 2003–2006 was largely inactive due to lack of funding. The second Management Body (2006–2009) received substantial funding from the 3rd Community Support Framework of the European Union, which allowed considerable investment in infrastructure and personnel. Thus, according to the management period of the park, the following three time periods may be identified:

1. Before establishment of the NMPANS (pre-1992)
2. After establishment of NMPANS and before appointment of a Management Body for the NMPANS (1992–2002);
3. After the appointment of a Management Body for the NMPANS (2003–present)

4. LEGISLATION REGARDING MARINE POLLUTION

Joint Ministerial Decision No.140384/2011 (G.G. 2017B)
This establishes the “National Monitoring Network for the quality and the quantity of waters”.

Law 3983/2011 (G.G. 144/A)
This establishes the "National strategy for the protection and management of marine environment - Harmonisation with Marine Strategy Framework Directive 2008/56/EU.

Joint Ministerial Decision No. 51354/2641/E103/2010 (G.G.1909 B)
This works towards “Defining Standards for Environmental Protection for the concentration of impurities and other substances on water”, in compliance with EU Directive 2008/105 regarding Standards for Environmental Protection in Water Policy.

Joint Ministerial *Decision* 8600/416/E103/2009 (G.G.356 B)
Harmonisation with Bathing Water Directive (2006/7/EC) (76/160/EEC the "old" Bathing Water Directive).

Presidential Decrees 148/2009 (G.G 190/A) and **11/2002** (G.G 6/A).
These incorporate Directive 2004/35/EC (on environmental liability with regard to the prevention and remedying of environmental damage. This establishes a framework based on the polluter pays principle, amended twice through Directive 2006/21/EC)

Joint Ministerial Decision 107017/2006 (G.G.1225 B)
Harmonisation with Directive on Environmental Impact Assessment (85/337/EEC) and Directive on Strategic Environmental Assessment (2001/42/EC).

Law 3199/2003 (G.G. 280 A) and **Presidential Decree 51/2007** (G.G. 54 A)
Harmonisation with Water Framework Directive (2000/60/EC).

Law 3010/2002 (G.G. 91/A) / **Joint Ministerial Decisions 15393/2332/2002** (G.G. 1022/B/) / **11014/703/F104/2003** (G.G. 332/B).
Greece incorporated the Council Directive 96/61/EC concerning integrated pollution prevention and control with the above mentioned laws and JMDs.

Joint Ministerial *Decision 5673/400/97* *(G.G.192 B)* / **JMD 19661/1982/1999** (Gov.Gaz. 1811B) / JM*D* ***48392/939/02*** *(G.G.405/B)*

Harmonisation with Urban Waste Water Directive (91/271/EEC) amended by Commission Directive *98/15*/EC.

Presidential Decree 68/1995 (Gov. Gazette A 48)
Acceptance of the modifications made to the Annexes of the 1972 London Convention - International Convention IMO "Marine pollution prevention due to waste disposal".

Law 743/77
This law allows for the protection of the marine environment.

5. LEGISLATION REGARDING FISHERIES MANAGEMENT

The National Strategic Plan for Fisheries for the period 2007-2013
This relates to the Council Regulation 1198/2006/EC on the European Fisheries Fund.

Law 420/26/1970 (Fisheries Code)
This governs fisheries activities and, through prohibiting illegal fishing activities, aims at conserving fish stocks. Articles from this law have been replaced by L.442/1976 (G.G. 259A), L.1514/1985 (G.G.13A), L.1740/1987 (G.G.221A), L. 2040/1992 (G.G.70A), L.2332/1995 (G.G.181A), L 2503/1997 (G.G.107A), L.2538/1997 (G.G.242A) and L. 2732/1999 (G.G.154A).

Law 3983/2011 (G.G. 144 A) - **National strategy for the protection and management of marine environment**
Harmonisation with Marine Strategy Framework Directive 2008/56/EU.

JMD U.S.; 14849/853/E 103/2008 (G.G. 645 B) / **JMD 33318/3028/1998** (G.G.1289 B)
This ratifies the 92/43/EEC Directive for the Conservation of natural habitats and of wild fauna and flora.

Law 3199/2003 (G.G. 280 A) / **Presidential Decree 51/2007** (G.G. 54 A)
Harmonisation with Water Framework Directive (2000/60/EC).

Legislative Decree 191/74 (GG 350A)/ **Law 1752/1988** (GG **26A)** / **Law. 1950/91** (GG **84A)**.
These ratify the Ramsar Convention and its ammendments.

JMD 46399/1352/1986 (G.G.438B)
This ratifies the Council Directive 78/659/EEC, as amended by the 2006/44/EC, on the quality of fresh waters needing protection or improvement in order to support fisheries.

Law 1335/1983
This ratifies the Bern Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 1979).

Presidential Decree 658/1981
This relates to the protection of the fish fauna of lakes and rivers.

Presidential Decree 67/81/29-11-1980
This applies protected status to a number of threatened species (including marine mammals), and forbids their capture or killing.

Presidential Decree 1094/1977
This bans fishing activities which use monofilament gillnets and underwater light sources.

Royal Decree 142/1971 (G. G. 49)
This relates too fishing for aquatic animals in lakes and rivers and provides for their protection.

6. LEGISLATION REGARDING NAVIGATION

Law 3497/2006 (G. G. 219A)
This ratifies the Protocol concerning cooperation in preventing pollution from ships and, in cases of emergency, combating pollution in the Mediterranean Sea (the 2002 Prevention and Emergency Covering Protocol).

Ministerial Decision 2411/2003
Guidelines and procedures for addressing incidents of ships in risk situations (Government Gazette B 850).

Law 3100/2003 (G.G. 20A)
Ratifying the Protocol on preparedness, response and co-operation to pollution incidents by hazardous and noxious substances, which was signed in London on 15 March 2000.

Presidential Degree 11/2002 (G.G. 6A)
National Emergency Plan for addressing oil pollution incidents and other harmful substances.

Presidential Decree 346/1994 (Gov.Gazette 183 A) / **Presidential Decrees 211/1997** (G.Gazette A **166), 174/1998 (G.G. A 129), 3/1999 (G. G. A2)** / **12/2000** (G. G. A 11).
"Reporting ships which enter or leave Greek ports and transfer hazardous cargo, according to the 93/75/E.C Directive (13.9.1993)

Law 2321/1995 (G.G. 136 A
This ratifies the UNCLOS Convention (United Nations Convention on the Law of the Sea) (Montego Bay 1982)

Law 2252/1994 (G.G. 192 A)
Ratifying the “international Convention OPRC on oil pollution preparedness, response and co-operation, 1990 and other provisions.

Law 1638/1986 (G.G. 108/A) / **Presidential Decrees 98/1990** / **270/1995** (G.G.151 A)
Ratifying the 1971 Brussels Fund Convention (International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage).

Presidential Decree 68/1995 (Gov. Gazette A 48)
Acceptance of modifications made to the Annexes of the 1972 London Convention -International Convention IMO "Marine pollution prevention due to waste disposal".

Presidential Decree 171/2004 (G.G. A 145)
Acceptance of amendments to the International Convention of 1975 on the "International Regulations for Avoiding Collisions at Sea". This was ratified through the 93/1974 (A 293) Act and was modified through the L. 635/1977 (A 189), 233/1983 (A86), 116/1989 (A 52), P.D. 84/1991 (A 33), 11/1996 (A11) Acts, which were adopted by the A. 910 (22) Decision of IMO.

Law 1269/1982 (State Gazette 89 A)
This ratifies the MARPOL convention. Further amendments have been made through Presidential Decrees (Nos 14/2011; 124/2010; 27/2007; 114/2006; 49/2005; 312/2002; 206/2000; 128/2000; 12/2000; 54/1999; 3/1999; 174/1998; 211/1997; 361/1996; 68/1995; 346/1994; 46/1993; 288/1992; 103/1992; 254/1989; 404/1986; 167/1986; 479/1984).

Law 743/77 as codified by **Presidential Decree 55/1998**
Allows for the protection of the marine environment.

Law Decree 187/1973
Code of Public Maritime Law.

7. INTEGRATED COASTAL ZONE MANAGEMENT (ICZM)

Law 3199/2003 (G.G. A 280) / **Presidential Decree 51/2007** (Gov. Gazette A54)
Planning of measures and procedures regarding protection and management of water.

Law 3201/2003
"Re-establishment and Protection of the Natural and Built Environment on Islands, as regards the competence of the Ministry of the Aegean".

Laws 855/78 (G.G. 235/A) / **1634/18-7-1986** (G.G.104/A) / **3022/2002** (G.G. 114/A)
This ratifies the Barcelona Convention (1976) and all its Protocols.

Law 2971/2001 (G.G. 285 A)
"Coast, Seashore and other provisions for the licensing for the implementation of works at the coast, seashore, consecutive and adjacent sea and the sea bed, as well as for swallow waters".

Law 2742/1999

Law 2508/1997
Regarding land-use planning.

Law 2321/1995 (G.G. 136 A)
Ratifies the UNCLOS Convention (United Nations Convention on the Law of the Sea) (Montego Bay 1982)

Law 1634/1986
Ratifies the Protocol on the Mediterranean Specifically Protected Areas, 1982.

Law 1337/1983
This sets out special regulations for the protection of the nation's coastal zone

8. LEGISLATION REGARDING NATURAL RESOURCES EXPLOITATION

Law 4001/2011 (G. G. 179 A)
This relates to the operation of Electricity and Gas Energy Markets, for Exploration, Production and transmission networks of Hydrocarbons and other provisions

Law 3983/2011 (G.G. 144 A) - **National strategy for the protection and management of marine environment**
Harmonisation with Marine Strategy Framework Directive 2008/56/EU.

JMD 69269/5387/1990 (G.G. 678 B)
This details the classification of projects and activities and the content of Environmental Impact Assessment studies.

Law 2252/1994 (G.G A 192)
This ratifies the Convention for the Readiness, Cooperation and Coping with the Oil Pollution, London (1990).

Presidential Decree 81/1989 (G.G. A 36)
This ratifies the Intern. Convention on Civil Liability for Oil Pollution Damage (1976).

Law 1335/1983
This ratifies the Bern Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 1979).

Law 1739/1987
This relates to the management of water resources.

ALBANIA

Ile de Sazani- Albania- photos mission PIM, www.initiative-pim.org

With the contribution of Dr Violeta Zuna: Project Manager of: Improving Coverage and Management Effectiveness of Marine and Coastal Protected Areas.

1. PRESENTATION AND HISTORY

Albania has only one MPA (Karaburun Sazani Marine Park). The Ministry of Environment is currently preparing a Strategic Plan for Marine and Coastal Protected Areas, which will be part of the updated National Biodiversity Strategy and Action Plan.

Over the last 20 years Albania has steadily lost much of its biodiversity and natural habitats, including marine ones, due to uncontrolled urban and tourism development, increased pollution, deforestation, erosion, lack of suitable environmental legislation and its weak implementation.

As a result, this inventory is based solely on information relating to the Karaburun Sazani Marine Park.

Karaburun Sazani Marine Park

Conservation value

There is a high diversity of landscapes, with steep and inaccessible cliffs, fissures, caves, capes, small beaches and bays (bays of Bristan, Dafina, Grama etc);

In the coastal and marine habitats, at the medio-littoral stage, biocenosis dominated by *Lithophyllum byssoides* is present in both Sazani Island and Karaburuni Peninsula. In the infralittoral stage the most important biocenosis is that of *Posidonia oceanica* meadows; this habitat belongs to the Habitat Directive 92/43/EEC as priority habitat, whereas *P. oceanica* as a species belongs to the Annex II (List of the endangered or threatened species) of the Barcelona Convention.

On the western coast, *Posidonia oceanica* generally grows on rocky substrates and rarely on sandy sea beds as well as that of semi-obscured caves, where the red coral *Corallium rubrum* and several species of sponges live. The red coral (*Corallium rubrum*) is a species of Annex-III of the Barcelona Convention, as a species whose exploitation is regulated and also a species of Annex III of the Bern Convention, as protected fauna species.

There potential habitat for monk seals along the western coast of Karaburuni. This area is also an important migrating corridor for the loggerhead turtle *Caretta caretta*. Common dolphin *Delphinus delphis*, the bottlenose dolphin *Tursiops truncatus* and the Mediterranean monk seal *Monachus monachus*, have been recorded in this area.

Scientific values (bio-geographical and ecological aspects)

At least 36 marine species, which are of international concern and belong to the lists of endangered and/or protected species are present in Sazani – Karaburuni area. In national scale, about 75% of endangered species are marine animals. Most benthic macro invertebrates, have been recorded in the Sazani – Karaburuni area.

In the hard beds and rocks of the infralittoral zone, perennial brown algae is dominant over extensive parts of shallow hard substrata in the western side of Karaburuni and Sazani. The most important group is that of the brown algae *Cystoseira*, represented with 5 species (*Cystoseira amentacea* var. *spicata*, *C. barbata*, *C. compressa*, *C. crinita* and *C. spinosa*). The *Cystoseira* communities together with the *Posidonia* meadows are the main supporters of biodiversity in shallow water. Other important associations are those of *Dictyopteris polypodioides*, *Corallina elongata* and *Cladocora caespitosa*.

