The Legal Basis for the Establishment and Further Development of Marine Protected Areas in the 'European Union Strategy for the Adriatic and Ionian Region' (EUSAIR) with Particular Emphasis on Transboundary Marine Protected Areas

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LIST OF ABBREVIATIONS AND ACRONYMS

ACCOBAMS	Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area
ADRIREP	Adriatic Traffic Reporting System
AII	Adriatic-Ionian Initiative
AIS	Automated Identification System
ATBA	Area to be avoided
Barcelona Convention	Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean
Bern Convention	Convention on the Conservation of European Wildlife and Natural Habitats
CBD	Convention on Biological Diversity
CISE	Common Information Sharing Environment
CCH	Cetacean Critical Habitat
CMS	Convention on the Conservation of Migratory Species of Wild Animals
CIESM	International Commission for the Scientific Exploration of the Mediterranean Sea
CRF	Common Regional Framework
EBSA	Ecologically or Biologically Significant Marine Areas in Need of Protection in Open Waters and Deep-sea Habitats
EFH	Essential Fish Habitat
EGTC	European Grouping of Territorial Cooperation
ETC	European Territorial Cooperation
EU-BS 2030	European Union Biodiversity Strategy for 2030
EU-IMP	European Union Integrated Maritime Policy
EUSAIR	European Union Strategy for the Adriatic and Ionian Region

FAO	Food and Agriculture Organization of the United Nations
FRA	Fisheries Restricted Area
GFCM	General Fisheries Commission for the Mediterranean
ICZM	Integrated Coastal Zone Management
IHO	International Hydrographic Organisation
IMO	International Maritime Organization
IMMA	Area of Interest for Marine Mammals
IMS	Integrated Maritime Surveillance
ISA	International Seabed Authority
IUCN	International Union for the Conservation of Nature
IUCN-WCPA	IUCN World Commission on Protected Areas
IWC	International Whaling Commission
Jakarta Mandate	Jakarta Mandate on Marine and Coastal Biological Diversity
MAP	Mediterranean Action Plan
MARPOL	International Convention for the Prevention of Pollution from Ships
MEPC	Marine Environment Protection Committee
MSFD	Marine Strategy Framework Directive
MSP	Marine Spatial Planning
m	meter
n.m.	nautical mile
PSSA	Particularly Sensitive Sea Area
RAMOGE	Agreement on the Protection of the Waters of the Mediterranean Shore
REMPEC	Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea

SAC	Special Area of Conservation
SBS	Sea Basin Strategy
SCI	Site of Community Importance
SOLAS	International Convention for the Safety of Life at Sea
SPA	Special Protection Area
SDG	Sustainable Development Goal
SPAMI	Specially Protected Areas of Mediterranean Importance
SRC-AS	Subregional Committee for the Adriatic Sea
TAP	Trans Adriatic Pipeline
TFEU	Treaty on the Functioning of the European Union
TEC	Treaty Establishing the European Community
Trilateral Commission	Joint Commission for the Protection of the Adriatic Sea
TSG	Thematic Steering Group
UNEP	United Nations Environment Programme
UNCLOS	United Nations Convention on the Law of the Sea
VME	Vulnerable Marine Ecosystem
VMS	Vessel Monitoring System
VTS	Vessel Traffic Service

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EXECUTIVE SUMMARY

As all EUSAIR countries are either European Union member States or aspire to join the European Union in the (not too distant) future, the key European Union commitments in the field of nature protection provided by the 2030 Biodiversity Strategy seems to be particularly relevant. The latter may be summarized as follows:

(1) Legally protect a minimum of 30% of the European Union's land and 30% of the European Union's sea area and integrate ecological corridors, as part of the true trans-European nature network;

(2) Strictly protect at least a third of the European Union's protected areas, including all remaining European Union primary and old growth forest;

(3) Effectively manage all protected areas, defining clear conservation objectives and measures, and monitoring them appropriately.

Based on the provisions of the 2030 Biodiversity Strategy, European Union member States will be responsible for designating the additional protected and strictly protected areas, either by expanding or completing the NATURA 2000 Network or under national protection schemes (marine protected areas), including eventual (transboundary) marine protected areas established in accordance with the provisions of regional seas conventions (i.e., the Barcelona Convention). Fisheries management will need to be implemented in all marine protected areas, according to clearly defined conservation objectives and on the basis of the best available scientific advice. The Commission will aim to agree the criteria and guidance for additional designations of marine protected areas with member States by the end of 2021. Member States will then have until the end of 2023 to demonstrate significant progress in legally designating new protected areas and integrating ecological corridors.

The European Commission pointed out, in this regard, that full implementation and enforcement of European Union environmental legislation is at the heart of the 2030 Strategy. As regards the Birds and Habitats Directive, enforcement will focus on completing the NATURA 2000 Network, the effective management of all sites, species-protection provision and species and habitats that show declining trends. Furthermore, the application of an ecosystem-based management approach under European Union legislation will reduce the adverse impact of fishing, extraction and other human activities, especially on sensitive species and seabed habitats. To support this, national maritime plans, which member Sates have to deliver in 2021, should aim at covering all sectors and activities, including other effective area-based conservation measures. The Maritime Spatial Plan of the Republic of Slovenia adopted in March 2021 could be a good example in this regard.

The targets put forward by the 2030 Biodiversity Strategy may be achieved by European Union member States – and generally EUSAIR coastal States – through the application of one or more of the following strategies.

a. Expanding and completing the NATURA 2000 - Emerald Network or through the establishment of marine protected areas under national protection schemes*.* The NATURA 2000 Network could be, for example, expanded not only in the Northern and Central Adriatic, but also in the Southern Adriatic (Channel of Otranto area), as well as within the Ionian Sea. EUSAIR coastal States that are not members of the European Union (Albania, Bosnia and Herzegovina, Montenegro) may contribute to this goal through the enlargement of the Emerald network, by establishing additional marine protected areas or through the designation of new marine protected areas under their national legislation. Taking into account that the Croatian waters surrounding the Bosnian waters in the Klek/Neum Bay have been already protected as NATURA 2000 sites, the plans of Bosnia and Herzegovina to protect also its waters in the Klek/Neum Bay, in close cooperation and coordination with neighbouring Croatia, seems to be of particular importance. Bosnia and Herzegovina can achieve the said goal either on the basis of its national legislation or, alternatively, based on the provision of the Bern Convention, contributing in such way to the enlargement of the Emerald network of (marine) protected areas. The NATURA 2000 - Emerald Network of marine protected areas could be strengthened also in the Southern Adriatic, particularly in the Channel of Otranto area and surrounding Ionian Sea, through prompt action and coordination by Albania, Italy and Greece.

b. Establishing marine protected areas, including transboundary, in accordance with the provisions of the Barcelona Convention and its Protocols. Reference should be made in this regard to the possibility of establishing transboundary SPAMIs or one bigger SPAMI in the Northern and Central Adriatic (including the Jabuka/Pomo Pit area) based upon a joint proposal by Croatia, Italy and Slovenia. Following the eventual ratification of the Areas protocol by Greece, a similar move could be envisaged in the Southern Adriatic (Channel of Otranto area) and the Ionian Sea. The scientific basis for such proposals may be found, among other, in the decisions of the Conference of the Parties to the CBD, which in 2014 identified the Northern, Central (including Jabuka/Pomo pit) and Southern Adriatic, including the Strait of Otranto area and nearby Ionian Sea, as EBSAs, and also in the report presented in 2010 to the extraordinary meeting of the focal points for the Areas Protocol, which listed the Northern and Central Adriatic as "priority conservation areas" and, together with *Santa Maria di Leuca* and *Northeastern Ionian*, as potential SPAMIs. Noteworthy is the fact that the latter report was based on a study undertaken by SPA/RAC in the period between 2008-2010 with the financial support of the European Commission. The future accession of Greece to the Areas Protocol seems, accordingly, of paramount importance.

c. ***Establishing other sectoral other effective area-based conservation measures applicable to parts of Adriatic and Ionian Seas (FRAs, marine protected areas for cetaceans, underwater cultural heritage sites, etc.).*** Other effective area-based conservation measures of transboundary character may include FRAs established within the framework of the GFCM, two of which lie in the Adriatic and Ionian Seas, namely the *Lophelia reef off Capo Santa Maria di Leuca* and the *Jabuka/Pomo Pit.* Worth of mention is the *Bari Canyon*, which does not present a transboundary character, although it is located in the South Adriatic Sea off the territorial waters of Italy. Since 2005, the

same organization has prohibited the use of towed dredges and trawl nets at depths beyond 1000 m in the Mediterranean and Black Seas: such effective area-based conservation measure includes portions of the Southern Adriatic and Ionian Seas. The designation of GFCM's FRAs in the Adriatic and Ionian Seas, particularly in its part where fisheries activities are prohibited is important also due to its contribution to achieving the goal of strictly protecting at least a third of the European Union's protected areas by 2030. It is of particular importance that the Jabuka/Pomo Pit has been recently confirmed as a 'permanent' FRA, together with all the associated management measures (44th session of the GFCM, held between the 2 and 6 November 2021) and that a proposed transboundary FRA within the region of concern (Albania, Italy) relating to *Deepwater essential fish habitats and sensitive habitats in the South Adriatic* seems close to its establishment under the GFCM. Furthermore, reference should be made to the fact, that Art. 11 of Regulation (EU) 1380/2013, relating to *Conservation measures necessary for compliance with obligations under Union environmental legislation*, allows for the adoption of conservation measures in order to achieve the objectives of the MSFD and Birds and Habitats Directives, and for the consequent establishment of protected areas of biological sensitivity, including FRAs also under the auspices of the European Union Common Fisheries Policy.