Coralligenous biocenosis is present on hard substrata, with calcareous red seaweeds, gorgonians and bryozoans. This biocenosis is well developed on the western side of Sazani Island and Karaburuni Peninsula.

There is limited access in Karaburuni and Sazani, mostly due to the lack of roads and the steep rocky coast which has protected and conserved the natural habitats. However, there are possibilities for controlled tourist and visitor access in the area, via trails in the hills and forests and by boat in the small bays and beaches with mooring possibilities.

The coastal part (terrestrial) of Sazani Island and western side of Karaburuni Peninsula-Sazani Island, is proposed as an MPA, due to its high values of biodiversity and natural habitats.

Threat and conflicts

Anthropogenic pressures are the main problem facing the area. These include:

- Hydro-technical interventions (i.e. drainage of lagoons, establishment of extensive agriculture drainage systems, etc.)
- Pollution
- Agricultural activity
- Coastal development
- Fishing and /or aquaculture development which results in loss of or alterations to important coastal habitats.

Category of protected area:

The National Marine Park of Karaburun – Sazani is IUCN II.

Legal basis

The National Marine Park of Karaburun – Sazani, was established in 2010 (DCM No 289, date 28.04.2010), comprising a marine area of 12.570,82 ha. Karaburuni peninsula represents the western part of the Vlora bay and together with Sazani Island has been identified as a priority area by many recent environmental policy documents of the Government of Albania.

1- THE LEGAL FRAMEWORK

National laws

a. Law No. 10 431, date 9.6.2011 'ON ENVIRONMENT PROTECTION'
b. Law No. 8906 dated 6.6.2002 "On protected areas"; amended
c. Law No. 9587 dated 20.07.2006 "On biodiversity protection"
d. Law No. 10253, date 11.3.2010 "On Hunting"
e. Law No. 10 006 dated 23.10.2008 "On wild fauna protection"
f. VENDIM Nr.84, datë 27.1.2009 'PËR CAKTIMIN E KRITEREVE PËR NGRITJEN E RRJETIT TË INVENTARIZIMIT DHE TË MONITORIMIT TË BIODIVERSITETIT'

National dispositions of EU and International laws

Albania is a party to the Barcelona Convention for the protection of the marine environment of the Mediterranean and its Protocols.

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

The General Fisheries Commission for the Mediterranean (GFCM), created under the auspices of the FAO, recommends establishing fishing reserves and Fisheries Restricted Areas (FRAs) as tools for the

management of fisheries and for the preservation of the marine environment, including areas beyond the States' jurisdiction. To date four FRA have been established by the GFCM.

Albania is party to The Convention on Wetlands (Ramsar). A Mediterranean initiative for these wetlands called "MedWet" was started in 1991 and aims under the Ramsar Convention to stop the erosion and degradation of Mediterranean wetlands and promote their sustainable use. All the Mediterranean countries, the European Union, UNDP, NGOs and international scientists are involved in the objective of conservation and management of these areas, several of which are key interfaces between land and sea.

CIESM is a scientific commission set up at the EU States' initiative and which has grown from its original eight founding countries to 22 Member States today. These support a network of several thousand marine researchers, applying the latest scientific tools to better understand, monitor and protect a fast-changing, highly impacted Mediterranean Sea. Its aim is to enhance knowledge, promote exchanges between scientists, improve the quality of scientific output in the region and give impartial advice on various topics relevant to the Mediterranean's marine status.

The two European Directives "Birds" (EC 79/409) and "Habitats" (92/43) (Natura 2000 network), which, the European Union has decided to provide an excellent and coherent network of natural sites.

Legislation regarding management of MPAs and Protected Areas

- Draft Strategic Plan for Marine and Coastal Protected Areas (SPMCPAs) (under approval procedures as part of revised NBSAP)
- Decision CM No. 266 dated 24. 04. 2003 CONCERNING THE ADMINISTRATION OF PROTECTED ZONES
- Decision No. 267 dated 24. 04. 2003 CONCERNING PROCEDURES REGULATING PROPOSAL AND DECLARATION OF PROTECTED AND BUFFER ZONES
- DECISION no. 86, dated 11.2.2005 FOR THE ESTABLISHMENT OF MANAGEMENT COMMITTEES FOR PROTECTED AREAS
- DECESION no. 289, dt. 28.04.2010 'On PROCLAMATION of the 'NATIONAL PARK' of the MARINE NATURAL ECOSYSTEM NEAR KARABURUNI PENINSULA AND SAZANI ISLAND

2. INSTITUTIONNAL FRAMEWORK

Legislative authority

The regional Directorate of Forestry service in Vlora is in charge of Administration of the site until the MCPA administration is established. At the moment there is no budget allocation for Karaburun-Sazani MPA (the protected areas law amended in 2008 provides no mechanisms for financing protected areas management). Therefore, the management of the area is limited using the existing FS administration of the Llogora National Park with patrolling, ranger and site supervision costs met by the GEF/UNDP MCPAs Project.

Management approach

Management is in its early stages under the “GEF/UNDP MCPAs project” (the only initiative that has directly addressed setup and strengthening of MCPA administration countrywide); the MCPA Karaburuni-Sazani is gazetted in April 2010. A Management Committee was formed on 16th August 2012. The MCPAs project is tasked with developing an administrative and management structure for Kararburuni-Sazani MPA.

Management plan
Once the administration of the MCPA Sazan-karaburuni is approved and established, it will provide a basic framework to be delivered through the framework of national Strategy of MCPA. The proposals for an administrative and management structure for the MCPA and the training framework, both produced under the GEF/UNDP MCPAs Project and as endorsed by the stakeholders, are under ministry of environment review and approval to be accepted as the basis for developing the administrative and management structure for the MCPAs network as a whole.

Measures for conservation, regeneration and development
Patrolling and surveying is enforced through rangers hired under the UNDP project. A practical approach for conservation and regeneration of ecosystem will be the focus of the management plan which will be main activity of the project in the coming year.

Finance
There is no budget currently available (See Legislative authority section). In addition, the Regional Forestry Service is in charge to temporarily (until the MCPA administration is established) takeover the management and the administration role of the MCPA Sazan-karaburuni, including the budget.

3. LEGISLATION REGARDING MARINE POLLUTION

Law No. 8905, dated 6 June 2002 ‘ON PROTECTION OF MARINE ENVIRONMENT FROM POLLUTION AND DAMAGE’

A new decision of the Council of Ministers has been adopted in 2009 "On the determination of the criteria for establishment of biodiversity inventory and monitoring network". So far this decision which was intended to establish a network of biodiversity monitoring has not been implemented

4. LEGISLATION REGARDING FISHERIES MANAGEMENT

Vendim no. 302 date 10.4.2013 ‘për ngritjen e sistemit të inspektimit për parandalimin, shkurajimin dhe eliminimin e peshkimit të paligjshëm, të parregulluar dhe të paraportuar (ppp) dhe krijimin e skemës së certifikimit të zënieve në peshkim’

5. Law 64/2012 dated 31.5.2012 “On fisheries” contains the main principles and rules of EU Council Regulation (EC) No 1967/2006 of 21 December 2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea.**LEGISLATION REGARDING NAVIGATION**

Ligj nr.8875, datë 04.04.2002 “Për rojën bregdetare shiptare”

6. INTEGRATED COASTAL ZONE MANAGEMENT (ICZM)

Vendim KM nr.364, datë 18.07.2002 “Për miratimin e planit “Administrimi i zonës bregdetare”

7. LEGISLATION REGARDING NATURAL RESOURCES EXPLOITATION

Order No. 596, date 22.11.2012
This relates to the development of action plans for threatened and endemic species. In this framework five action plans have been developed between 2006 and 2007. These include cetaceans, Little Shag, alien/invasive species, as well as the action plan for the protection of sea turtles and their habitats approved by the Minister of MEFWA.

Chapter 4 – Governance of the Sea

Authors: Francois Feral (CNRS)

INTRODUCTION

Since twenty years, the approach of a complex socio-political phenomenon in terms of governance allows to overcome the limitations of the formal legal analysis. She entered the data of the political sociology to better understand the decision-making process and the management of public policies: economic stakes, interest groups, weight of contexts, anthropological and historical dimensions of issues, analysis of the social demand, consideration of ways and of the public Action ... However it is difficult to define rigorously this approach of the collective issues, because governance is an ambiguous multidisciplinary approach. *Governance is both descriptive and prescriptive:* we speak of "*good and bad*" governance, which introduces a performative unscientific judgment of value in this analytical work. Furthermore the field of search on governance is always uncertain, between the analyzes of public policies of governments on the one hand, and the science of public or private management on the other hand.

Since more than two decades, the concept of governance illustrates the apparent loss of sovereignty of states by comparison with their legal supremacy which was recognized to them during the 19th and 20th centuries to drive the public policies. This reassessment of the unilateralism is first manifested in the society of the states, which in the framework of the international conventions, limits their freedom of action; it is also illustrated through the loss of political influence in favor of economic powers. The authority of states is contested by multiple categorical aspirations attributed to the civil society: a nebula consisting of lobbying, expertise and participatory democracy. This view believes *that the market exercises the primary function of social regulation* and devotes the pressure groups as legitimate public actors.

However, states retain on the marine areas, a preeminent legal and geopolitical regime. The sea is both *a public space opened to users* (a common good non-appropriated of the spaces and resources) and an *international area forum opened to all flags* (the principle of freedom of movement and use). Governance of marine areas therefore has the distinction of giving a great importance to the sovereignty and to the states' cooperation *to regulate maritime disorders* based on:

- Freedom of access for users;

- Conflicts of resource and marine areas use;

- Open competitions between states to control and exploit the spaces and marine resources.

Under these conditions, the most part of the marine issues depends on international agreements and on the interstate policies implemented by some institutions of international cooperation. Thus, the legal framework of marine policies is based on the combined competences of the coastal states, the port states and the flag states, through interstate and international agreements. Marine governance is characterized by the sharing of the international legal sovereignty of the states: this cooperation is combined with the globalization and with the joining to large universal conventions. On territorial seas, the environmental governance illustrates the growing importance of the market and the weight of the best organized private interests. The contesting of the state's intervention and the influence of the economy on the public action at the national and international levels, is an indicator of the effects of the globalization and of the level of effectiveness of policies.

In Europe, another element of complexity appears with the community institutions that integrate many skills of the member states and redefine them according to a common logic. This situation explains the difficulty in putting police's measures of the environment, of transport, fisheries, maritime security and safety assessment.

In the Mediterranean, the governance of the marine space is particularly complicated because of the extent of the strategic and economic issues as well as the geographic complexity of the basin. The large number of coastal States and States-users, acting in historical disputes, regularly generates endless conflicts whose gravity handicaps cooperation.

Thus MPAS' policies present important features. For the states, it is to set up police's dispositions on the spaces opened to users, and on which have been developed many traditional, industrial and service activities. Costly public and private infrastructures have been invested and new activities are regularly promoted, as the wind industry or intensive aquaculture. In the Mediterranean, due to the configuration of the coastline, the demography, the large marine touristic and industrial activities, *the MPAs' policies are now integrated into the town planning and development policies.* In total, the main measures of MPAs are intended to exclude or limit the artisanal coastal fishing, but they do not undermine the development of the major industrial activities and they don't limit the touristic activity, seen as the main source of coastal activities. Paradoxically, to just 12 miles from the coast, the regime of the high seas applies and the state authority can be exercised only in the context of international cooperation agreements.

Therefore Market, international law and state intervention are the essential components of what we might call "the governance of the Mediterranean", if also it can be defined. The intensity, the interactive and inter-state dimension of these three factors gives to it a high specificity with a level of cooperation proportionate to the level of geopolitical tensions and socio-economic upheavals. The governance of MPAs in the Mediterranean thus appears as *a complex system,* composed of various elements:

- A particularly complicated context of legal and political relationships and of international policies, contradictory or incoherent;

- An uneven MPAS' governance, dominated by geopolitical issues and major geographical differences;

- A network of MPAs in progress, but far from the initially ambitions displayed by the governments since the Rio Conference

1 THE CONTEXT OF **THE MPAS'** GOVERNANCE IN THE MEDITERRANEAN

The legal and socio-economic aspects of the Mediterranean on which the COCONET program proposes to promote a network of marine protected areas, are particularly complicated and they compromise the establishment of a global and coordinated cooperative project. MPAS' policies are in competition with other issues and their difficulties of implementing illustrate the theme of the *inconsistency of cooperation policies* which have been gradually established on the sea.
Environmental risks**,** **strategic** and economic issues as well as political tensions in the Mediterranean, are not making the creation and the operation of MPAS, as a priority of the policies of the coastal States**,** and of the user States.

The multi-dimensionality of the Mediterranean and of the international public action is one of the major difficulties in the study of environmental governance in the area. The marine space has several dimensions that interfere with the understanding and the future of the cooperation policies which are engaged there for five decades.