Additionally, as of today, 22 proposals for marine protected areas for cetaceans have been identified within the framework of the ACCOBAMS, four of which would be located in the Adriatic and Ionian Seas, namely: the *Waters along east coast of the Cres-Lošinj archipelago*; the *Sazani Island – Karaburuni Peninsula (Adriatic and Ionian Sea, Albania)*; the *Eastern Ionian Sea and the Gulf of Corinth (Greece)*; and the *Southwest Crete and the Hellenic Trench (Greece)*. The parties still have to achieve the objective of creating and maintaining a network of marine protected areas for cetaceans, which should coincide with those sites recognized as CCHs. The identification of CCHs is, in turn, based on the overlapping of IMMAs and the mapping of anthropogenic threats.

Some States have established marine protected areas also around underwater cultural properties (for example, Italy by decrees of 7 August 2002 established the two underwater parks of *Gaiola*, in the Gulf of Naples, and of *Baia*, in the Gulf of Pozzuoli), based on the relevant provisions of the UNESCO Convention on the Protection of Underwater Cultural heritage. The same approach could be used also in other areas located within the 'heritage rich' Adriatic and Ionian Seas, which are important for the *in situ* preservation of underwater cultural heritage.

d. Establishing a PSSA applicable to the entire Adriatic Sea, including the whole Otranto Channel area. An extremely important tool which may help in the achievement of the goals put forward by the 2030 Biodiversity Strategy and other global policy instrument is represented by the designation of the entire Adriatic Sea, including the wider Otranto Channel area, as a PSSA. Noteworthy is the fact that a PSSA can be used as a supplementary measure within an already established marine protected area or other effective area-based conservation measure (e.g., FRA). Alternatively, it can be proposed as a separate sectoral measure in relation to threats posed by international shipping, in parallel with the process of establishment of a (transboundary) marine protected area, including a SPAMI. The example of the Strait of Bonifacio, where all previously mentioned

instruments – i.e., national marine protected areas both on the French and Italian side, NATURA 2000 sites, international marine park co-managed by an EGTC, a SPAMI and a PSSA – coexist over roughly the same area, is a clear example in this regard.

One of the most important challenges in the process of designing a PSSA is represented by the endorsement, preparation and joint submission of a PSSA proposal to the IMO by all affected States. The chances of success of a proposal are far greater if all States bordering an enclosed or semi-enclosed sea (i.e., all coastal States bordering the Adriatic and Ionian Seas) are united and submit a joint proposal with regard to the designation of a certain area (e.g., the Adriatic Sea) as a PSSA, together with the relevant "associate protective measures". The chances of success are further enhanced if such proposal is supported within the IMO bodies by the European Union and its member States as a united block, as for example the case has been during the process of adoption of the "Western European Waters" PSSA in 2004. Independently of the fact that the draft PSSA proposal prepared in the period 2006-2011 related to the Designation of the entire Adriatic Sea as a PSSA was not finalized and submitted to the IMO, the said draft may represent a sound basis either for its update and finalisation, or as a starting point for the preparation of a new PSSA proposal.

e. Effectively managing all protected areas, defining clear conservation objectives and measures, and monitor them appropriately. The aim of effectively managing all protected areas, defining clear conservation objectives and measures and monitoring them appropriately could be achieved in the Adriatic and Ionian Seas also with the help of an innovative legal entity, the EGTC, in accordance with the relevant European Union legislation. As an autonomous legal entity, an EGTC set up by the Adriatic and Ionian coastal States could be responsible for the management of a protected transboundary area, or network of areas, in the Adriatic and Ionian Seas and the identification of the relevant protection measures. Its legal personality based on public law, with tasks specified in the constitutive instruments, would ensure that such management authority participates through its legal and institutional representations in the most appropriate fora where marine environment protection tools are discussed and approved. Each EGTC is governed by a convention concluded by its members. These may be European Union member States, regional and local authorities of European Union member States, public undertakings and public bodies under certain conditions, also belonging to States that are not members of the European Union. What is necessary is that the EGTC is made up of members that are located on the territory of at least two European Union member States. In addition, the EGTC may include one or more States that are neighboring at least of one European Union member State that is a member of the same EGTC. A State that is not a member of the European Union is considered as a "neighboring State" under the EGTC Regulation when *"it shares a common land border or where both the third State and the EU Member State are eligible under a joint maritime cross-border programme under the European territorial cooperation goal, or are eligible under another cross-border, sea-crossing or sea-basin cooperation programme, including where they are separated by international waters"* (Art. 3a, para. 1). The maritime borders between the countries concerned are included. Accordingly, Albania, Bosnia and Herzegovina and Montenegro –

or public bodies of these States – could become members of an EGTC in the Adriatic and Ionian Seas. The possibility to resort to the EGTC instrument with a view to protecting the marine environment in a transboundary context, as a possible form of territorial cooperation, has been already affirmed through the establishment of the EGTC for the *International Marine Park of the Mouths of Bonifacio*, in the Tyrrhenian Sea.

Another example of good practice which may be taken into account both with regard the management of marine protected areas in particular, and the holistic governance of the Adriatic eco-region in general, is represented by the work of the International Sava River Basin Commission. The latter was established with the aim to implement the Framework Agreement on the Sava River Basin (FASRB), concluded in 2004 by the riparian States, Slovenia, Croatia, Bosnia and Herzegovina and Serbia. Noteworthy is the fact that, the key objective of the Framework Agreement (and of the Commission) is to achieve sustainable development of the region through transboundary cooperation. Particular emphasis is paid in this regard to the setting up an international regime of navigation, on sustainable water management, on the prevention and limitation of hazards and related elimination or at least reduction of their negative consequences. Reference should be finally made to the fact, that four protocols to the Framework Convention have been concluded in the fields of Regime of Navigation (2004), Flood Protection (2015), Prevention of Water Pollution Caused by Navigation and Sediment Management (both in 2017). Noteworthy is the fact that the first Sava River Basin Management Plan was adopted in 2014 and is now already under review. It may be suggested that a similar function to that of the Sava River Basin Commission could be undertaken in the Adriatic and Ionian context by the (expanded) Quadrilateral Commission.

Both the Adriatic and Ionian Seas qualify as juridical "enclosed or semi-enclosed seas" based on the provisions of Part IX UNCLOS. Accordingly, coastal States are under a good faith obligation to establish among themselves closer means of cooperation than those applying in other marine spaces. Currently, all States bordering the Adriatic and Ionian Seas are parties to the UNCLOS. An important consideration with regard to the juridical status of the Adriatic and Ionian seas is that once all coastal States will proclaim an exclusive economic zone – namely: Albania, Italy (which has adopted in 2021 a framework law that needs to be implemented through a decree), Greece and Montenegro, in addition to Croatia that has already proclaimed a full exclusive economic zone in 2021 – the high seas will disappear from the Adriatic and Ionian Seas.

The extension of jurisdiction by a European Union member State (e.g., Croatia) automatically entails the extension of the European Union legal order and policies on that part of the sea (as it happened with the Croatian exclusive economic zone). Such order includes, *inter alia*, the European Union Integrated Maritime Policy, having the European Union Marine Strategy Framework Directive (hereafter: MSFD) as its environmental pillar, the Birds and Habitats Directive with its NATURA 2000 Network of protected areas and Maritime Spatial Planning as one of the most important cross-sectoral policies. The concept of blue corridors in maritime spatial planning should be seen as a measure to improve the functional connectivity of ecological networks and to ensure sustainable

fisheries and navigation in marine ecoregions. The MSFD clearly identifies the Adriatic Sea as a separate management sub-region (eco-region) within the wider Mediterranean region, while the Ionian Sea forms a separate sub-region, together with the Central Mediterranean.

The present trend towards the establishment of exclusive economic zones could become an incentive towards the adoption of a coherent and coordinated Mediterranean – and Adriatic and Ionian – network of marine protected areas and other effective area-based conservation measures.

CHAPTER 1

ADRIATIC AND IONIAN SEAS AS PART OF THE WIDER MEDITERRANEAN SEA[1]

1.1. Geographical and political considerations

Throughout history, the Mediterranean Sea has been known by a number of alternative names. During Roman times it was commonly referred to as the *Mare Nostrum* and from this expression it may be implied that it was, to a certain extent, also a *Mare Clausum.* Noteworthy is the fact that its current name is derived from the Latin word *mediterraneous*, meaning 'in the middle of the earth' or 'between lands'. The name Mediterranean, therefore, clearly emphasizes the 'enclosed' position of this sea between not less than three continents – Africa, Asia and Europe.

Nowadays, quite contrary from ancient times, the Mediterranean coastline, which extends to approximately 22,500 km, is shared by 23 States[2]. The overall surface of the Mediterranean Sea amounts to about 2,500.000 km^2, while its average depth is approximately 1,500 m. The Mediterranean Sea stretches over a distance of 3,500 km (from Gibraltar to the east)[3]. The Mediterranean Sea is an international waterway linking the Atlantic and Indian Oceans through the Suez Canal, and both of them with the Black Sea, through the Turkish straits of Bosporus and Dardanelles. Some major islands (Sicily, Sardinia, Corsica, Cyprus and Crete) and a great number of smaller islands and islets are situated in the Mediterranean.