1.1 A SEA WITH SITUATIONS AND COMPLEX ISSUES UNFAVOURABLE TO THE NATURE AND CONSERVATION **POLICIES.**

The geomorphological and geopolitical complexity of the Mediterranean is a factor of permanent crises which handicaps the marine conservation policies. Population, urban and economic growth of the basin makes more problematic the conducting of environmental policies.

1.1.1 Geomorphological and anthropological complexity of the Mediterranean

a. *The sciences of life and earth* describe the Mediterranean as a semi-enclosed sea, the crossroads of three continents, whose crucial geological situation feeds a strong telluric and volcanic instability. It is poorly fed with water renewal waters of Gibraltar and the Suez Canal, raising its vulnerability. Despite its small size, it reached an average depth of 2,000 m., with narrow continental shelves.

Its coastal division is complicated: the Mediterranean is crossed by three septentrionnal peninsulas which oversize the length of its coastlines. It is studded with archipelago (Malta, Cyclades Islands, Adriatic coast and Greece and Turkey) and is dotted with large islands (Sicily, Crete, Cyprus, Corsica, Sardinia); Black Sea which depends on it, is itself a natural and specific geological space.

The biomass of the Mediterranean is relatively low but situated at the crossroads of septentrionnal and tropical influences, its fish biodiversity is the richest in the western northern hemisphere and it is constantly evolving due to significant invasive phenomena through the Strait of Gibraltar and of the Suez Canal, to which is added the ballast of an intense maritime traffic.

b. The complexity of the Mediterranean also decline itself in reference to his anthropological heritage. The Mediterranean has a millenary history where have crossed, mixed, faced the most ancient civilizations. This story has created one of the most dense multicultural stand, due to wars, commerce, arts, migrations, conquests, religious and ideological clashes. This density of history and of stories of the Mediterranean has never waned, and even now in the context of globalization, the Mediterranean is one of the major centers of tension and transformation of the planet. The people who surround it still share warmongers or postcolonial litigations. In ancient grudges, they share a common societal background which unites them,by lifestyles and socio-cultural representations.

1.1.2 An area of crisis with **a background of** natural and antropic risks

a. Socio-political conflicts have always gone through this complex area, the Mediterranean is now facing new risks and new crises. In terms of natural environment, natural seismic and volcanic risks are recurring and now apply themselves to densely populated zones, with energy, food and industrial consumptions growing. The Mediterranean is very vulnerable to the climate changes and to its consequences on the aridity, desertification, rising sea levels and changes of the marine and terrestrial biodiversities.

b. At the geopolitical level, the maritime zoning is inextricable because of the complexity of the coastal lines and the potential or opened conflicts between the 22 states and territories bordering the Mediterranean and who compete for resources and spaces. Due to conflicts and political instability, the east and south of the basin, in particular, appear distant from the zoning policies of the marine protection.

- Two wars are opened in the Middle East;

- The partition of Cyprus excludes marine environmental cooperations around one of the largest islands in the Mediterranean;

- Because of the civil war the Syrian coast remains closed to conservation policies;

- Maritime sovereignty on the maritime spaces of the Gaza Strip remains an enigma;

- An armed conflict has just been closed in Libya, political instability is still strong in Egypt and Tunisia: situations of crises are not giving priority to marine protection policies;

However conflicts of zoning and sovereignty also affect the northern Mediterranean: Turkish-Greek disputes about the boundary lines; coastal territorial annexation of Crimea has just occurred in the Black Sea: it upsets the zoning and the precedent conventional international balances. The Member States of the European Union are not the best students: France and Spain can not reach an agreement on the delimitation of their EEZ or on the creation of a transboundary MPA. Large non-riparian powers such as England or the United States maintain their presence and their interests: they will maintain military fleets and postcolonial rear bases or military. Finally, the European authorities interfere and intervene unilaterally to coordinate the policies of the member states bordering the Mediterranean, driving important issues according to Euro-community logics, often different from the Mediterranean balances.

c. *At the level of demographic and socio-economic transformations*, the addition of the 22 states and Mediterranean territories indicates a total of 475 million people in 2011 and the urbanization of the Mediterranean coast is the fastest and the most intense of the world: "The people of agglomerations of the Mediterranean coastal regions amounts to over 130 million people, or 48% of the total population of the cities of the countries bordering on 17.5% of their total area. The Littoralization in the Mediterranean first concerns regional urban mechanisms. For the entire Mediterranean basin, 59.1% of the urban population in coastal areas is setting in a band of 5 km and 68.8% in a band of 10-km" [836]

Outstanding landscapes, farmland and natural areas of the Mediterranean are inexorably destroyed by a port, industrial, tourist and urban frenzy, fed by a natural population growth in the south, fed by strong migrations in the north; *fisheries resources and biodiversity of the Mediterranean are now significantly over operated* by the competition of the industrial fleets of the different states in order to monopolize the high seas species and to feed an insatiable tourist market ...

d. International trade is growing rapidly: this maritime corridor covers 1% of the seas for 30% of its maritime traffics, especially with the carriage of oil of the Middle East, and Asian goods to feed a European market of 500 million people.

[836] F. Moriconi-Ebrard , F. Dinard « l'urbanisation du littoral méditerranéen » Mappe-Monde 57 2000 .1

Industrial and port activities which are related to the urban demography and trade flows, are a factor of the deterioration of the fragile and remarkable spaces. Despite the risk of an irreparable disaster, oil and gas development in the Mediterranean are not subject to a moratorium: they are a major risk of destruction of a marine environment with a low renewal halieutic capacity. Prospects for development of industrial wind activity add an element of risk and complexity in an already saturated sea, where conflicting uses are multiplying.
The Mediterranean is also the largest tourist destination in the world: 250 million people generate a high consumption of transport, energy, urban infrastructures, services and goods which occupy more and more land and marine areas.
Finally, in dramatic circumstances, the economic imbalance Euro-African attracts to the north basin, tens of thousands of migrants, creating on the waters and coasts a lot of tensions and drama, and for Europe, sparking an intricate moral dilemma;

1.1.3 The economic and demographic growth of the Mediterranean coast

The policy of development and networking of MPAs is justified by the urgency of protecting a marine area whose urbanization and industrial influence are growing rapidly, a development encouraged by a policies of economic cooperation opposing to the protection goals.

a. The importance of migration flows in the Mediterranean weighs on environmental policies. Each year, about 60,000 migrants arrived in Europe by sea and by roads ranging from Algeria to Sicily or passing through the Strait of Gibraltar (Council of Europe, Report, 2005). These migrations are either seasonal migrations (tourism, work or commerce); either illegal migration (economic factors related to North / South inequalities and political factors).

International law has reacted with the adoption of the Protocol against the Smuggling of Migrants annexed to the United Nations Convention against Transnational Organized Crime, 2000, which is applicable in conjunction with the United Nations Convention on the Law of the Sea of 1982. The Mediterranean regional framework is not binding: Tunisia Declaration on migration in the Mediterranean, 17 October 2001, followed by several meetings (2004 Algiers, Rabat, 2006, Athens 2010 ...). The migration issue is addressed differently according to the Mediterranean coast in consideration: if the migrants' home states are more likely to protect them, the destination states give priority to the protection of their borders and their sovereignty.

b. Tourism activity in the Mediterranean occupies a privileged position in the international tourism. In 1971, the 21 countries bordering the Mediterranean received 86 million tourists, 125 million in 1985, 200 million in 1990, 250 million in 2010,it is mentioned 500 million people in 2020 and 650 million in 2025 to more than 1, 5 billion international arrivals[837]. These flows represent 40% of tourist arrivals and 30% of mondial tourism receipts. That's 13% of exports from Mediterranean countries, 23% of the service sector, 40% of tourism activities between June and September and the sector employs more than 5 million people.

[837] Source OMT, « Vision 2020 »

This tourism is concentrated in a few key sites around natural sites mostly coastal and exerting considerable pressures on ecosystems. The tourist concentration facilitates illegal construction practices and the proliferation of conflicts of use for common resources such as land or water. In 2012, surveys show that tourists are increasingly sensitive to the quality of air and water, cleanliness, hospitality of the people, the feeling of safety and Handicrafts: optimizing the management of water, energy and waste, Plan Bleu is such an element of promoting sustainable tourism.

c. Urban planning and management of Mediterranean areas. The protocol of Barcelona gives to the Mediterranean one of the best text of coastal protection (Integrated Coastal Zone Management, Green Morocco Plan, Plan Azur tourism development ...) But the tourist and residential affluence produces a growing urban pressure which amplifies the natural population pressures: *the Mediterranean urbanism presents an coastal overpopulation and a land speculation carrying pollution, energy-producing and consuming giant infrastructures*. It depletes water resources and threatens natural areas and landscapes. In coastal areas, urbanization destroys arable land at the expense of food self-sufficiency and public agricultural policies, which amplifies an unbalanced maritime traffic between countries ensuring their self-sufficiency and those who need food imports (followed EU / Morocco on 16 February 2012) agreement. In fact, the policies of expansion of the Mediterranean urbanism appear in contradiction with the international agreements on the management of the coastal zones and rural areas.

d. *The increased maritime traffic and the Mediterranean port infrastructures* threaten the marine environment policies. The project of the European Union to implement a partnership resulting in a Euro-Mediterranean area of political stability and security, is based on the economic development of the southern Mediterranean. The conference of Barcelona on 27 and 28 November 1995 has realized a reconciliation process, conducted since 1960, previously based on a system of trade preferences. Bilateral agreements are established between the EU and each Mediterranean country, *with the objective of the increasing of the trade flows leading to regional integration.* The opening to competition of the Mediterranean markets expresses the Development Policy "*by the market*" and the development of entrepreneurship.

1.2 INCOHERENCE OF THE INTERNATIONAL PUBLIC POLICIES IN THE MEDITERRANEAN CONTEXT

The Mediterranean is an area of tension, but this character in counterpoint encourages cooperation policies of the riparian states. Under these conditions the MPAS' development faces the issue of consistency of law and Mediterranean policies. These numerous collaborations were often designed and implemented under the pressure of crisis and under the threat of risks, without measuring their possible contradictions.

1.2.1 The high number of interstate cooperations in the Mediterranean

Numerous collaborations have emerged to manage international tensions, international, lateral, regional and even community. The COCONET's project questions the Mediterranean Environmental Cooperation in the heart of a sociopolitical widespread phenomenon from several points of view, the geopolitics, public policies, the economy, and the international environmental law and law the sea.

a. *The intensity of public policies in the Mediterranean affecting the MPAS' governance.* The maritime corridor of the Mediterranean sea represents 30% of the traffic for 1% of the surface of the seas: in a complicated context, the status of the high seas weakens the ability of management and intervention of the riparian states, it necessitates a closer cooperation, whose implementation is always difficult because of the number of states and the high of stakes. Economic forces which are involved interfere with the ability of regulation and control of the states. International policies have been developed in the maritime field around several issues characterizing the legal context and the international regime of the basin.

The *Mediterranean area is an area of strong inter-state intervention, it has an high diplomatic and cooperative intensity and a significant normative and institutional production*. These specific standards are in addition to the general standards of the global international level: the Barcelona Convention and its protocols are a topical illustration. This cooperative activity has to be linked with crises, tensions and risks identified by the littoral states and the international community. Specific agreements awarded many projects established to resolve the problems, anticipate the disasters by managing risks, balance and develop economies, policing and support the changes and crises ...

b. *These collaborations define many contradictory policies. The paradigms and the values of the Mediterranean public action* as expressed in the law, the objectives and the logics of public action; according to the logics, implicit values and representations which policies are initiated and conducted. Comparing the economic logic, legal principles and views of public policies is the first comparative element. Policies appear to be a cocktail of liberal and interventionist ideologies, protectress of rights and hypersensitive to the disorders, cooperatives but respectful of the sovereignties, productivist and displaying the principles of economic moderation and of sustainability.

1.2.2 The lack of coordination of international public policies in the Mediterranean

The diplomatic activism in the Mediterranean and the high number of cooperation does not produce a coherent set of policies. A fundamental contradiction appears between prevention and the reduction of risks on the one hand, and development's policies and infrastructures on the other. The complexity of the maritime borders only amplifies this phenomenon.

a. *The legal confusion of the Mediterranean maritime zoning.* According to Article 122 of UNCLOS, the Mediterranean is defined as a "semi-enclosed sea", surrounded by African, Asian and European lands, owning to 21 riparian states. Functional maritime zones which have been established by coastal States are specific and it seems a disorder in the national laws of the Mediterranean states, which are confusing and sometimes contradictory.

This sea has a complex geological setting, its shoreline has many peninsulas and bays, with islands with variable extension and narrow continental shelves. In a first step, the zoning that have been adopted since the Third United Nations Conference on the Law of the Sea had difficulties to locate here because of the geographical and geopolitical complexity. So after a number of contradictions and clashes riparian states had been able to establish only the baselines and the territorial sea of 12 miles. However in this first time, few states have shown an interest in the delimitation of EEZ or other similar maritime areas in Mediterranean waters. The major consequence is that most of the Mediterranean waters are under the high seas, which enshrines the principle of freedom. From the 1990s, this pattern changed, when some coastal states *began to claim competences in areas partially registering in the legal regime of the EEZ.* It concerns areas less large physically and less legally sovereign, in which the state exercises only certain functional competencies granted by international law under the regime of the EEZ. Since then the number of maritime zones in the Mediterranean has increased, with different denominations; characteristics and dimensions. The most part of the riparian states proclaimed an expanded jurisdiction beyond its territorial waters. "Zone of fisheries protection" (Spain), "exclusive fishing zone" (Malta), "area reserved fishing" (Algeria) "Fishing Area" (Tunis), "Exclusive Economic Zone" (Morocco, Egypt) "ecological Protection Zone" (France), "Zone of Ecological and Fisheries Protection" (Croatia). These spaces are as a matter of fact, EEZ, limited or fragmented: nothing prevents the riparian states to limit their jurisdiction on this maritime space to one or more of the powers conferred by the law of the sea. However, this possibility and the use of ad hoc terminology to define the limited EEZ (ZEP, ZPP, ZPE, mixed zones) and the coexistence of different areas regarding their extension and skills, are a factor of confusion and uncertainty.

b. *The marine policies develop themselves in a difficult geographical and geostrategic context*. Many countries bordering the Mediterranean Sea are members of the European Union. They participate in the Integrated Maritime Policy that goes beyond the Common Fisheries Policy and deals with aspects touching the safety and the marine protection. This situation has created an important normative development, which can be found in the national legislation and in the practice of the public administrations of the Member States.

- The delimitation of maritime areas which is one of the situations of international law of the sea among the most complex interfering on management methods of dangerous or destructive activities of the environment;

- Maritime security including protection of the marine environment from derivatives risks of human activity; Commercial Union fleet is the largest in the world, territorial and jurisdictional waters of its member states have a very high density of marine traffic and its coastline has more than 1,000 ports. This traffic consists of all classes of ships, and among them, some in poor condition, carrying dangerous and highly polluting substances. This creates a very high risk of an accident and a serious problem of maritime security. Protection of the coastal environment and territorial and jurisdictional waters, as well as the safety of maritime traffic, are one of the key issues motivating the presence of active public policies in the Mediterranean States and the European Union. In this domain, as is well known, the risks have increased due to the development of two complementary phenomena:

- The issue of flags and Mediterranean "ports of convenience" promoting drain offending vessels due to the lack of control and monitoring. These two aspects affect the powers of flag States and port States, they greatly weaken measures of implementation of international agreements on maritime security and the legal fabric built by the international community. Violation of international standards by flag States complacent seriously the maritime safety and distort the competence in the Mediterranean.

- The Marine Security including prevention, prosecution and suppression of unlawful acts at sea: looting of underwater cultural heritage, smuggling, narcotics, weapons, terrorism and piracy, etc. Crime at sea has grown considerably. Against violence at sea, policies combine preventive and repressive measures to protect marine activities against the threat or commission of deliberate wrongdoing. The increasing of these risks shows that some states have neither the ability nor the will to implement international rules in this area, or to prevent these threats.

- *Governance of fisheries in the Mediterranean is particularly complex* because of large areas of the high seas that cannot be the object of the coastal states police; due to the regime of open access, international cooperation agencies organize fishing: GFCM and ICCAT.

- The General Fisheries Commission for the Mediterranean (GFCM), under the terms of Article 14 of the Rules of FAO, was approved by the FAO Conference in 1949 and entered into force in 1952, is a group of 23 countries and members of the European Union, the objectives of the GFCM are to promote the development, conservation and management of living and sustainable development of aquaculture in the Mediterranean, Black Sea and adjacent seas marine resources.
- The International Commission for the Conservation of Atlantic Tunas (ICCAT) is an intergovernmental organization responsible of fisheries conservation of tuna and tuna like species in the Atlantic Ocean and its adjacent seas.

Both institutions aim for the conservation and management of fishery resources (fishery enforcement, fisheries agreements, fight against undeclared and unregulated illegal fishing); but

More than protection, it is mainly the question of the distribution of fishery resources among states. The Common Fisheries Policy of the European Union has only been applied late in the Mediterranean. It gives rise to international fisheries agreements signed by the EU with the countries of the Southern Mediterranean: These agreements are seen as a fundamental pillar of the External Fisheries Policy of the EU. However, they are increasingly called into question in the two shores of the Mediterranean, as shown for example the difficult relationship between Europe and Morocco.

c. *The growth and development policies* raise the question of over-attendance of the Mediterranean basin, its pollution and destruction. They show the extent of its social, economic transformations, as well as the tensions and the growing crises areas for the grabbing of these areas and this markets. Through the examples of tourism, port development, migrations, urbanism, and space management, the incoherence of the policies of the European Union appears to us:

- Management Policies of the coastal urbanism (ICZM)

- Policies for port development;

- Development policies of industrial aquaculture;

- Political development of wind energy at sea;

- Policies for tourism development

d. *Policies of prevention of environmental risks and conflicts*: The Mediterranean coast is being strengthened by specific issues, with greater vulnerabilities: exhibition marked, many natural disasters, particularly impact. What is the nature of the local or broader natural hazards related to the climate change and the exploitation? What are the risks associated with anthropogenic activity sectors such as tourism, commercial shipping, port exchanges or even industrial uses coastlines?

1.2.3 The difficult driving **of the** conservation policies by zoning in the Mediterranean

MPAS' policies reveal continuities and ruptures, of the growth and the poverty in the Mediterranean societies: they participate in the transformation of the Mediterranean by changing the access rules to spaces and marine resources. Characters of the governance of marine protection by zoning are evaluated from different components: context, action planning, allocation of resources, process implementation and evaluation of results.

It also be analyzed from the various instruments of intervention and of follow : bureaucratic model, centralization, unilateralism, the role of expertise and science, professional or societal lobbies pressures ... These intervention models and methods of public action are indicative of different types of managements and decisions in the Mediterranean. In addition to the state police and administration of centralized methods, the public action of conservation resorts increasingly to

participatory model, to technocracy. It is also looking for models of conservation based on market mechanisms: it contributes to economic concentration and to the awakening of new professional corporatism.

In the Mediterranean, governance of the marine conservation public action is strongly inspired many international protocols: its main weakness lies in their implementation particularly weak in areas of crisis and of socio-economic emergence. It is also constrained by weak institutions of monitoring and support agreements with States' commitments in the field of marine conservation. As part of these policies appear two questions related to the program COCONET:
- Consistency of the international standards and the partitioning of interstate agreements; this phenomenon of conventional conflicts is usually solved by the force of institutions established during the implementation of the agreements. This is the operational capacity of the various agreements which operates the hierarchy of standards, more than a formal hierarchy of principles of law. In this context policies of MPAS are not best equipped to be a priority of national and international public action;

- Coordination of public policies at the international level in complex situations. Crises and geopolitical tension secondarize the marine environmental issues in the half east / south of the basin;

Maritime Mediterranean area shows these two phenomena: its future is fraught with these issues of coherence and coordination because of the tensions, challenges and the number of international players.

2 THE UNEQUAL GOVERNANCE OF THE MPAS DOMINATED BY GEOPOLITICAL ISSUES AND **BY** GEOGRAPHICAL MAJOR DIFFERENCES

The conventional framework and the international incentives are fundamental in the governance of MPAs in the Mediterranean. The commitment of States in these conservation policies and zoning policies is very uneven and the actors involved in these policies are numerous.

2.1 CONVENTIONNAL FRAMEWORKS AND INTERNATIONAL INCENTIVES FOR THE MEDITERRANEAN MPAS

The Mediterranean has one of the richest biodiversity in the world: its complex morphology and intermediate latitudinal position allow it to host numerous tropical and northern species while developing a high level of endemism. However, its biomass is low and the renewal of its waters through the Strait of Gibraltar is also very limited. So this is a fragile basin where disaster risks facing its marine biodiversity.

That is why was set up in 1982 the Action Plan for the Mediterranean (PAM Protocol on Specially Protected Areas of Mediterranean and Biological Diversity in the Mediterranean came into force in 1999). The Regional Activity Centre for Specially Protected Areas (RAC / SPA) was established in Tunis in 1985 by decision of the Contracting Parties to the Barcelona Convention: they entrusted the responsibility to assess the situation of the natural heritage and to provide assistance to Mediterranean countries.

In addition to the Barcelona Convention, the signatories of the Convention on Biological Diversity (CBD) in 2004 rated the Mediterranean in under-representation of marine ecosystems in the global network of protected areas and they adopted a general objective: "*to set up before 2012 a global network of national and regional protected area comprehensive, representative and effectively controlled*. "It is on the basis of these criteria that we can now assess the quality and the level of MPA governance, and the effectiveness of marine conservation policies.

In 2009 in Marrakech a regional program of work was adopted for marine and coastal protected areas in the Mediterranean, including the high-seas. The implementation of this program is the responsibility of national authorities. A number of partner organizations collaborated in the development of this regional program and they proposed to the Mediterranean countries, which would request technical assistance, a financial support to undertake the activities of the work program.

In 2010 was adopted the "*Strategic Plan for Biodiversity 2011-2020," including Target 11, which specified that "by 2020, at least 17% of terrestrial zones and inland waters and 10% of marine and coastal areas, including areas of particular importance for biodiversity and ecosystem services, are conserved through ecologically representative frameworks and well subsequently assembled by protected areas effectively and equitably managed and other conservation measures effective by zone, and integrated into the whole terrestrial and marine landscape."* "

It is in the context of this regional work program that a comprehensive study on the status of MPAs in the Mediterranean was carried out in 2013 by the MedPan network. This work sitting on the operation of a large questionnaire highlights several aspects which are related to the context we have seen above. The study also tangibly measures the reality of MPAs in the Mediterranean by providing detailed and meaningful data of their governance. However the conclusion of the study conducted in 2013 on the "Status of Marine Protected Areas in Mediterranean Sea[838] "showed clearly that the targets set in 2004 and renewed in 2010 have not been achieved mainly due to a serious lack of governance.

2.1. A CONTRASTING POLICY ACCORDING TO THE UNEQUAL IMPLICATIONS OF THE STATES

[838] Gabrié C., Lagabrielle E., Bissery C., Crochelet E., Meola B., Webster C., Claudet J., Chassanite A., Marinesque S., Robert P.,Goutx M., Quod C. 2012. *« Statut des Aires Marines Protégées en mer Méditerranée.* » MedPan & CAR/ASP.Ed: MedPan Collection. 260 pp.

The opposition of the situation of MPAS to northwest of the basin for south-eastern part is a recurring data. A new philosophy of governance also appears that challenges the notion of protected area and gradually changes it, to the notion of *a planned area by concerted management*.

2.1.1 The importance of the North-west / South contrast

The Mediterranean is not a set with homogeneous characteristics in the field of the development's policies of MPAS. Differences appear which oppose the categories of zones and of states in the conduct of these policies; an overall policy of conservation's zoning thus appears, still unrealistic today. The Data availability brings up:

- A clear imbalance between the south and east of the basin on the one hand and on the other the west and north;

- Membership or not of the coastal states to the European Union, although, even within the EU, different commitments are also notable.

These imbalances cover many structural areas of the governance:

- Integration of MPAs in global national policies: urbanism, decentralization, marine and environmental policies ...;

- Applicable legal framework and applied perimeters, status of activities and management tools;

- Participatory organization of users;

- Quality of scientific expertise, constitution and availability of data on protected area in the various fields of conservation;

- Capacity and effectiveness of monitoring and control;

- Availability of scientific and financial resources;

- Belonging to the networks of managers, scientists and NGOs;

- Animation and funding research programs and data processing;

- Participation in instances of international cooperation in relation to the monitoring and development of MPAs ...

In all these respects, *the countries belonging to the European Union are significally "advance" in the political and financial investment*. The role of the Union Commission as an incentive and cooperative institution of the member states bordering the Mediterranean appears crucial, including the harmonization of environmental policies reflecting international commitments (NATURA 2000 Ramsar Convention ...).

The countries of southern and eastern of the Mediterranean for many reasons related to political instability in the development, internal and international tensions, weak societal pressures, on these topics are not clearly fit their priorities in marine conservation.

2.1.2 The new configuration of the MPAs governance

MPAs are also marked by *significant changes in the functions assigned to them* and by a drift towards the establishment of *managed areas* where marine sanctuaries occupy only a very limited space.

a.Historically, MPA appears as *a sanctified zone with limited surface designed to maintain a remarkable feature or characteristic of the wilderness* . It is by reference to this ideal type that IUCN has established internationally recognized classification of AMP: from a sanctuary, the other zones are defined by the management of an increasing intensity of anthropic activities. This view of conservation is now in question: the size of protected areas tends to increase but these areas are now integrated in more complex spatial governance where economic and recreational activities are planned within a concerted framework. MPA is now most often a "managed marine area" (MMA) in which, if any, areas of very limited ban access are established. Essentially, the marine areas' function is to assess the extent of deleterious uses, and to explore the natural environment and their evolution (this is the main activity of managers): unlike the prohibiting access or regulatory measures become marginal.

b. For example the topical status of Natural Marine Park established by France in 2007 illustrates the recent transformations of a national policy and of its legal framework. Indeed, the field of application of MPAS is not only dedicated to the strict conservation of a space, as the founding principle of "no-take". Diversification of intentions and choices that govern the creation of MPAs, generates within them new purposes. Thus, MPA is as original tool and often autonomous (integrated approach) for the sustainable management of the marine environment and of the sustainable development: resource protection and habitat preservation and development of local commercial fishing, marine tourism development activities, recreational fishing cooperative coastal management and watershed ... These new

paradigms involve the participation of all actors and stakeholders involved in the establishment of an MPA. MPAs are not solely an easy way to support public policies of protection: they become an end in itself, their operation carries an ideal governance.