Also due to the slow exchange of waters through the Strait of Gibraltar, the Mediterranean Sea is at great risk of pollution[4]. Marine living resources are under pressure from pollution and overfishing. Liquid and gaseous hydrocarbons have been found in the continental shelf along the southern and eastern Mediterranean shores.

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[1] Chapter 1 of this study is partially based on chapter 1 of GRBEC, *Extension of Coastal State Jurisdiction in Enclosed and Semi-Enclosed Seas. A Mediterranean and Adriatic Perspective*, London and New York, 2015. For the purposes of this study, the Mediterranean Sea is defined as per Art. 1, para. 1, of the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona, 1976, as amended in 1995; hereafter: Barcelona Convention), the Black Sea being excluded from the definition.

[2] Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Palestine, Slovenia, Spain, Syria, Tunisia, Turkey, the United Kingdom (as regards Gibraltar and the two Sovereign Base Areas of Akrotiri and Dhekelia on the island of Cyprus). Eight among the Mediterranean bordering States are members of the European Union, an international organization that exercises, *inter alia*, an exclusive competence for fisheries management and conservation and shared competences with its member States in the field of protection of the marine environment.

[3] For more details, see LEANZA, *Il regime giuridico internazionale del mare Mediterraneo,* Napoli, 2008.

[4] More than 80 years is the period needed for the exchange of Mediterranean waters through the Strait of Gibraltar. See LEANZA (*op.cit*. in footnote 3), p. 8.

Figure 1 – The Mediterranean Sea and its sub-seas. Source: GRBEC (*op.cit.* in footnote 1), Figure 1.1.

Another important characteristic of the Mediterranean Sea is that it comprises a number of sub-seas (Figure 1) which are either indented inside the continent (e.g., the Adriatic Sea) or situated between a continent and islands (e.g., the Tyrrhenian Sea). The main sub-seas in the Western Basin include the Alboran Sea (between Spain and Morocco), the Balearic Sea (between the Spanish coast and the Balearic Islands) and the Ligurian and Tyrrhenian Seas, lying between mainland Italy and the islands of Corsica, Sardinia and Sicily. The sub-seas in the Central and Eastern Mediterranean include on the other hand the Aegean, Ionian and ultimately the Adriatic Sea. At least geographically speaking, the Adriatic and Ionian are therefore two distinct sub-seas of the wider Mediterranean Sea. The common denominator of the mentioned sub-seas, both in the Western and Eastern Basins, is a restricted space, coupled in the majority of cases with narrow connections to other sub-seas. A clear example in this regard is represented by the Channel of Otranto, linking the Adriatic to the Ionian Sea and wider (Central) Mediterranean.

The bordering countries differ as far as their internal political systems and levels of economic development are concerned. Highly populated cities, ports of worldwide significance, important industrial areas and renowned seaside resorts are located along the Mediterranean shores. The said geographical difficulties in the Mediterranean are furthermore accentuated by some longstanding political problems as, for example, by the presence of the United Kingdom enclave of Gibraltar on the Iberian Peninsula and by the

presence of the Spanish enclaves on the Moroccan coast, coupled with the still difficult relationship of Israel with its Arab neighbours (i.e., Lebanon). The delimitation of maritime boundaries in the Eastern Mediterranean is furthermore complicated by the still divided status of Cyprus and by the tense relations between Greece and Turkey in the Aegean Sea.

Navies of bordering and non-bordering States cruise the Mediterranean, which is a region of major strategic importance. These factors complicate, among others, the delimitation of maritime zones and the process of extension of coastal State jurisdiction in the Mediterranean Sea and its sub-seas[5] and have, as such, represented an important barrier to regional and sub-regional cooperation. It is nonetheless imperative to note that, despite the fact that not all Mediterranean States are parties to the United Nations Convention on the Law of the Sea (Montego Bay, 1982; hereafter: UNCLOS)[6], all States bordering the Adriatic and Ionian Seas are State parties to the said Convention.

The Adriatic Sea, as a sub-sea of the Mediterranean, may be defined as a narrow, shallow and temperature warm semi-enclosed sea, forming a distinct sub-region within the Mediterranean Sea region[7]. The Adriatic Sea is nowadays surrounded by seven States: Italy, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Albania and Greece. The latter is also considered as an Adriatic State, mostly a result of the geographical position of the Greek island of Corfu located at its entrance, and due to some smaller Greek islands located within the Channel of Otranto.

Reference should be made to the fact that the geographical coordinates of the Adriatic Sea, as well as those of the Ionian Sea as explained later, slightly differ depending on the purpose of the specific measurement. From the practical point of view, of particular importance seem the coordinates contained in various documents of the International Maritime Organization (hereafter: IMO) relating to safety of navigation in the Adriatic Sea. In the joint proposal submitted in 2003 by Albania, Croatia, Italy, Serbia and Montenegro, and Slovenia on the establishment of new recommended traffic separation schemes / recommended routes system and other new routeing measures in the Adriatic Sea, endorsed by the IMO, the Adriatic is described as follows:

> The Adriatic Sea is the part of the Mediterranean sea situated between Balkan and Apennine peninsulas, on the geographical longitude between 012°15' E and 019°45' E and the geographical latitude between 39°45' N and 45°45'N. The south border includes the whole area of the Strait of Otranto.

[5] GRBEC, *Extension of Coastal State Jurisdiction in the Mediterranean: Quasi EEZs or real sui-generis zones?*, in MARTÍNEZ GUTIÉRREZ (ed.), *Serving the Rule of International Maritime Law: Essays in Honour of Professor David Joseph Attard*, London - New York, 2010, p. 181.
[6] Israel, Libya, Syria and Turkey are not parties to the UNCLOS.
[7] VIDAS, *Particularly Sensitive Sea Areas: The Need for Regional Cooperation in the Adriatic Sea*, in OTT (ed.), *Croatian Accession to the European Union: Institutional Challenges*, Zagreb, 2006, p. 359.

Figure 2 – The Adriatic Sea. Source: GRBEC (*op.cit.* in footnote 1), Figure 1.3.

Due to its relatively long and narrow shape, the Adriatic is deeply indented into the European mainland and linked to the Ionian and the rest of the Mediterranean Sea only through the Channel of Otranto. The surface of the Adriatic Sea amounts to 138,595 km^2, while the total length of the Adriatic coastline is around 7,912 km^2, more than half of which composed of the coastline of the numerous islands fringing particularly the Eastern Adriatic coasts. The length of the Adriatic Sea from Venice and the mouth of the River Butrinit in Albania amount to almost 475 n.m. It is noteworthy that the average width of the Adriatic is only 85 n.m. The Adriatic Sea has been also an important route of international navigation. The main navigation route in the Adriatic Sea goes from the 'wider' Mediterranean Sea (Ionian) through the approximately 45 n.m. wide Channel of

Otranto and towards one of the Northern Adriatic ports: Trieste (Italy), Koper (Slovenia) and Rijeka (Croatia).

The Adriatic marine environment is extremely sensitive and represents an almost unique ecosystem[8]. It has been alleged that its environmental conditions are mostly a result of the specific exchange of waters with the Ionian Sea and the wider Mediterranean through the Otranto Channel and the Palagruža threshold separating the shallower Northern Adriatic from the deeper Southern Adriatic, and furthermore by the inputs of freshwater from the mountains in the Eastern and the rivers in the Western part[9]. Its living resources can be generally qualified as highly diversified, with numerous species but low abundance, which in turn makes the Adriatic's ecosystem particularly vulnerable.

The ecosystem of the Ionian Sea, which is bordered only by two States (Greece and Italy), seems to be in comparison with the Adriatic's ecosystem less vulnerable, due to the fact that the Ionian Sea is neither so narrow, nor so shallow, and has – differently from the Adriatic Sea – a wide opening towards the wider (Central) Mediterranean. The Ionian Sea differs from the Adriatic Sea also with regard to its depth. While the depth of the Adriatic Sea generally does not reach more than 40 m, the Ionian Sea is deeper and even includes the deepest point in the Mediterranean Sea (5,269 m at the southwest of the Peloponnese). As a result, it has been argued that the Ionian Sea is, in comparison with the Adriatic Sea, better oxygenated with a higher abundance of species. Taking however into account that the Adriatic Sea is connected to the wider Mediterranean Sea exclusively through the narrow Otranto Channel and the Ionian Sea, the activities within, and the environmental status of, the Adriatic Sea have a profound impact on the environment and the ecosystem of the Ionian Sea. It may be asserted, accordingly, that the Adriatic and Ionian ecosystems are closely interconnected.

[8] Joint Expert Group of the Adriatic States on the PSSA, *Designation of the Adriatic Sea as a Particularly Sensitive Area*, Draft proposal (Second Draft), 2007, p. 2. Copy on file with the authors.
[9] *Ibid.*, p. 2.

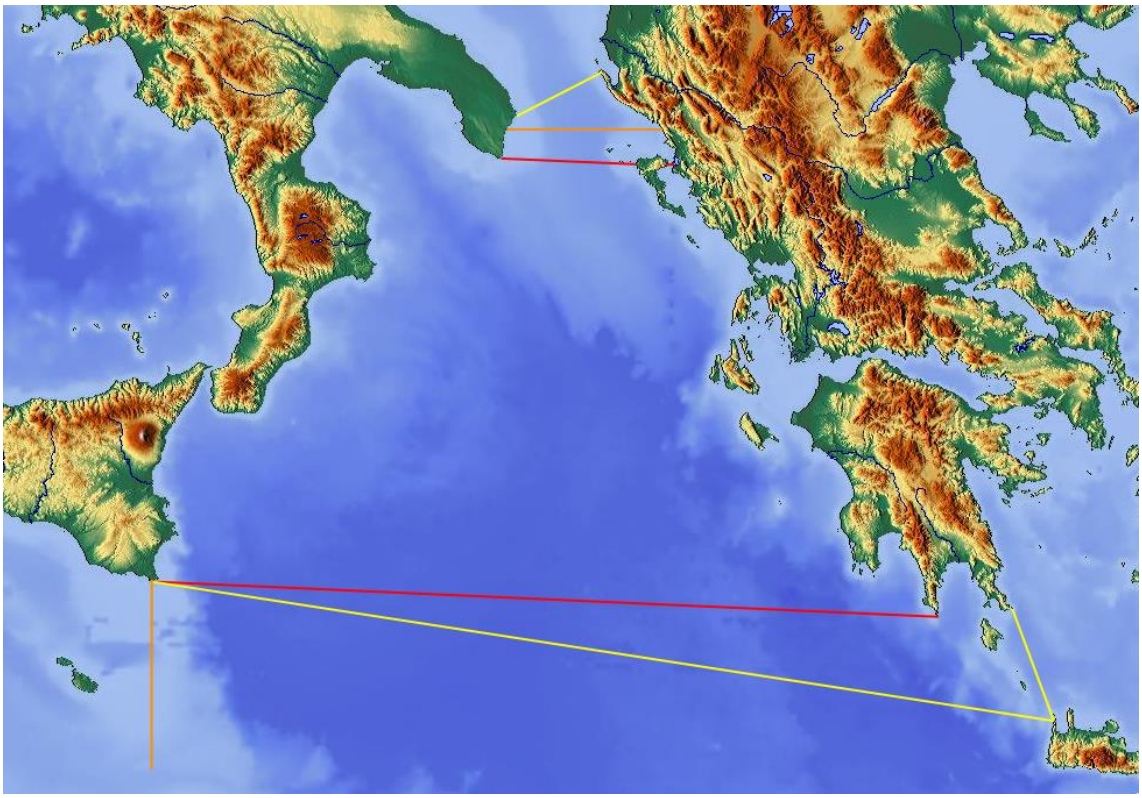

Figure 3 – Limits of the Ionian Sea (in red) as defined by the International Hydrographic Organization[10]. Source: https://www.atlanticoceanmap.com/ionian-sea/.

The political map of the Adriatic and Ionian region still shows a division between States that are members of the European Union (Croatia, Greece, Italy and Slovenia) and other States, although it is important to note that all remaining States aspire to join the European Union in a not too distant future. The organization, also through its policies and macro-regional strategy (i.e., through EUSAIR)[11] has become an important actor and catalyst in the context of Adriatic-Ionian cooperation[12].

Reference should be made to the fact that the Adriatic and Ionian region is a functional area, primarily defined by the Adriatic and Ionian Seas basin. It is home to more than 70 million people and paramount for Europe's geographical continuity[13].

[10] *On the North.* A line running from the mouth of the Butrinto River (39°44'N) in Albania, to Cape Karagol in Corfu (39°45'N), along the North Coast of Corfu to Cape Kephali (39°45'N) and from thence to Cape Santa Maria di Leuca in Italy. *On the East.* From the mouth of the Butrinto River in Albania down the coast of the mainland to Cape Matapan. *On the South.* A line from Cape Matapan to Cape Passero, the Southern point of Sicily. *On the West.* The East coast of Sicily and the Southeast coast of Italy to Cape Santa Maria di Leuca, INTERNATIONAL HYDROGRAPHIC ORGANIZATION, *Limits of Oceans and Seas*, 3rd ed., *IHO Special Publication*, No. 23, Monaco, 1953, p. 17, available at: https://epic.awi.de/id/eprint/29772/1/IHO1953a.pdf.

[11] See *infra*, sub-para. 2.4, D.

[12] SLIM and SCOVAZZI, *Study of the Current Status of Ratification, Implementation and Compliance with Maritime Agreements and Conventions Applicable to the Mediterranean Sea Basin*, 2009, Part 2, pp. 67-68.

[13] EUROPEAN COMMISSION, *For a Prosperous and Integrated Adriatic and Ionian Region*, 2014, available at https://ec.europa.eu/regional_policy/en/information/publications/brochures/2014/for-a-prosperous-and-integrated-adriatic-and-ionian-region.

Figure 4 – The EUSAIR area. Source: doc. COM (2020)132 final.

1.2. Present juridical picture of Mediterranean waters

From the standpoint of contemporary law of the sea, there are at least four important implications of the previously explained size and configuration of the Mediterranean Sea on its juridical status, also in the context of the Adriatic and Ionian Seas, as sub-seas or sub-regions of the wider Mediterranean Sea.

The first implication is that there is no point in the Mediterranean, including within the Adriatic and Ionian Seas, which is located at a distance of more than 200 n.m. from the nearest land or island. In practical terms, this means that Mediterranean coastal States, including those bordering the Adriatic and Ionian Seas, are not in a position to extend their jurisdiction up to the maximum extent permitted by international law. Similarly, the limited maritime space available also means that almost every extension of jurisdiction creates new neighbours and triggers the need for delimitation of actual or potential zones of sovereign rights or jurisdiction with adjacent and opposite States.

Secondly, due the proximity between Mediterranean States, including between States bordering the Adriatic and Ionian Seas, the extension of jurisdiction by one coastal State, in most cases, affects the interests of more than just another neighbouring State. An excellent example is the complicated geographical situation in the Ionian Sea and generally Central Mediterranean, where the extension of jurisdiction by one State up to the maximum extent permitted by international law, would affect the interest of up to four neighbouring States, namely Greece, Italy, Libya, and Malta (Figure 5 below).

Figure 5 - Overlapping claims in the Ionian Sea and the Central Mediterranean. Source: GRBEC (*op.cit.* in footnote 1), Figure 1.2, modelled on FRANCALANCI and SCOVAZZI (eds.), *The Mediterranean: Selected Maps*, Genoa, 1992.

Thirdly, since the continental shelf exists *ipso facto* and *ab initio*, there is no space in the Mediterranean Sea, including within the Adriatic and Ionian Seas, for an outer

continental shelf on the basis of Art. 76 UNCLOS, nor obviously for the Area in accordance with Part XI UNCLOS[14].

In fact, Mediterranean States are still far from taking a uniform attitude as regards the extent and nature of their coastal zones. Looking at the map, a patchwork of different kinds of coastal zones mixed with holes of high seas is immediately visible. But the situation is likely to change in the future because of the growing trend towards the establishment of exclusive economic zones. The present picture of coastal zones in the Mediterranean is the following.

Maritime internal waters. Several Mediterranean States (Albania, Algeria, Croatia, Cyprus, Egypt, France, Italy, Libya, Malta, Morocco, Montenegro, Spain, Tunisia and Turkey) have enacted legislation measuring the breadth of the territorial sea not from the low-water mark, but from straight baselines joining points located on the mainland or islands. Historical bays are claimed by Italy (Gulf of Taranto) and Libya (Gulf of Sidra).

Territorial sea. Most Mediterranean States have established a 12-n.m. territorial sea. The exceptions are the United Kingdom (3 n.m. for Gibraltar and the Sovereign Base Areas of Akrotiri and Dhekelia), Greece (6 n.m., but 12 n.m. in the Ionian Sea up to Cape Tenaron)[15] and Turkey (6 n.m. in the Aegean Sea, but 12 n.m. elsewhere).

Contiguous zone. 24-n.m. contiguous zones have been established by some States (Algeria, Cyprus, Egypt, France, Malta, Morocco, Spain, Syria and Tunisia) for customs, fiscal, immigration or sanitary purposes. Algeria, Cyprus, France, Italy and Tunisia exercise rights in the field of archaeological and historical objects found at sea within the 24-n.m. limit (so-called archaeological contiguous zone).

Sui generis zones (fishing zone, ecological protection zone). Some coastal States have proclaimed a *sui generis* zone beyond the territorial sea, namely a fishing zone or an ecological protection zone. While neither of them is mentioned in the UNCLOS, they are not prohibited either. They encompass only some of the rights that can be exercised within the exclusive economic zone. Such a fragmentation of rights does not seem incompatible with the UNCLOS, considering that the right to do less is implied in the right to do more.

Fishing zones of different width have been proclaimed by Libya, Malta and Tunisia. An ecological protection zones has been proclaimed by Italy, but only as regards the waters of the Ligurian and Tyrrhenian Seas.

Exclusive economic zone. A number of Mediterranean States have established an exclusive economic zone (Algeria, Croatia, Cyprus, Egypt, Israel, Lebanon, Morocco, France, Spain and Syria) or have adopted legislation enabling the future establishment of such a zone (Italy, Libya, Montenegro and Tunisia).