2.2 STAKEHOLDERS OF CIVIL SOCIETY IN CONFLICT AND COMPETITION WITH STRONG INEQUALITIES OF REPRESENTATION

Pressures and nuisances acting on marine environments are very different according to sub-regions and conservation areas. These pressures correspond to social groups constituting actors and users of

the sea. In the north western part, the evolution of the governance's systems of MPAS paves the way for the involvement of the civil society in the form of participatory management and lobbying. The role of science and expertise are important. The influence of these new players leaves a little latitude for policy makers to unilaterally impose protection's measures.

2.2.1 Situations of various and unequal pressures

a. The list of pressures on Mediterranean MPAs identified by MedPan is revealing: industrial, artisanal fishing, recreational fishing, extraction of gas and oil at sea, maritime transport (military transport, ferries, freighters ...), port activities, recreation other than fishing, urban pollution, agricultural pollution, industrial pollution, aquaculture, invasive species, illegal activities. One must add wind farms which could now grow on marine areas of the Mediterranean. The study of pressures was carried out from the responses to the questionnaire sent to the managers. This document had to rate according to a gradient "high to zero" the main pressures on habitats and species. According to the responses, the recreational and artisanal fisheries are the uses that exert the most pressure on MPAS. Southern countries report having a significant fishing pressure in their MPA but this is explained by tourists and recreational navigation much smaller than in the northern part of the basin.

However the issue relates only to pressures in the area of the MPA and it only lists the direct uses of marine resources and spaces. The deleterious effects of related or adjacent activities are not counted, so it presents the coastal artisanal fishing as the main cause of degradation of the marine environment in the Mediterranean. This observation is also to be related to the small size of MPAs, now limited to very small coastal zones. Large industrial users of marine areas not directly operate and so far in protected or managed areas: it would probably be different if the MPAS will settle beyond the internal or territorial seas.

b. Data about frequentation of the spaces concerned by the MPAS also emphasize the heterogeneity of situations: one MPA support more than 100,000 visitors / year, and 20% of them welcome 10,000 and 100,000 / year. And less than 10,000 visitors per year to 12% of the MPAS. The northern part of the Mediterranean is more touristic and the frequentation of MPA is maximum; no MPA of the South receives more than 100 000 visitors / year. Very small MPAs may receive more than 100,000 visitors / year (example of Portofino, Italy Strunjan Slovenia). In inveerse, very high MPAS welcome very few tourists (Amvrakikos Wetlands in Greece, for example).

The frequentation of recreational navigation in the interior of the protected areas is difficult to establish. The survey of MedPan therefore sought the number of places to port for pleasure craft in the MPA. Here again the question for managers is biased; due to the very small size of MPAs, three-quarters of the managers either did not respond or said they did not have a port for pleasure boats in the MPA.

It is difficult to give a meaning to the number of places identified: the natural marine park in the Gulf

of Lion (France) declared 9000 places in its perimeter but its coastal area encompasses 10 seaside resorts and pleasance ports. The number of places of ports then sets from 1 to 5000 places of pleasure boats. The identification of places of pleasure boats in the two closest ports did not collect half of the responses. As an indication, the MPA of the Blue Coast (France) has 12 000 places around, 48 MPAS declare from 1 to 5,000 boaters in the neighborhood of the protected area.

Even thought the numbers of this census are uncertain and debatable, a general observation is undeniable in the northern part of the basin: a very high number of pleasure boats and a development of water sports in the sea, as well as the strong and steady increase of these phenomena.
A media attraction effect and an over-frequentation effect appear in relation to the conservation operations: paradoxically, mass tourism is a danger to the sea but it also generates by its cash flow, promotion policies (example of the marine reserve of Banyuls sur Mer (France) and the significant increase in the number of divers around the sanctuary area)

2.2.2 Changes in the governance of MPAs in the north western part of the Mediterranean

In the northwest part of the basin that is to say in the areas where data are available, changes in the governance of MPAs brings up the growing role of civil society in the management of marine areas. This is manifested by the growing importance of scientific expertise and the spread of participatory management. Unlike the unilateral and repressive manner seems limited and called to disappear.

a. The MPA is now defined as a forum for users and experts, rather than as a police district administered by a body of law enforcement officials. The inventory of the participants in these forums brings up the great diversity of interests and of user groups and / or experts involved in the governance of marine perimeters of conservation. This large number of stakeholders limits the effectiveness of the efficient normativity of MPA. However in the most cases, the administration of the MPAS limits the identification of users to some iconic groups: artisanal fishermen, marine recreation operators, experts ... Yet the effectiveness of conservation depends on many related policies, parallel to the development of MPAS:, urban tourism policies , industrial, port, energy and transport, the main actors are not necessarily directly involved in the governance of MPAs.

b. The approach in terms of governance allows to consider the MPA as a dynamic system, contextualized and taking into account the complexity of marine spaces and the variety of uses that are exerted. The size of the protective surfaces is influenced not only by environmental or biological criteria, but also by political and socio-economic considerations. Finally, entrusting the management of marine areas to local institutions and decentralized applies more naturally to restricted MPAS, because contiguous to land areas which are the jurisdiction of these local authorities. They prefer to participate in the creation of one or more small MPAs whose they will actually lead governance, rather than being subsumed into technocratic 'superstructures', regional or national, where the

cumbersome procedures of decision brings de facto the central government to decide and manage authority (Feral et al., 2012 and 2013).

c. So, choose between a single large MPA or several small perimeter MPAS remains a delicate issue being the subject of much debate. In the Mediterranean, a unique and large area suppose that it can be relatively "autonomous", able to fulfill several purposes and assume consistency with maximum functionalities, including the land / sea interface. The multiplication of small MPAS is rather set in a network perspective. They seek a high connectivity between sites and a better protection against the unpredictable or controllable environmental factors, including those related to climate change. We will see below the difficulties of such a strategy more dictated by the configuration of the basin than chosen for its efficiency.

2.2.3 The pressures and the interest groups interfering in the governance of MPAs in the Mediterranean

To the pressures and nuisances interfering with the operation of MPAS, correspond groups of persons or entities that contribute to the governance of marine areas by their categorical claims.

2.2.3.1 The group of living resources **operators**

The exploitation of living resources in the Mediterranean Sea is a traditional activity but it has significant socioeconomic disparities

The tradition of artisanal coastal fishing is common to the whole Mediterranean. These villagers and family groups operate "fishing territories" relied on coastlines dotted with marine villages. Polyvalent farms use different techniques depending on the biodiversity and the markets. This professional category is most concerned with the direct effects of MPAS which settle in territorial waters.

- The traditional groups are isolated and atomized and their representation in decision-making remains low;

- The economic impact of the small professional fishing in the Mediterranean is marginal compared with tourism, port or land industries;

- The artisanal fishing activity is considered as the main pressure on Mediterranean MPAs.

The group of industrial tuna in the Mediterranean is instead a powerful and well-organized lobby, with strong support from the national authorities of their flag. Unlike artisanal fishers their production is single species (bluefin tuna); the catches are realized in competition between national fleets across the whole basin outside a territorial management; tuna fishing also has the opportunity of the state of high seas in the Mediterranean: areas in which the regulation of coastal states do not

operate. The management of blue fin tuna stocks in the Mediterranean is organized internationally by the International Commission for the Conservation of Atlantic Tunas (ICCAT), whose mission is to allocate catch quotas between fishing nations and monitor stocks.
The impact of these massive catches on the overall biodiversity of the Mediterranean is poorly documented. However, from an economic perspective, this industry has monopolized the tuna resources, and traditional fisheries have increasingly specialized in catch of demersal resources.

Despite the catastrophic situation of most fish stocks, the group of wholesalers remains concerned primarily by supplying consumer markets growing steadily, supporting the claims of the fishermen. This group is also developing marine infrastructure policies able to organize and strengthen the flow of fishery goods.

2.2.3.2 The group of aquaculture and industrial farmers

Conch culture (mussels, oysters, clams ...) is a traditional activity in the Mediterranean dating back to ancient times, especially in the lagoons of the sandy coasts of the Mediterranean; its offshore development grew from the 1960s (farming oysters and mussels and spat collection of sea shells) as occupying sectors concessions in many coastal areas
Intensive fish farming has also developed in the 1970s (bream, bars, shrimp, turbot ...). This industry is very sensitive to the quality of coastal waters whose degradation can endanger these activities: intensive farms occupy coastal areas granted and generate landscape, biological and ecological damage. For this category a mention must be made for the "tuna fattening cages" whose recent technique is related to the industrial catch of blue fin tuna. This concentration also generates pollution and it induces massive capture of "forage fish" for feeding captive fish.

2.2.3.3 The social group of scientists, experts and NGOs of the Nature Conservation

From a sociological point of view, science is defined as "the social group that takes advantage of his status as an expert." This group is the primary beneficiary of MPA policies due to funding and evaluation expertise that necessarily accompany all creation and all monitoring protocol of MPAS.

Examination of expenditures linked to MPAS brings up the focus on collections of scientific data. At 89%, the financing of MPAs are essentially public and national self-financing through "business plan" (conservation financed by market mechanisms) today remains marginal and chimerical. Many highly qualified jobs and investment in equipment and scientific services are closely related to public conservation policies to constitute a "public economy of science" related to the development of MPAs. It is in the members states of the European Union that the funds available are the most important:

This group is broken down to various institutions who share the same academic training and the same scientific and even conversationniste culture: universities and research organizations, networks of MPA managers, NGO of environmental protection, research departments, programs and scientific projects, public institutions in charge of the environment (agencies, ministries, regional and international institutions ...)

This group is organized around the conversationniste moralizing discourse: because of its networking, its high level of education and its cultural homogeneity, it has a strong ability to penetrate the decision-making apparatus, in being both expert and recipient of its own expertise;
In the north and west of the Mediterranean group of experts and scientific accounts for most of the society's demand for conservation of ocean space and its most efficient lobby. Its relative weakness in the south and east of the basin largely explains the marginal level of MPAS policies.

2.2.3.4 The tourism industry of the coastline

The Mediterranean coast is the subject of the biggest tourist and urban pressures of the world. This attendance feeds many maritime services constituting the tourist and residential market whose marine activities have been developed over the spaces and resources.
An eco-economic arguments support the tourism sector: activities of sustanaible protection of the marine environment, particularly in tourism would have intended to allow the creation of new jobs in this area. On the whole basin the group of providers of tourist and residential services has very dense transport infrastructures. These operators are organized to manage and boost the flow of people and goods: commercial ports and marinas and their services, airports, highways, ferries, cruise lines, rental of ships, organizers diving and spearfishing, equipment suppliers navigation and maritime leisure ... businesses related to these recreation are an important pressure group attached to both the conservation of the marine environment but very anxious to preserve the freedom of access to their various recreational activities;

The urbanization of the Mediterranean coast generates in the whole basin a significant speculative pressure land: it helps to redistribute access to marine areas to new populations to the detriment especially of traditional activities.

2.2.3.5 The industrial pressures of marine space

a. Mediterranean at the crossroads of three continents is a highly urbanized area, a huge market for services and goods provided by the infrastructure of the highest level and populations to higher purchasing powers. This exceptional economic situation is an opportunity for the shipping industry and the creation of port and coastal industrial zones and supplying energy. Coastal states do not intend to give up these opportunities, although these activities are carriers of pollution and risks to the marine environment. Industrial and maritime development is an area of cooperation, promoted by the European Union, and the riparian states are competing to capture their activity streams.

b. This geo-economic position gives special importance to maritime operators, industrial and energy sectors: transport, engineering services, port and energy production. That is why in the governance of MPAs, the issue of limitation of port activities and navigation in the Mediterranean is rarely asked because it upsets a major area of economic development. The Medpan’s study on the status of

MPAS has only inventoried the number of pleasure boats in relation to protected areas to emphasize their deleterious nature.

However, the Mediterranean basin is one in which the commercial shipping and recreational boating is the densest in the world. Despite the nuisance and risk generated by this activity, the growth of these activities is encouraged by the coastal States and cooperation policies of the European Union. Areas of high seas which extend to 12 nautical miles and the principles of freedom of navigation of the Law of the Sea is a serious handicap in the implementation of conservation zoning policies. Ports of the different states are competing to capture the flow of goods and passengers because of the economic benefits and industrial areas who settle there. Port investments to make giant port complex are multiple, they welcome more and more and bigger and bigger ships. These developments are not in favor of conservation and they increase the risk of pollution and disaster.