As regards *maritime boundaries*, only a limited number of the required delimitation treaties have been concluded so far by Mediterranean States with adjacent

[14] It is nonetheless interesting that, while approximately 20 per cent of the Mediterranean Sea is represented by the natural continental shelf, the waters of the Adriatic Sea, as one of its sub-seas, are almost completely situated over its natural continental shelf. See LEANZA (*op.cit.* in footnote 3), p. 10.

[15] The Greek territorial sea in the Ionian Sea has recently been extended from 6 to 12 n.m. by Law No. 4767 of 21 January 2021.

or opposite coasts, and not all of them have entered into force. Several instances of maritime boundaries are still unsettled, 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.).

In particular, as regards the Adriatic and Ionian Seas, the boundary of the territorial sea between Italy, on the one hand, and Croatia and Slovenia, on the other, has been determined in 1975 by the treaty concluded in Osimo by Italy and the former Yugoslavia (Figure 6 below).

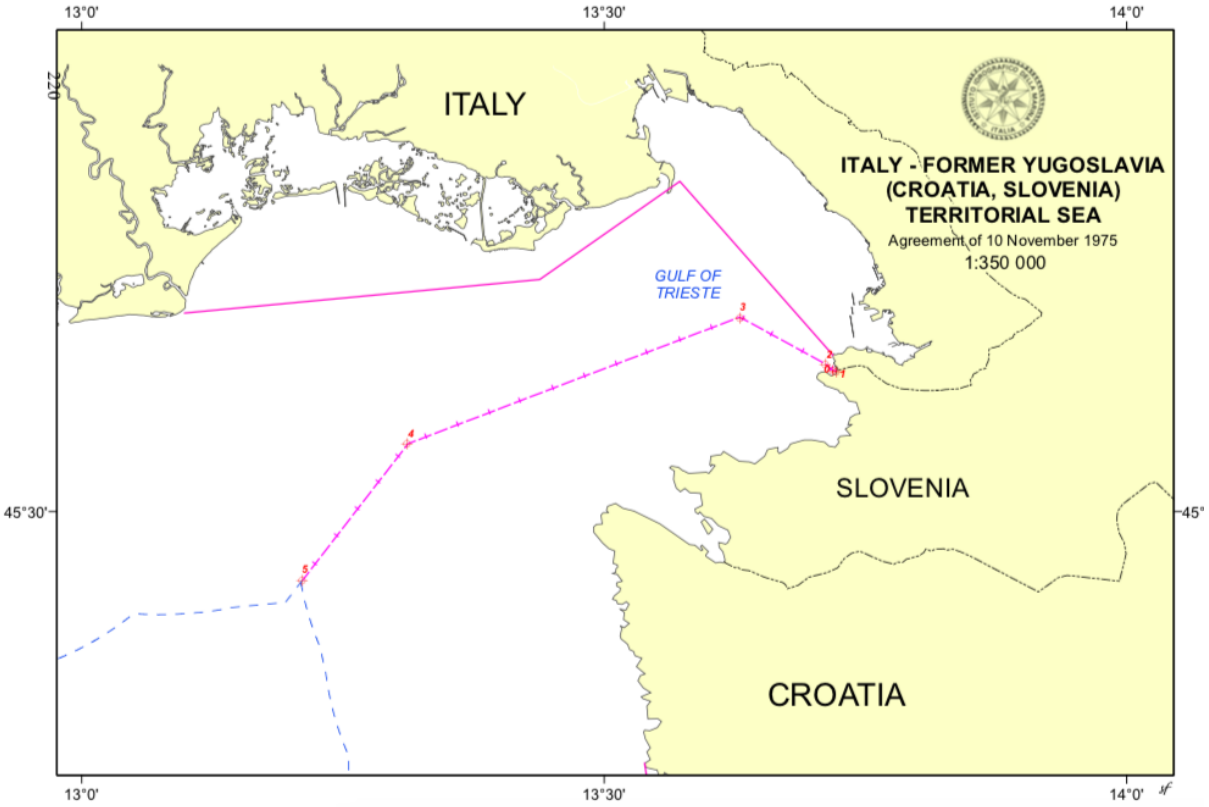

Figure 6 – Delimitation of the territorial sea between Croatia and Slovenia, on the one hand, and Italy, on the other hand. Based on the treaty between Italy and the former Yugoslavia (Osimo, 10 November 1975). Source: TANI, FERRERO and PIZZEGHELLO (eds.), *Atlas of Maritime Limits and Boundaries in Central Mediterranean: Legal Texts and Illustrative Maps*, Genoa, 2020, p. 220.

The territorial sea boundary between Croatia and Slovenia has been settled by the arbitral award of 29 June 2017 (Figure 7 below). However, the two States concerned have taken different positions about the validity of the award[16].

[16] According to Slovenia, the award is binding. According to Croatia, the 2009 arbitration agreement was terminated before the date of the award. Award available at: https://pca-cpa.org/en/cases/3/.

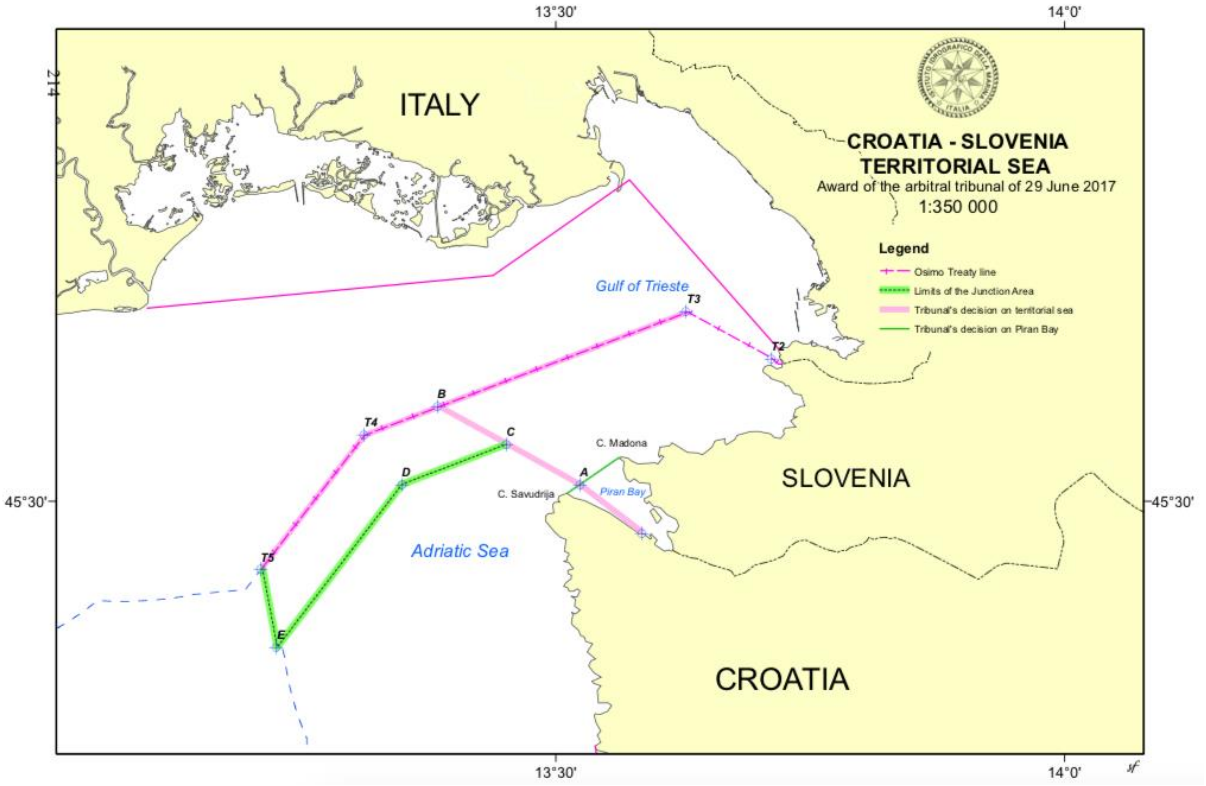

Figure 7 – Delimitation of the internal waters, territorial sea and 'junction area' between Croatia and Slovenia, settled by the arbitral award of 29 June 2017. Source: TANI, FERRERO and PIZZEGHELLO (eds.)(*op.cit.* in Figure 6), p. 214.

The boundary between the marine internal waters of Croatia and the territorial sea of Bosnia and Herzegovina has been provisionally established by the 1999 Treaty on the State border between the two countries (Figure 8 below).