Since 2003, Tanger Med port complex illustrates the ecological threat of this development. Located at the crossroads of major maritimes roads, east-west and north-south, this new port handles a total traffic of 25 million tonnes; over 1,800 container ships calling at Tangier Med, fifty liner services connect Tanger Med 125 international ports in the world. The index of maritime connectivity of Morocco, went from 77th in the world in 2007, at the 14th position and is currently in 1st place at the African level. The free trade agreements with Brussels and Washington have led to the creation of three free zones to work on-site industrial products: 150,000 jobs were created. The port has generated an urban and industrial explosion at the western entrance of the Albaran sea, a sea that is already subject to severe environmental threats.

c. Exploration and exploitation of hydrocarbons in the Mediterranean is a major risk of an environmental disaster for which a moratorium is not considered. But there are thirty drilling activity in the Mediterranean, five oil fields and three new exploration programs.
Oil exploitation feeds tensions between riparian states, whether or not members of the European Union: it complicates even more the issue of maritime zoning. The example of the Natural Park of the Gulf of Lions is a good illustration of the limits of environmental cooperation within the European Union. After the project of a marine border Franco-Spanish park had failed in 2010, Spain granted in 2012 petroleum exploration permits, inside the perimeter of the Marine Park in the Gulf of Lion newly inaugurated by France.

Forages, champs pétroliers et zones de prospection en Méditerranée ; source : *Objectif Transition* « exploitation offshore en Méditerranée au 29 décembre 2013

Drilling, oil fields and exploration areas in the Mediterranean; source: Goal Transition "operating offshore in the Mediterranean in December 29, 2013"

d. Finally, despite the technical difficulties related to the depth of the basin and the marine frequentations, a new industrial pressure appears with wind farms at sea. This activity is also promoted under sustainable development, and is in phase with the energy transition policies: the European Union support this industry with the *Inflow project* which intends to install an offshore wind farm with a capacity of 26 MW in 2017. Floating wind turbines seem to provide the technological adequate response for the operation of wind fields in deepwater, such as the Mediterranean, while the current technology does not allow the exploitation of deposits located beyond 40 meters depth. The floating wind allows the construction of larger wind farms.

The connection of these wind farms necessarily giant because of their cost of depreciation implies significant installations on earth, increasing the demand for land on the coast. The industrial use of marine space in the Mediterranean is growing with the prospect of a energetic activity highly promoted and accompanied by new engineering. Thus emerges on a sea already over urbanized, an industrial grip and new risks inconsistent with the objectives of biodiversity conservation. Incentive programs of states and of the European Union are combined with the mobilization of economic actors and technicians of a new activity. [839]

2.2.4 The complexity of the marine public decision in the Mediterranean

2.2.4.1 Police of seas and accompanying policies

In territorial waters which are primarily concerned by Mediterranean MPAs, only states have the formal legal authority to intervene to create conservation areas and to authorize or prohibit or

[839] Le prototype *Tricase* d'une puissance de 2MW est aujourd'hui testé en Adriatique et le projet Winflo est en cours d'étude en Méditerranée française soutenu par le programme Vertiwind de l'Union Européenne.

regulate marine activities. However, the geopolitical situation in the Mediterranean induces a complex public decision, highlighting the inconsistency of international policies; that is why we underline above the importance of the legal, operational and international framework. In most cases, the establishment of an MPA is not limited to merely establish administrative police districts sitting on repressive regulations. The creation of MPAs is subject to many public policy measures involving significant funding: management / scientific AMP monitoring, control and surveillance of the district, information and user awareness, organizing the consultation, development of access , remediation, compensation ...

2.2.4.2 Financing and public leaderships in marine policies

Despite the theories developed for financing MPAs by market mechanisms, it is clear that the management of the MPA governance rests almost entirely on the public purse: States credits (expenditures of different ministries or specialized agency, public science programs, provision of administrative services, etc.), funding by local authorities involved in the management of MPAs (municipalities, general, provinces, regions, districts ...), international credits (World Bank, UN programs, programs of the European Union).

The growing importance of local communities in the management of ocean space coincides with a general trend towards decentralization and participatory management in which are associated actors and local managers. The government often seeks to shift the financial burden and responsibility of MPAS to local actors; this transfer also increases the legitimacy of the constraints attached to the creation of an MPA. Communities also appear as entrepreneurs of public, tourism or industrial urban infrastructures. In this respect they often pursue conflicting objectives to conservation policies. The legal framework for MPA is monitored and placed under supervision by the state administration to avoid patronage and mercantile excesses.

Because of this political lamination, public management and administrative and legal skills of MPAs are often complex and not easily understood by users and the public. It is difficult to identify those responsible and actors of MPAs; This is why the establishment of an ad hoc body, specifically established to manage a protected area is considered as a part of good governance. This setting allows to create an administration pursuing its categorical objectives and a strategy of development.

3. THE STATE OF **THE** MEDITERRANEAN AMP BASED ON THE MEDPAN DATA [840]

If Mediterranean MPAs are numerous, they are few stretches, unrepresentative and their governance is often defective. It must be noted also that the objectives committed by riparian states

[840] Cf. sur l'ensemble des données recueillies et utilisées dans le présent rapport Gabrié C., et al. Op. cit

have not been met. This observation can be made with relevance through the work of the "Mediterranean Protected Areas Network" established in 1990 with support from the World Bank at the Conference of Monaco.

3.1 IMPORTANCE OF THE MEDPAN ASSOCIATION IN THE ESTABLISHMENT OF A NETWORK OF MPAS' GOVERNANCE IN THE MEDITERRANEAN

The project contributes to the different European policies concerned with the protection of the environment: Habitats Directive, action plan for biodiversity, marine directive, common fisheries policy, maritime policy, tourism policy and their implementation in territorial policies in each country.

It has the official support of the Barcelona Convention, through its Regional Activity Centre for Specially Protected Areas, which is an associated partner of the project.
The MedPan North project is complementary to the South MedPan projects and MedMPAnet projects which aim to support the creation and management of MPAs in the countries of southern and eastern Mediterranean.

Through this program, the north-western Mediterranean organizes the exchange of experiences between the managers of Mediterranean protected areas and develops management tools adapted to the basin. [841]

a. This association is now the institution best informed of the situation of MPAs in the Mediterranean and it's goal is to integrate all the States concerned and all managers. His works bring together the most relevant data on the issue of MPAs in the Mediterranean. The MedPan network is monitoring the situation of all Mediterranean's MPAs, even tought states or welfare institutions are, or not, members of the association. The network led many lobbying operations, but also animation studies, the establishment of databases, monitoring operations and cooperation. Even within the network MedPan, north MedPan network[842] appears particularly active because of the support of four major European coastal states (Spain, France, Greece, Italy) and by the European Union.

b. The identification and inventory of MPAS is the object of a specific database (MAPAMED) as a geographic information system (GIS) developed, updated and administered jointly by the association and the CAR MedPan / SPA. This mapping application, uses "inclusion criteria" based on managerial IUCN definitions and adapted to the Mediterranean context. MedPan considers as MPA:

[841] Le réseau MedPan a d'abord été porté en 1990 par l'administration du Parc national de Port-Cros (France); il a organisé la rencontre entre les gestionnaires des AMP, les scientifiques et les décideurs. Au printemps 1999 son action a été soutenue et relayée par le Programme des Nations Unies pour l'environnement via le CAR/ASP basé à Tunis (financement Banque Mondiale).

[842] Le projet MedPan Nord illustre les déséquilibres Nord/Sud évoqués plus haut. Organisé à l'intérieur même du programme MedPan, il rassemble les acteurs des 6 pays côtiers de la Méditerranée membres de l'Union Européenne : Espagne, France, Grèce, Italie, Malte et Slovénie. Son budget est de 2.38M€ cofinancé par le Fonds Européen de Développement Régional et du programme Européen Med. Cette disponibilité de moyens accentue le clivage entre les pays de l'Union et les pays tiers dans le domaine des capacités de développement et de suivi des AMP.

"All geographic space marine clear - including subtidal terrain, intertidal and supra-tidal lagoon or / coastal lake continuously or temporarily connected to the sea, along with its overlying water - recognized, dedicated and managed, through effective , legal or otherwise, to ensure long-term conservation of nature and the ecosystem services and cultural values associated with him. "

Thus there is in the Mediterranean a wide range of names related toMPAS. No less than 26 different denominations were identified. Among the most common, we find the following names: marine protected area, nature reserve, national park, marine reserve park. To these 26 names are added (and often overlap) international laws: ASPIM, Biosphere Reserves, World Heritage sites, Ramsar sites, Natura 2000 sites (for members of the European Union)

This profusion and the large character of the concept adopted by MedPan raises the question of the definition of an MPA. The selection criteria are based on the nature of the site, the consistency of the site with the definition of a marine protected area, the objectives of the MPA by reference to the IUCN categories; the type of protection and finally organizational criteria (management, temporal, vertical zoning ...).

c. MedPan adopted a broad view of the concept of MPAs, including both areas related to the sea, such as beaches or lagoons, as well as sites simply declared but whose legal protection has not been consecrated or which management is nonexistent. Sometimes coastal states show areas of environmental conservation as a means of propaganda without these ads could be credible. Yet it is very difficult within the framework of an international cooperation to question the statements of a sovereign state without creating a diplomatic malaise. Here appears again the question of "paper parks": an artificial display of protected areas, confusion between creation and effective management, ineffective protection, of credibility of MPA policies, etc.

3.2 A LARGE NUMBER OF MPA IN THE NORTH / WEST BASIN FOR LIMITED AREAS AND LOW PROTECTIONS

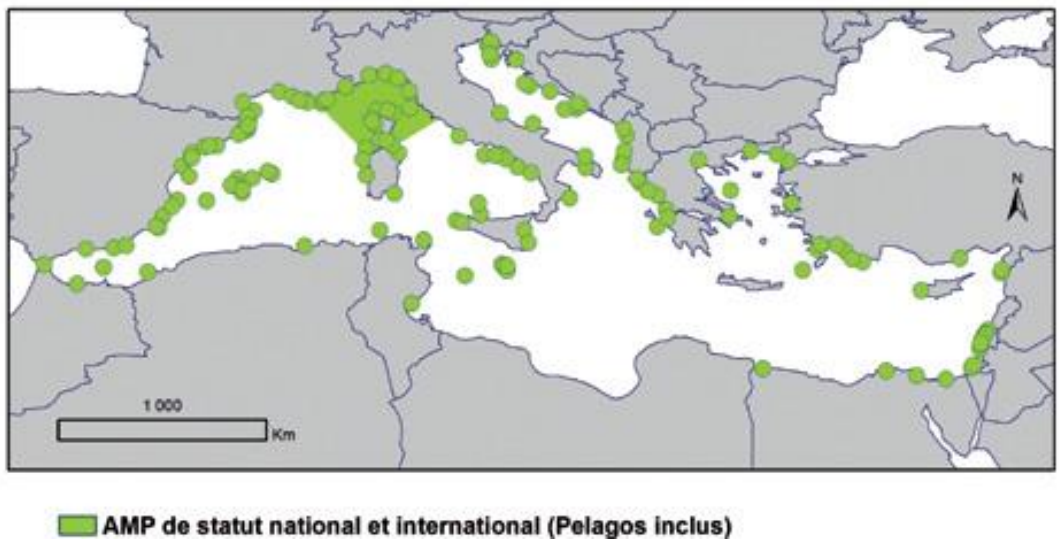
The impressive number of Mediterranean MPAs is not provided a credible system of conservation: low surfaces, dispersion and especially the very low enforceable and enforced to protect these areas relativizes their impact and scope.

3.2.1 The high number of MPAs in the Mediterranean

According to the updated database MAPAMED updated in 2013 the number of MPAs in the Mediterranean amounted to 677 sites distributed as follows:

161 AMP of national statute;
9 MPA only international statute;

40 AMP with one or more international statutes, including 32 especially protected areas of Mediterranean Importance (ASPIM)
5 Biosphere Reserves
2 marine sites inscribed on the World Heritage.
507 marine Natura 2000 sites;
55 MPAS planned.



Nombre élevé des AMP en Méditerranée in Gabrié C. et al. op. cit. : la ponctuation cartographique ne rend pas compte de la faiblesse des superficies

On a digital map, the importance of the Natura 2000 network in the constitution of protection is measured. However, this recognition is redundant with the object of Nature 2000 It does not help to clarify the policy itself marine conservation and complex categories of protected areas.

3.2.1.1 A low overall surface protection

All of these areas represent 114,600 square kilometers of areas under "protected status" or 4.6% of the Mediterranean, 8.2% of the 12-nautical mile constitutive of the coastal States' territorial sea of the Mediterranean, and only 2.7% of marine areas beyond 12 nautical miles. 170 MPAs themselves cover a marine surface of106,465 square kilometers. And the high number of protected perimeters based on the small size illustrates their very small size. The only exception is the Pelagos sanctuary from the Ligurian Sea that spans 87,500 km2 but if its international symbolic significance is important, its function is limited to cetaceans. This counted surface Mediterranean MPAs only cover 18,965 square kilometers.