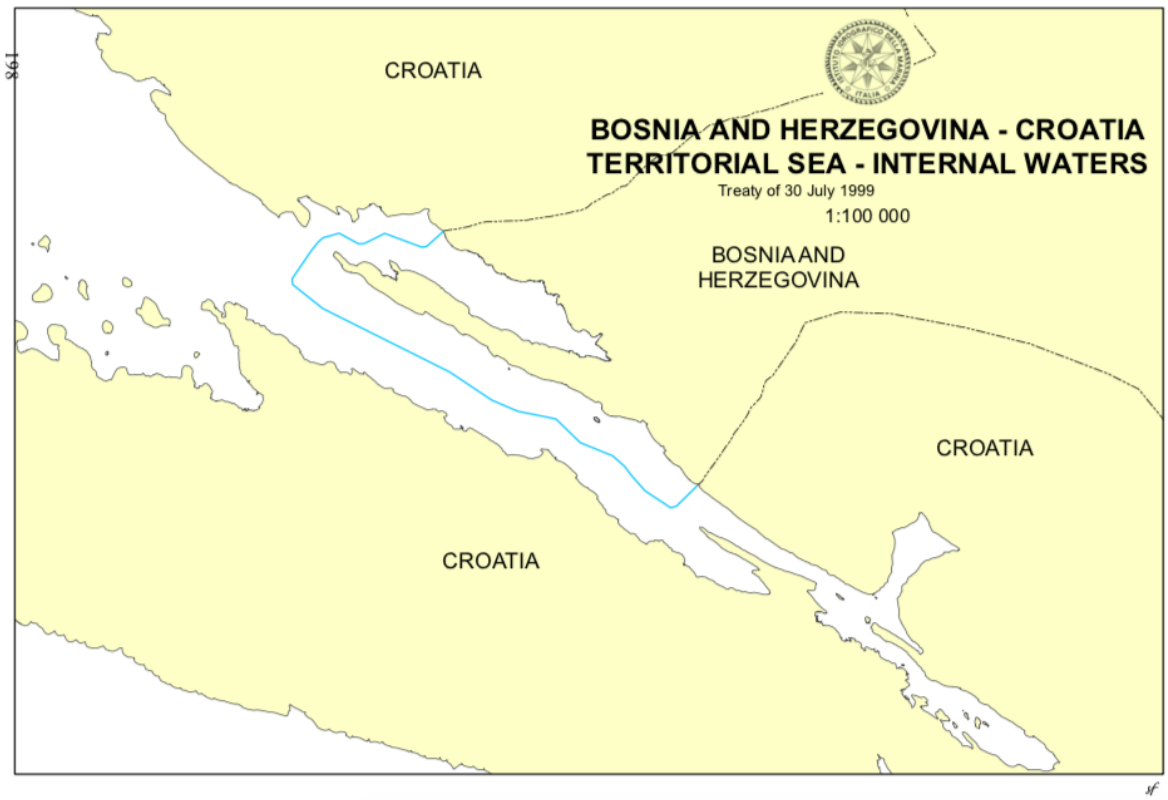

Figure 8 – Delimitation of the internal waters and territorial sea between Bosnia and Herzegovina and Croatia. Based on the treaty on the State border between the two States (Sarajevo, 30 July 1999). Source: TANI, FERRERO and PIZZEGHELLO (eds.) (*op.cit.* in Figure 6), p. 198.

The territorial sea boundary between Croatia and Montenegro was provisionally delimited by the 2002 protocol between Croatia and the former Yugoslavia[17]. There is no agreement of maritime delimitation between Albania and Montenegro. A delimitation of the territorial sea and other maritime zones between Albania and Greece was effected under an agreement signed in Tirana in 2009. However, it is unlikely that the agreement will ever enter into force, because in 2010 the Albanian Constitutional Court found that the agreement was vitiated by procedural and substantive violations of the Constitution and the UNCLOS.

As far as the other maritime zones are concerned, the agreement between Italy and the former Yugoslavia on the delimitation of the continental shelf (Rome, 1968) (Figure 9 below)[18] applies today in the relationship between Italy and the successor State Croatia[19]. However, the 1968 agreement did not delimit the exclusive economic zone, for which another boundary treaty needs to be concluded in the future. Nor does it apply anymore between Italy and Montenegro[20].

[17] Map in GRBEC (*op.cit* in footnote 1), Figure 4.3, p. 164. There is a dispute between the two countries about sovereignty over the Prevlaka Peninsula.
[18] This is the first treaty concluded for the delimitation of a maritime boundary in the Mediterranean Sea.
[19] According to Art. 43, para. 2, of the Croatian Maritime Code of 27 January 1994, *"the boundary line of the continental shelf between the Republic of Croatia and the Republic of Italy has been established by the agreement between Italy and the former Federative Socialist Republic of Yugoslavia in 1968".*
[20] The memorandum between Italy and Montenegro on the succession of Montenegro to the bilateral treaties concluded before the proclamation of independence (Podgorica, 2012) does not list the 1968

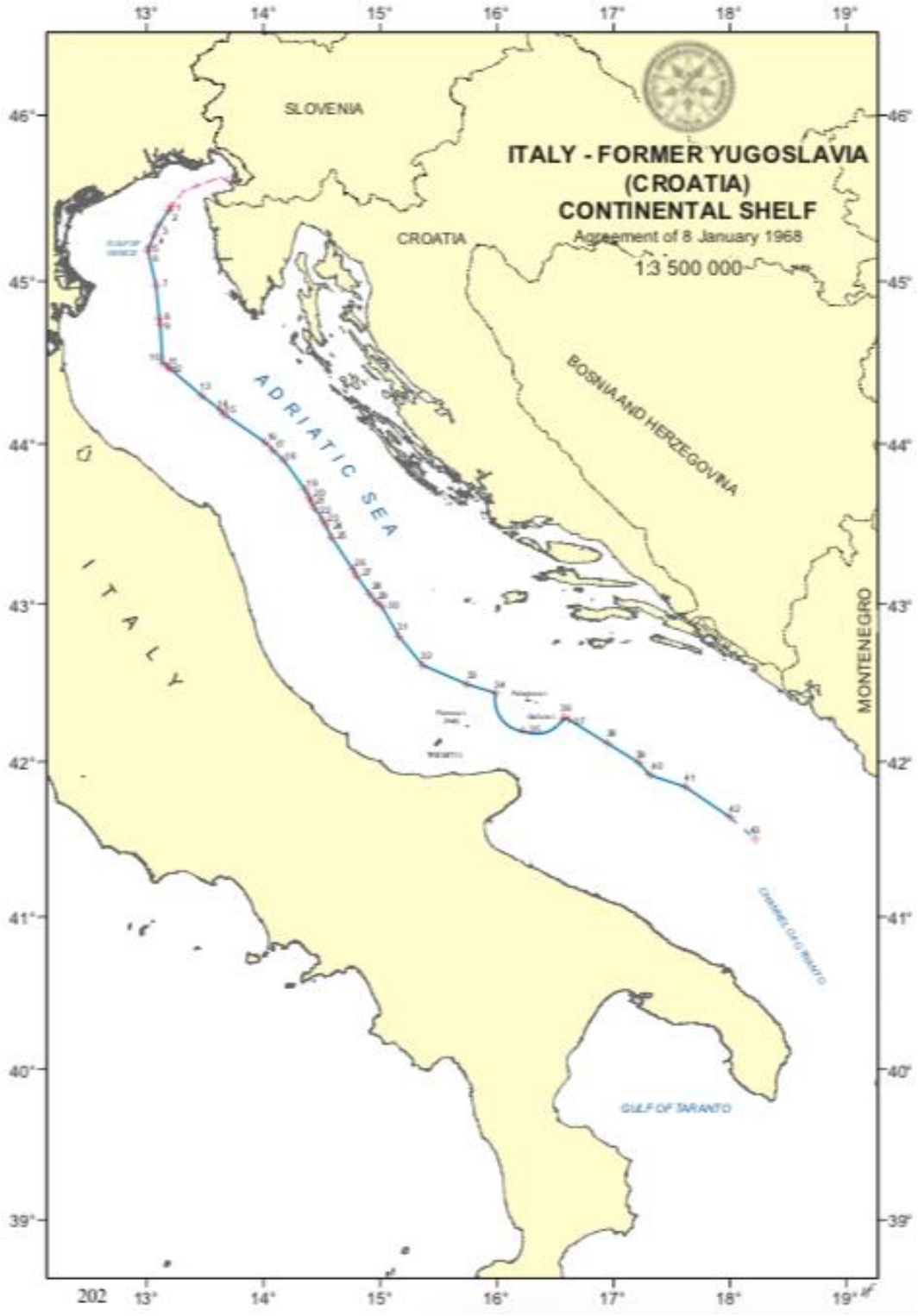

Figure 9 – Delimitation of the continental shelf between Croatia and Italy. Based on the Treaty between Italy and the former Yugoslavia on the delimitation of the continental shelf (Rome, 8 January 1968). Source: TANI, FERRERO & PIZZEGHELLO (eds.) (*op.cit.* in Figure 6), p. 202.

agreement among the treaties that remain in force between Italy and Montenegro. It follows that, for the time being, the last two segments of the 1968 agreement (from point 41 to point 42 and from point 42 to 43) do not represent anymore a maritime boundary.

In the Ionian Sea, the continental shelf has been delimited by the agreement between Greece and Italy (Athens, 1977) (Figure 10 below). Recently, the two States have concluded another agreement on the delimitation of their respective maritime zones (Athens, 2020), which will apply to the respective exclusive economic zones if and when they will be established by them. The 2020 agreement follows, for the superjacent waters, the same boundary line that was agreed upon in 1977 for the seabed.

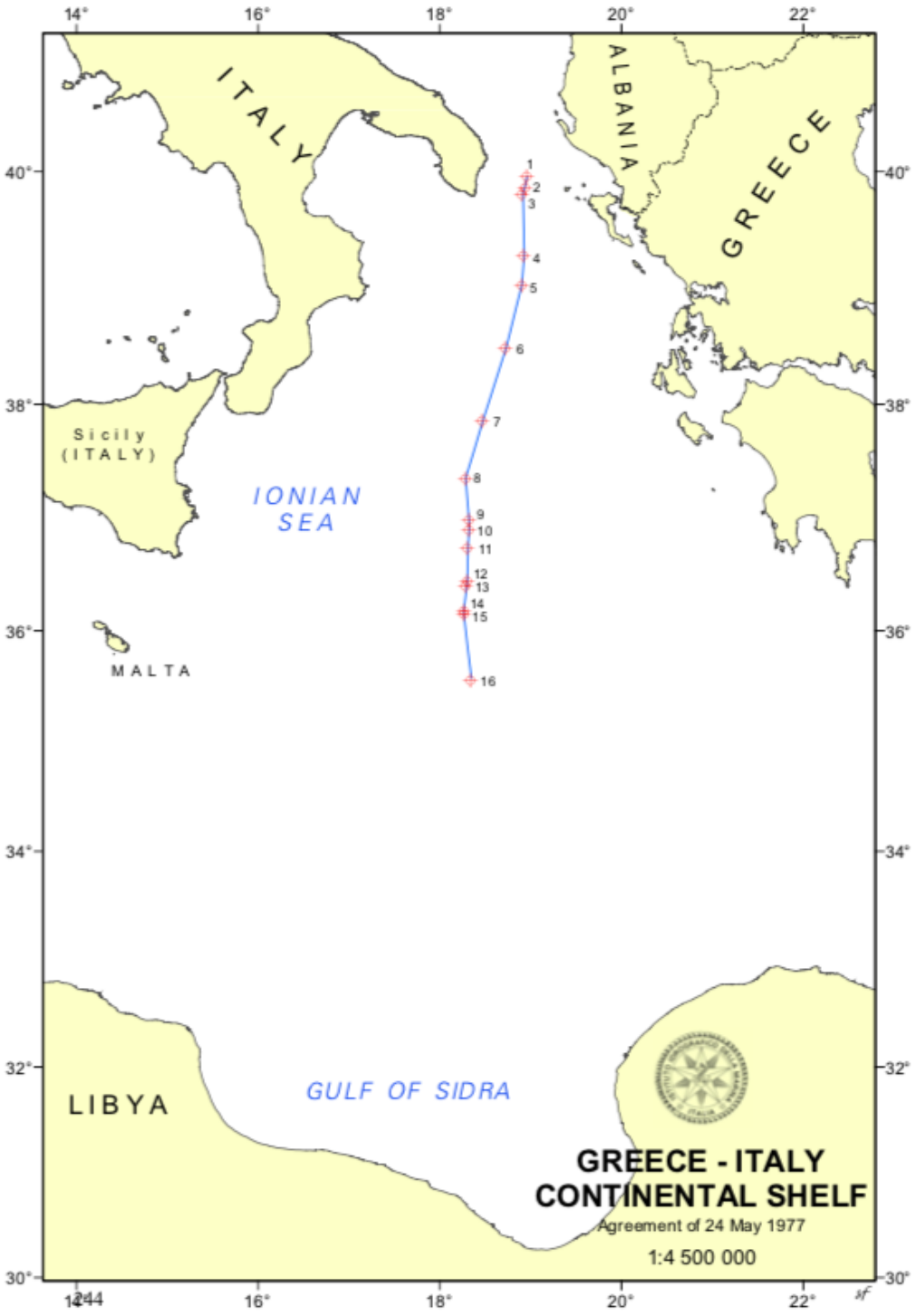

Figure 10 – Delimitation of the continental shelf between Greece and Italy. Based on the Agreement between the two countries (Athens, 24 May 1977). Source: TANI, FERRERO and PIZZEGHELLO (eds.) (*op.cit.* in Figure 6), p. 244.

1.3. Implications of the recent process of extension of coastal State jurisdiction in the Adriatic and Ionian Seas

An important consideration is that once all Mediterranean States, including those bordering the Adriatic and Ionian Seas, will proclaim their exclusive economic zones, the high seas itself, as well as the high seas regime based on Part VII UNCLOS, will disappear from the Mediterranean, including the Adriatic and Ionian Seas. Despite the recent and still ongoing process of exclusive economic zones delimitation or proclamations, including within the Adriatic and Ionian Seas, similarly as within the wider Mediterranean not all States bordering the Adriatic or Ionian Seas have proclaimed an exclusive economic zone or have implemented their exclusive economic zone legislation. An evolving situation exists as regards the nature and extent of coastal zones in the Adriatic and Ionian Seas. The present picture is the following.

On 5 February 2021, the Croatian Parliament adopted a Decision whereby it proclaimed an exclusive economic zone in the Adriatic Sea[21]. This replaces the previous (2003 and 2004) decisions establishing an ecological and fishery protection zone. Pending the conclusion of specific agreements, the outer limit of the Croatian exclusive economic zone temporarily follows the delimitation line established under the 1968 Agreement between Italy and the former Yugoslavia[22], as well as the continuation of the provisional delimitation line provisionally defined by the 2002 Protocol between Croatia and the former Yugoslavia (now Montenegro).

Italy has recently adopted Law 14 June 2021, No. 91, on the creation of an exclusive economic zone. However, such law provides that the Italian exclusive economic zone will in fact be established by a subsequent decree to be adopted by the government. The outer limits of the zone will be determined by agreements between Italy and the adjacent or opposite States concerned. Pending the conclusion of such agreements, the outer limits *"are established with a view to not affecting or hindering the final agreements"* (Art. 1, para. 3). As the implementing decree has not yet been adopted, the legal condition of the waters located on the Italian side of the Adriatic and Ionian Seas still consists of a 12-n.m. territorial sea followed by an area of high seas[23].

According to the legislation of Montenegro (Law of 26 December 2007), the regime of the exclusive economic zone shall apply from the date of the decision of the Assembly to declare such zone (Art. 45). Such decision has not yet been taken.

It does not seem that Albania has claimed an exclusive economic zone so far.

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[21] See the recent proclamation of the Croatian exclusive economic zone. The relevant text is available at https://www.un.org/depts/los/LEGISLATIONANDTREATIES/PDFFILES/DecisionEEZRepublicofCroatia.pdf. For a general comment on the recent process of extension of coastal States jurisdiction, see BICKL, *EEZ in the Adriatic. Challenges and Opportunities in a Semi-enclosed Sea*, The NCLOS Blog, Posted on 22 December 2020, available at: https://site.uit.no/nclos/2020/12/22/eezs-in-the-adriatic-challenges-and-opportunities-in-a-semi-enclosed-sea/.

[22] See *supra*, Figure 9.

[23] An ecological protection zone has been established by Italy under Law 8 February 2006, No. 61, and Decree 27 October 2011, No. 209, only as regards the Ligurian and Tyrrhenian Seas.

Greece has not proclaimed an exclusive economic zone so far. However, it has many times declared that it reserves the right to do so whenever it deems it appropriate. The Agreement of delimitation of future maritime zones, concluded in 2020 by Greece and Italy, goes in this direction.

It thus appears that several Adriatic or Ionian coastal States that are in a position to do so[24] are moving towards the establishment of an exclusive economic zone. Despite the many unsettled boundaries, there is no doubt that Mediterranean States are entitled to establish exclusive economic zones whenever they wish[25]. International law allows any coastal State to establish an exclusive economic zone, including those States that border an enclosed or semi-enclosed sea, provided that maritime boundaries are not unilaterally imposed by one State on its adjacent or opposite neighbours[26].

The legal implications of such situation are interesting. On one hand, there are still substantial areas beyond limits of national jurisdiction (high seas) in the Adriatic and Ionian Seas, whereby the high seas regime is therefore still applicable. On the other hand, such high seas area are potential or future exclusive economic zones awaiting delimitation or implementation[27]. It is likely that such transitional situation will change in the near future[28].

A question which has arisen in the past in relation to the process of extension of coastal State jurisdiction in the Mediterranean Sea, including the Adriatic and Ionian Seas, has been whether, taking for example into account that the Barcelona System[29] in principle applies also to the high seas, and having in mind its evolving character, how much would the extension of jurisdiction by coastal States actually increase their prescriptive and enforcement powers in the field of the protection and preservation of

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[24] For geographical and legal reasons, Bosnia and Herzegovina and Slovenia are not in a position to establish an exclusive economic zone. Slovenia proclaimed in 2005 a zone of ecological protection (whose provisional limits completely overlapped with part of the Croatian ecological and fishery protection zone), but has repealed the said proclamation in 2018, following the award of the arbitral tribunal in 2017, according to which Slovenia is not entitled to a continental shelf or zones of jurisdiction. See Permanent Court of Arbitration, Case No. 2012-04 in the Matter of An Arbitration under the Arbitration Agreement between the Government of the Republic of Croatia and the Government of the Republic of Slovenia, signed on 4 November 2009, Final Award, 29 June 2017, available at https://pcacases.com/web/sendAttach/2172.

[25] In fact, exclusive economic zones have been established in other enclosed or semi-enclosed seas, such as the Baltic, the Caribbean and the Black Seas.

[26] As remarked by the International Court of Justice in the judgment of 18 December 1951 on the Fisheries case (United Kingdom v. Norway), *"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"* (INTERNATIONAL COURT OF JUSTICE, *Reports of Judgments, Advisory Opinions and Orders,* 1951, p. 20).