The larger areas are of modest size: 66% of MPAs are less than 50 square kilometers and the national park in Israel Akhziv only covers 0,003 km2. Larger areas are: natural marine park in the Gulf of Lion (France 4000 km ²); Marine Alonissos Sporades-Vories (2,265 square kilometers in Greece)

National Park; specially protected area of Datça-Bozburun (763 square kilometers in Turkey) and AMP Isole Egadi (540 km ² in Italy). MPAs in France, Italy, Spain and Turkey account for over 50% of national protected, mainly as marine parks surfaces.

Based on the total surface of the Mediterranean Sea, the spatial coverage of MPA is low, it is below the 10% target for protection. This means that "*current Mediterranean MPAs, still far from forming a network, can be only considered as a fragmented assembly of protected zones, weakly connected to each of the other.* [843]"

3.2.1.2 Limited surfaces and weakened normativities

Most Mediterranean MPAs were created by centralized initiative of states but most of these areas has small perimeters and is concentrated on the north shore and in coastal areas

However, the expansion of the surface of the protection zones is facing various barriers specific to the Mediterranean:

- The absence of EEZ does not allow coastal states to extend beyond 12 miles their perimeters of protection;
- The density of activities and uses makes confrontational the restrictive measures;

- The multiplicity of territorial disputes and of zoning between the States themselves cannot develop transnational or cooperative protected surfaces;

- Political instability over half east / south basin secondarized cooperation and conservation policies.
- In the south and east of the basin, the weak social demand of protection and scientific lobbying is also an important factor of immobility.

These territorial, societal and individual reasons explain the predominance of small MPAs in the Mediterranean. The strong artificialization of the coast, the tourist frequentation and the increased economic issues are all opposed to new environmental constraints pressures. In the context of a semi-closed, crowded and frequented sea, conservation measures prove to be conflicting and difficult to enforce among stakeholders: fishermen, boaters, carriers, coastal communities, tourism operators, manufacturers, etc. De facto states are not alone in orchestrating the development and management of an MPA. The formal legitimacy of management rules is always in relation to a unilateral state decision (as a law, decree or administrative action); Yet its development and adoption are now conditioned by consultations and negotiations, which are brought under the expertise and participatory governance. The strength of the objections related to feelings of exclusion or confiscation of an area of work, life, pleasure or transit led policy makers to limit the sanctuaries marine areas.

Thus, in the survey conducted by Pan Med, no AMP of status I wilderness area has been declared; conversely categories IV (Management Area of habitats or species) and II (National Park) are best

[843] Laffoley D. Vice Président chargé des questions marines de la Commission Mondiale des Aires Protégées de l'UICN préface à Gabrié C. op. cit p. 15

represented in numbers; Category VI, which has the lowest level of protection (protected with sustainable use of natural resources area) has few but large MPAs. Only AMP Group A and B of the Mediterranean have wilderness covering only 300km², ie 3% of the total area of MPAs identified and 0.012% of the surface of the Mediterranean.

3.2.2 A low representation of the Mediterranean biodiversity

The representativeness of the MPA network in the Mediterranean is low: one can also not really talk about conservation network and should not confuse it with the MedPan institutional network, which operates is contrarily operational.

a. According to the principles established by the Conference on Biological Diversity, an MPA network is considered representative of a region "when it consists of areas representing different biogeographic subdivisions of a region, reasonably reflecting all different ecosystems, including the biotic and habitat diversity of these marine ecosystems "

The assessing of the representativeness and effectiveness of the network of marine areas and Coastal Protected Areas in the Mediterranean conducted in 2012, concluded the failure of CBD objectives set in 2004 in the region. It requires " an *enhancement of the coverage and the quality, of the representativeness and, if applicable, the connectivity of marine protected areas to contribute to the development of a representative system of protected areas*."[844]

b. From a very broad perspective, first of all, concerning the group consisting of MPAS identified, the study made the observation that:

- The geographical distribution of MPAs is unbalanced between the South shore, east and north shore of the Mediterranean

- The ecological coherence, best in the Western Basin, remains low on a global scale in the Mediterranean. Protected areas are often poorly connected and too unrepresentative;
- AMPs are still mainly coastal;

- The representation of ecological sub-regions, habitats and species is very uneven and protected sites are highly variable adequacy and sustainability;

- In eastern Sicily Channel distribution data on habitats in the southern and eastern sub-regions of the Mediterranean are not available;

- There is no protection policy for the high seas and deep waters. The Pelagos Sanctuary is the only deep-sea MPAs in the region and the content and scope of its conservation measures are marginal, they are for fishing and capture of a class of species excluding habitat , included are the pelagic habitat of cetaceans.

[844] Ibidem

c. If we detail more particularly the current Mediterranean's measures of safeguards and zoning, they are still far from forming a network and can only be considered as a fragmented protected zones assembly, weakly connected to each of the other.

- In the list of sub-regions of the Mediterranean, the Tunisian Plateau / Gulf of Sirte, the Levantine Sea, the Ionian Sea and the Adriatic Sea are not represented in the network of protection;
- The abyssal floor is covered by any MPA and the network is thus only marginally representative of the deep benthic habitats. In particular, the unique deep biocenoses of the Mediterranean such as cold seeps, brine pools and coral reefs cold waters are not under protection;

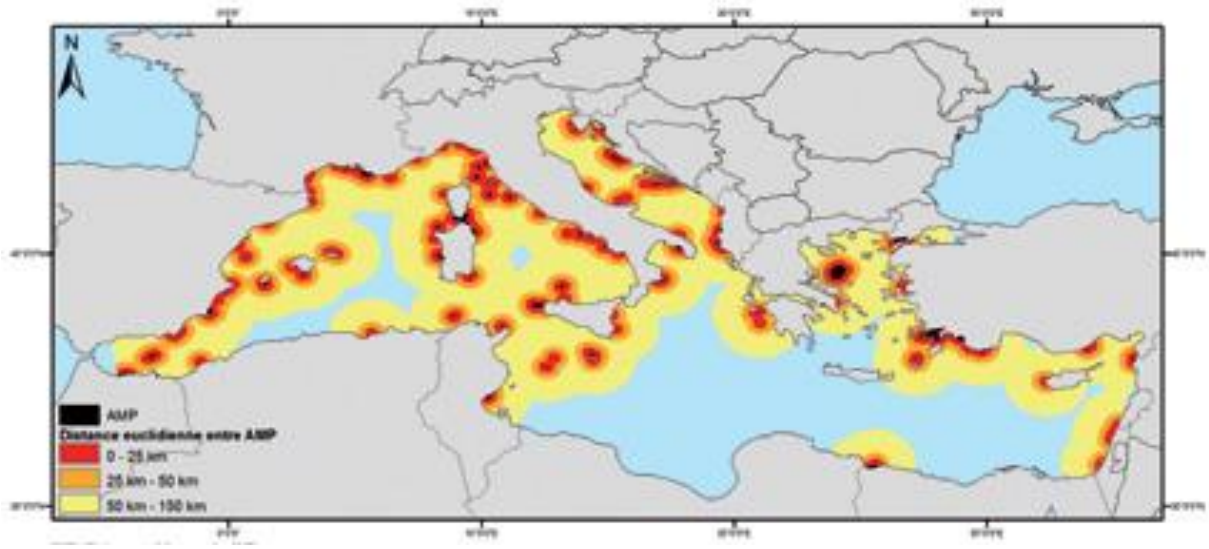
3.2.3 The complex issue of connectivity and effectiveness of the network

a. The connectivity, as the representativeness, is considered as a key element in the development of representative networks of MPAs; she participated in the "ecological coherence" in the conservation planning. In Mediterranean, according to the very low surface of MPASdiversity and interdependence of the sites that element appears to be determined in the conservation strategy.

b. However it is difficult to draw from this principle, operational technical or legal standards. Studies conducted on connectivity are interested in certain populations based on genetic data: their implementation in terms of space, habitat and conservation areas is risky and is sometimes regarded as more political than scientific. There are many uncertainties about the definition of connectivity's parameters which can be used.

MedPan's study was based on the one hand, references of HELCOM and OSPAR conventions which advocating a distance between MPAS of 25 to 50 km, and on the other hand, of some population genetics studies which establish the average dispersal distances of fish between 25 and 150 km. It is on this basis that was modeled the connectivity of the Mediterranean MPAs.

"The average distance between the AMP (between nearest neighbors) in the Mediterranean is 26.6 km (SD = 56.26 km, min = 0.09, max = 3631.5 km). The following figure shows the map of proximity between MPA, 25, 50 and 150 km. MPA 113 (IUCN II and IV. Fig 69), 59.9% of MPAs are separated by less than 25 km (with their nearest neighbor), 6.9% are remote from 25 to 50 km, 9.5% are separated by 50-150 km, and 2.6% are separated by more than 150 km (with a maximum distance between their nearest neighbors 498.6 km). "



Carte des AMP de catégorie UICN II et IV situées a moins de 25 km, entre 25 et 50 km, entre 50 et 150 km et au-delà de 150 km de distance de sa voisine la plus proche in Gabrié C. et al. op. cit. p. 117

This model is actually debatable and could be misleading the real connectivity of the network. The connectivity capability of a species also depends on its surface of establishment: protection areas are greatly reduced in the Mediterranean.
However, from a strategic point of view, it does not matter in the end that the concept of "ecological coherence" have no absolute scientific basis, or that the principles of connectivity are still discussed in the context of research. The politicians need benchmarks and simplistic metrics to establish social reference standards.
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3.3 A DEFICIT OF MANAGEMENT AND GOVERNANCE

Mediterranean MPAs are now better known, well located and their data are collected appropriately in the database of MAPAMED. Beyond the low representation and the small size of MPAs, MedPan study highlights deficiencies in the effectiveness of the management and the governance mechanisms of a significant number of protected areas. The overall effectiveness of the MPA network is affected, even though its international governance is not yet assured.

3.3.1 The shortcomings in the management of MPAs

The set of criteria for good management has been analyzed and despite substantial progress, the effectiveness of MPAs in the Mediterranean is very uneven and generally insufficient.

3.3.1.1 The criteria for a good management of MPAs

The study conducted in 2013 by MedPan measured the effectiveness of management from 80 MPAS selected respondents to a questionnaire sent to all managers who have been identified. This panel is representative of the managerial situation of all MPAS, given the regional disparities we have outlined above.

While some progress has been recorded from a similar study conducted in 2008 by MedPan, the level of management of Mediterranean MPAs remains low according to its own 2013 report: "*Many protected areas are weakened by a management quite inefficient, or completely absent, reducing them to simple parks, existing only on paper, and therefore irrelevant in terms of conservation, the decision makers who have not fulfilled their commitments to initiate appropriate actions, and the civil society at large, which obviously, still do not see the importance of the costs generated by the degradation of the marine environment for the society and the benefits of its conservation* "

This observation is based on the application of efficiency criteria adopted according to international recommendations:

- Management of the MPA by an ad hoc body
- The existence of a management plan,
- The adequacy of funding for the protection,
- The quality of the scientific monitoring of the presence of a scientific council,
- The nature of governance in terms of participation of the local actors in the planning and management of MPAs;
- Consideration of the MPA in the territorial planning;
- Collaboration in management, with other Mediterranean MPAs .

3.3.1.2 Organizations of *ad hoc* management

This criteria is based on the principle that specific structures and specific resources should be allocated to the MPA to directly drive the missions of protection. Special legal structures are established by governments to customize the management, under the form of associations, foundations and public institutions. These new structures increase the administrative landscape: they must find their place and define their particular skills vis-à-vis the authorities and existing organizations.

Of all the national and international MPAS of national status identified in MAPAMED Mediterranean and of the 507 Natura 2000 marine sites 170, 278 sites have an organization of ad hoc management (AMP 153 and 67 sites Natura 2000). Thus over 90% of MPAs of nationhood come with a management organization, but 75% of Natura 2000 sites do not have an identified manager.

Here we see the limits of the accounting for Natura 2000 sites in the European Union in the panel of MPAS: The purpose of Natura 2000 is not specifically marine. Its many sites are the overall response of the European Union to the commitments of the Rio Conference. The Member States have mobilized their ministerial and deconcentrated services to achieve first an inventory of sites to be

protected on their territories and then take pragmatic measures to protect, usually under the direct responsibility of the state administrations. This was not intended to contribute to an international network of MPAs or multiply administrations for very small sized areas.

Half of the management organizations are decentralized at local or regional level, while 36% of the sites of the panel are directly managed by the State. Some MPAs are managed by an NGO or said they did not have a management structure. States and communities are the key players of the policies and of the management of MPAs. Whatever the status, the legal and political control of the state or local authorities on the operation of the MPA is still prominent.
If 17% of MPAs surveyed said they did not have participatory procedures, the involvement of local actors is now major in instances, in planning and management of MPAs in the manner we have outlined above: this is an inevitable development in connection with the arbitration of conflicts of use and the gradual increase in the area of MPAs. It is the same for the integration of MPA in policy of territorial planning, in relation to coastal urbanization and pressure exerted by the policies of Integrated Coastal Zone Management.

c. Half of MPA have no management plan. This means a lack of definition of the functions and tasks accompanying the zoning of conservation, and a low mobilization of stakeholders to give an operational content to the protection. However, experience shows that the development of this plan is the culmination of a long period of negotiation sometimes several years. It contains a number of studies, data collection, stakeholder consultations and users: one can speak of the "maturing" of the institution in its socioeconomic environment. The constraints of the areas to be protected therefore interfere directly on the planning capacity of the management agencies.

3.3.1.3 Funding of MPAs**:** public funding for science and expertise in the countries of the north-western part

a. Funding Mediterranean's MPAS has the same differences we have outlined above. It is primarily an imbalance of resources between countries belonging to the European Union and the countries of southern and eastern basin, according to data from the operating budgets of different MPA from EU countries are on average 1.5 times higher than those of other countries (€ 680,000 / € 450,000). Similar gaps exist for investment budgets that are in the range of 0 to 974,440 euros (100,000 euros median) and are correlated with operating budgets.

b. The other most singular disparity is the magnitude of differences in resources between MPAS, from 0 to € 6.35 million (median 287 000 Euros). These differences are not justified by the importance of the surfaces to manage or the particular challenges for conservation. Small less than 5 square kilometers AMP have high budgets, having means between 100 000 and 200 000 euros / km ^{2}; others, large, have no funding. "*But there is little correlation between the average annual operating budget over the last 5 years and the surface of the MPA."*The reputation and tourism in the protected area are favorable factors in obtaining funding. Paradoxically, the MPAS bes tfunded by government are those which function as "amusement parks" (in both senses of the word: staging of the sea and media promotion of the site).

c. 90% of MPAs work only on public funds. Self-financing and grants from NGOs and international donors are still marginal; they would not allow the creation of a network and ensuring sustainable financing for management agencies.

The involvement of the private sector is very low: only 8 AMP benefit but not decisively (Croatia, France, Greece, Spain, Italy, Slovenia, Lebanon).
We also note that 70% of MPAs have no business plan: Now this formula promoted by some liberal economists should allow the flow of MPAs by the market.
The capabilities of public funding is so for now the key to the development zoning policies and marine protection**:** it explains to a large extent the imbalances of the network of Mediterranean MPAs.

d. The analysis of expenses incurred for the operation of MPAS brings up that the largest budget item is the remuneration of permanent staff in charge of the development and implementation of management plans: the establishment of an ad hoc body for MPA management is a key element in defining needs and spending MPA,as in the conduct of protection mission. As we have indicated, an MPA now produces a range of services in unequal proportions between sites, the nature of its zoning and its social environment; we can consider MPAs as multifunctional organizations:
- The oversight and monitoring compliance with the regulations can be directly carried out by staff attached to the management body but often compliance areas and rules of conduct for users is the subject of a criminal regulations that police state control and sanction;
- The activity and the largest budget item are assigned duties scientific monitoring of the MPA associated with research on marine environment knowledge: the science and expertise contribute to a participatory dialogue of the actors and they provide necessary elements to action plans;
- The trading functions of the management plan and implementation of rules: management agencies are responsible for the organization of forums for discussion and negotiation of actors and invited users to participate in the development of programs action of AMP;
- The functions of communication are particularly developed to change users' behavior: education, awareness, information ... Now they also come in promotions and public attractions in the form of educational or recreational activities;
- The functions of management and rehabilitation sites make up the bulk of investment positions: identifying markings, ecological moorings, access infrastructure ... Restore operations are growing slowly but still limited at scales: restore meadows, reef location, stocking ...
Thus, the management and functions of an MPA first appear in harmony with their socio-economic environment: in relation to their characteristics, the body develops its actions and strategies.

3.3.1.4 The importance of monitoring functions and collection of scientific data

a. The formation of a Scientific Advisory Board with management organism is considered as a key element of good management; in the Mediterranean, only 40% of MPAs have a Board and thus more than half of the AMP has no scientific body attached, although some support for MPAs call as

needed for example to academic research teams. Conversely in the sameMPA several operators may occur creating numerous studies and research (scientists, MPA staff, NGOs, consultancy firms, ...).

b. The vast majority of MPAS ensures regular monitoring and carry out specific studies on particular species or ecosystem functions (example: refuge, wintering, feeding, reproduction ...) on the physicochemical conditions of the environment (temperature , ... salinity) and pollutants. Investigations of uses of fishing (fisheries, catch ...), tourism and other socio-economic activities are rarer because they have a more complex and sometimes conflicting dimension. Overall, the various types of monitoring are carried out by the group of scientists that we reported above. As for the different operators and for the same type of monitoring is a distinction between MedPan by researchers involved in 39% of cases, the MPA staff in 29%, design offices in 17% of other operators in 12% and NGOs in 5% of cases.

However, the profiles of these different operators are homogeneous and their cohesion is strong as managers, consultants, NGOs and research centers often have the same origin and the same training and have often worked together in programs or the same academic curriculum.

c. In the study conducted by Med Pan, in addition to credits for operating of the differen tMPA, 100 monitoring programs have been identified. Information on the types of funding source was obtained for 93 of the 100 programs. The main funder in many programs is the European Union (50% of regional programs, 65% of sub-regional programs, 57% of national programs). Public funds from countries of the European Union come in second place for research grants and monitoring by the finance one third of programs. Public funding from Mediterranean countries participate only up to 4% of monitoring programs and these programs are national.

And the importance of European programs is measured for the economy and for scientific support for management agencies and research. Apart from the economic inequalities of the Mediterranean countries, the couple "public money / group" scientists from member countries of the European Union appears to be driving the dynamics of MPA and development of its resources.

d. The importance of these scientific networks is critical for the development and theimplementation of MPA policies in the Mediterranean. Experience sharing and cross group supports scientific promote MPAs to policy makers and public opinion. Thus half of the MPA reported having developed common management activities with other Mediterranean MPAs. The group of MPAS of the EU has the highest level of collaboration in relation to the importance of its resources.

3.3.2 Good governance and participatory management

The characterization of the governance of the MPA study MedPan in 2013, was inspired by the work

of IUCN concerning "management groups for protected areas": they were originally designed by reference to models of forest management applied in transition countries. This is a type of governance established according to a gradient of decentralization and autonomy of management and decision making, opposed to centralized bureaucratic state model.

a. The notion of governance is primarily linked to the political sociology: however in the investigation by MedPan, it is mainly documented by legal criteria. These criteria do not reflect the dynamics and power plays which make the operation of MPAs.

A scientific approach to governance involves collecting multidisciplinary data on the actual operation of MPAs, particularly in political and administrative sciences, institutional analysis and sociology of organizations, public and private cost accounting ... The influence of demography, market, pressure groups and coastal urbanization in relation to MPA is also important in the distribution of the power management.

The typology of IUCN based on the premise that governance is most effective when it is free from the state, *"[Governance is driving] either by the government - national, regional or local -; either through shared governance (co-management) or by private governance or governance by local communities.* "

b. In the study conducted by MedPan, it thus appears that, in just a formal and legal analysis, 76% of MPAS fall under the "government", whether local, regional or national level. Only 11% of MPAs declared operate in a "shared governance in joint or collaborative co-management 'or local communities (3 AMP - 4%). One MPA has a private governance managed by an NGO (Miramare in Italy). It is confirmed that the role of the coastal State is crucial in the implementation, funding, conducting and animating MPA, although the expertise and participatory democracy now constitute the framework of decision the most frequently used.

The study acknowledges that "this issue has not been well understood they confuse the term" type of governance "and the term" management body "."These concepts remain ambiguous and polysemous, and must be validated by social science surveys.

c. Typology of MedPan was designed by an NGO, it is not free of liberal ideology: it celebrates a civil society that would naturally inspired by a participatory and scientific virtuous approach. However, in respect of marine policies, this subjective approach is unrealistic:

- In terms of protections and marine police nothing can be done without the pulse, warranty and financing of coastal states or supra-state organizations; the role of the ministries of the environment is pre-eminent in these policies, even if NGOs and public opinion in the European Union had decisively political pressure;

- Most of the governance systems are complex assemblies of responsibilities, intricate skills and cross-subsidization; they also work in a permanent dynamic;

- Despite the development of participatory structures, financing, mentoring and the institutional and legal framework for MPA is always under the responsibility of States; it is in the sub-regions where the state fails that MPAs are less developed;

- The function of lobbying by civil society can't ensure the all institutional functions, guarantees and driven by the state apparatus.

By cons, we can apply to the Mediterranean an approach of the governance based on social and political dynamics of the adjacent coastal areas according to an institutional typology taking into account the interaction of the actors: [845]

Critère	AMP Étatique[10]	AMP participative[11]	AMP traditionnelle[12]
Gouvernance	Centralisée	Cogérée	Décentralisée
Approche	Technocratique	Participative	Disciplinaire
Milieu	Urbain	Urbain, périurbain	Rural, villageois

fonction	Territoriale[13]	Mixte : récréative/commerciale	Vivrière
Décision	Unilatérale	Rapports de force, lobbying	Consensuelle
Coût	Coûteux	Coûteux	Bon marché
Fonctionnement	Professionnel	Corporatif, catégoriel	Clanique
Information	Science/expertise	Négociation	Expérience
Organisation	Verticale	Forum	Horizontale
Processus	Bureaucratique	Interactif	Communautaire
Relation aux autres acteurs	Extraverti	Extraverti	Intraverti
	LEGITIMITE ÉTATIQUE	**LEGITIMITE SOCIETALE**	**LEGITIMITE AUTOCHTONE**

Tableau 9: Types de gouvernance d'AMP à partir des règles de fonctionnement. Les 3 archétypes se déclinent selon un large éventail de modèles mixtes présentant des caractères imbriqués en fonction des contextes et des histoires. Source Féral F. in Garcia S.M. et al. p. 263

[845] [845] Il s'agit du modèle centralisé et bureaucratique classique de l'État nation. Il est pratiqué également par des États fédérés ou par des collectivités locales (Corse, Généralité de Catalogne…) : la gouvernance fonctionne selon le modèle étatique même s'il ne s'agit pas d'États au sens du droit international public.

[845] Exemple du parc naturel marin du Golfe du Lion : un forum d'usagers et de représentants locaux oriente la gestion (l'expression « Parlement de la mer » a été utilisée). L'État apparait volontairement minoritaire, mais il conserve les compétences régaliennes, la direction de l'administration de gestion et d'exécutif des décisions consensuelles.

[845] C'est le cas des modèles très localisés devenus rares en Méditerranée car conditionnés par un isolement géographique, (exemple des Prud'homies de la Côte Bleue, les *Cofradias* de la côte Espagnole, les villages des Cyclades ou les coopératives de l'Adriatique : les groupes de pêcheurs gèrent eux même leurs territoires halieutiques) ; cette « gestion » est toujours validée par les instances étatiques

CONCLUSION: PROGRESS AND LIMITATIONS OF THE MPAS' GOVERNANCE IN THE MEDITERRANEAN

For more than a decade the work of networking and services of the MedPan association contributes effectively to strengthen the coverage and the quality, the representativeness and, if applicable, the connectivity of marine protected areas in the Mediterranean.

However the commitments made by the States to constitute 10% of Mediterranean protected areas have not been kept and regional disparities remain under a crippling handicap for the representativeness of the network.

We must distinguish clearly

- Institutional quality of MedPan network that cannot be denied or progress or political activism;

- The network of the many Mediterranean MPAs itself whose connectivity, surfaces and representativeness are outside the targets set in the context of international works.

Mediterranean countries belonging to the European Union have zoning policies, proactive and courageous against powerful lobbies and against the practices of a public user accustomed to a wide open access. Yet these states themselves cannot act beyond their territorial seas beyond 12 miles in the Mediterranean, there are no more protective zoning, including off the coast of the member countries of the European Union.

In the north western part of the Mediterranean Sea, these policies are promoted by NGOs of environmental protection and economic lobby of scientists and experts. This group also exerts its influence on the public and the media so that allows a societal support in favor of unpopular conservation measures. Governance is indeed analysis as a dialectical relationship between the administrative and political apparatus of the states on the one hand and pressure from organized groups of the civil society

This process does not occur in the southern and eastern basin: societal pressure on the governments for the conservation of the sea is not visible and the level of its influence is negligible. The societal model based on NGOs and on lobby scientists must be propagated and promoted in the southern countries otherwise there will be no public policy of MPA.

Moreover, the instability and crises in this Mediterranean subregion secondarize actions to protect the marine environment. Similarly the focus on employment and economic development is not conducive to operations of zoning.

In total, the pressures directly exercise within the classified perimeters are relatively serious because of their small areas and their low-range on the reserves effects on the whole basin. The most serious issue today and that seems insoluble is urban and industrial development of the Mediterranean in a context of competition and conflict-ridden.

At the end of 2012, the MEDPAN network launched with its partners the Mediterranean Forum ofMPS. This will bring together all stakeholders involved in the marine environment; it is a platform to share the experiences of each and to establish a joint work program to advance the network of MPAs in the Mediterranean over the next ten years. It seems that the spread of MPAS and the improving of their conservatory effectiveness could settle on mimicry, education forums, pilot operations, media events, featuring again the issue of marine planning in the heart of the concerns of policymakers.

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