[27] See GRBEC (*op.cit* in footnote 1), chapter 3.1, and TREVES, *Potential Exclusive Economic Zones in the Mediterranean*, paper delivered at the 11th Mediterranean Research Meeting, Florence and Montecatini Terme, 24-27 March 2010, p. 4.

[28] With regard to the present legal status of the waters beyond the limits of the territorial sea in the Mediterranean Sea, including the Adriatic and Ionian Seas, reference should be made to the fact that, despite the current process of extension of jurisdiction in the mentioned seas, the jurisdictional status of the Mediterranean Sea still differs from others enclosed or semi-enclosed seas. Nearly 40 per cent of the Mediterranean waters are still high seas and are therefore beyond the jurisdiction of coastal States. See discussion in GRBEC (*op.cit* in footnote 1), chapter 3, and BICKL (*op.cit.* in footnote 21).

[29] See *infra*, sub-para. 2.3, A.

the marine environment. This question has been particularly interesting in light of the already existing continental shelf regime and of the limitations provided by the UNCLOS on the regulation of navigation by a coastal State in its exclusive economic zone.

This was due to the fact that certain sources of pollution would not be affected for purely geographical reasons (e.g., land-based pollution), while, as stated, with regard to pollution from sea-bed activities, the prescriptive and enforcement powers of Mediterranean coastal States are already available under the continental shelf regime[30]. Some authors interestingly argued that the added value of establishing exclusive economic zones or ecological zones in the Mediterranean would mainly relate to the protection and preservation of wildlife and biodiversity – a matter not so extensively regulated by UNCLOS[31]. It seems however necessary not to underestimate the limited, but nonetheless important, 'functional jurisdiction', including both prescriptive and enforcement rights, that the coastal State can exercise in its exclusive economic zone in the field of protection and preservation of the marine environment, particularly with regards to the prevention of ship source pollution and preservation of biodiversity[32].

An important power given to the coastal State in its exclusive economic zone is provided by Art. 211, para. 6, UNCLOS, which provides that a coastal State may, where existing international rules are inadequate and subject to the approval by the IMO, establish an area within its exclusive economic zone for which it may prescribe laws for the prevention of pollution from vessels *"implementing such international rules and standards or navigational practices as are made applicable, through the [IMO] for special areas"*, or in certain cases even other national measures approved by the IMO[33]. It should be noted, however, that there seem to be no cases of 'specially protected areas' established solely under the complicated provisions of Art. 211, para. 6, UNCLOS. A better option in the Adriatic and Ionian Seas seems to include, as discussed further in this study, the designation of Particularly Sensitive Sea Areas (hereafter: PSSAs) or Specially Protected Areas of Mediterranean Importance (hereafter: SPAMIs), based on the relevant IMO guidelines or the provisions of the relevant protocol to the Barcelona Convention[34]. However, already at this stage reference should be made to the fact that neither the designation nor the implementation of the regime of a potential PSSA or that of a SPAMI depends upon the extension of coastal State jurisdiction, i.e. upon the proclamation of an exclusive economic zone or *sui generis* zone of jurisdiction.

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[30] Arts. 208, para. 1, and 214 UNCLOS.

[31] Art. 194, para. 5, UNCLOS provides that *"[t]he measures taken in accordance with this Part [Part XII] 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".* Regarding the protection of biodiversity, see also Art. 61, para. 4, UNCLOS.

[32] Worthy of mention are also the enforcement powers provided to the coastal State by Art. 220 UNCLOS in cases where there is a *"serious damage or threat of serious damage"* to the marine environment by a vessel navigating in the coastal States' exclusive economic zone (or, alternatively, ecological protection zone). Such powers may include measures such as *"physical inspection"* and ultimately the *"institution of proceedings"* and *"detention"* of the violating vessel. See Art. 220, paras. 3-6, UNCLOS.

[33] See CHURCHILL and LOWE, *The Law of the Sea*, Manchester, 1999, p. 395.

[34] Both types of area-based protection tools are analyzed *infra* in this study.

Reference should also be made to the fact that the extension of jurisdiction by a European Union member State (e.g., Italy) automatically entails the extension of the European Union legal order in that part of the sea[35], which seems to be particularly relevant for current and future European Union member States in the Adriatic and Ionian Seas[36].

In conclusion, far from being the manifestation of excessive unilateralism, the establishment of a consistent jurisdictional framework in the form of exclusive economic zones and the disappearance of the high seas could lead to the strengthening of regional co-operation in the Mediterranean Sea, with special regard to the aim of managing living resources and addressing environmental concerns. It is difficult to see how the future Mediterranean governance could be built on the vacuum determined by the persistence of high seas areas or on the confusion created by different kinds of coastal zones. The extension of coastal States' jurisdiction will entail the responsibility of such States to apply to a broader extent of waters their legislation for the protection of the marine environment and the sustainable development of marine living resources, including, in the case of European Union member States, the European Union legislation.

In particular, the present trend towards the establishment of exclusive economic zones could become an incentive towards the adoption of a coherent and coordinated Mediterranean network of marine protected areas and other effective area-based conservation measures. The UNCLOS and the other treaties applicable at the world or regional level promote the establishment of protected areas and other effective area-based conservation measures in any kind of marine spaces, irrespective of their legal condition. Of course, there is a need to comply with the UNCLOS and customary international law and to take into account that the regime applicable in coastal areas and, in particular, the rights that are granted to the coastal States vary in accordance with the legal condition of the waters where the protected area is established (marine internal waters, territorial sea, exclusive economic zone, continental shelf)[37].

1.4. The Mediterranean, Adriatic and Ionian Seas as juridically enclosed or semi-enclosed seas

A final consideration when discussing the juridical status and the relation between the Mediterranean and its sub-seas may be on whether the Adriatic and Ionian Seas, as sub-seas of the wider Mediterranean Sea, form also separate juridical enclosed or semi-

[35] See CHURCHILL, *The European Union and the Challenges of Marine Governance: From Sectoral Response to Integrated Policy?*, in VIDAS and SCHEI (eds.), *The World Ocean in Globalisation: Climate Change, Sustainable Fisheries, Biodiversity, Shipping, Regional Issues*, Leiden-Boston, 2011, p. 412. The precise extent of such powers depends, however, on the nature of the proclaimed zone (e.g., exclusive economic zone, fisheries protection zone, ecological protection zone).

[36] For further discussion see *infra*, chapter 4. Adriatic States may in this regard be conveniently divided between European Union members States (Croatia, Italy, Slovenia and Greece), candidate States (Montenegro) and potential candidate States (Albania, Bosnia and Herzegovina and, within the EUSAIR, also Serbia and North Macedonia).

[37] See *infra*, sub-para. 2.2, A. See also CAFFIO, *La cooperazione marittima tra i paesi adriatici*, in *Rivista Marittima*, October 2021, p. 2.

enclosed sea on the basis of the provisions of Part IX UNCLOS (*"Enclosed or semi-enclosed seas"*).

Such consideration may be important as it has been argued that States bordering enclosed and semi-enclosed seas are under at least a *bona fide* obligation to exercise their rights and perform their duties under UNCLOS in the light of the general duty of cooperation embodied in Part IX UNCLOS[38]. Such assertion is, *inter alia*, based on the introductory element of Art. 123 UNCLOS, which seems to provide a general good faith obligation for States bordering enclosed or semi-enclosed seas to endeavour to cooperate in the exercise of all their rights and in the performance of all their duties under UNCLOS. It is suggested that although such general obligation is not enforceable *per se*, it affects the way in which other provisions of the UNCLOS should be interpreted and applied by States bordering enclosed or semi-enclosed seas[39].

In accordance with the opinion discussed by various authors [40], it is clear that at least both the Mediterranean and the Adriatic Seas are classified, on the basis of Part IX UNCLOS (Art. 122)[41], as legal enclosed or semi-enclosed seas. Both seas are in fact surrounded by more than one State; both are linked to another sea or ocean through a narrow outlet (or outlets)[42]; and, should proclamations of exclusive economic zones or other zones of jurisdiction occur, in both cases their surface would not just primarily, but entirely, be made up of exclusive economic zones or other jurisdictional zones of the surrounding States.

Although the separate juridical status of the Ionian Sea in relation with Part IX UNCLOS may not have been discussed to such extent as has been the case with the Mediterranean and Adriatic Seas, it is possible to put forward the argument that also the Ionian Sea, similarly as the Adriatic Sea (or together with the Adriatic Sea), can be qualified as a separate juridical enclosed or semi-enclosed seas. In fact, also the Ionian Sea fulfills the broad legal and geographical criteria provided by Art. 122 UNCLOS and it is beyond any doubt also a *"gulf, basin or sea surrounded by two or more States and consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more coastal States".*

Reference should be made in this regard to the fact that the classification of the Mediterranean and the Adriatic Seas (and Ionian Sea) as juridical enclosed or semi-enclosed seas based on Part IX UNCLOS does not stem exclusively from the fulfillment of the prevalently geographical criteria embodied in Art. 122 UNCLOS. This fact may also be implied by the already established or envisaged cooperation amongst States bordering the Mediterranean and the Adriatic Seas (and Ionian Sea), which in certain cases even

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[38] See discussion in GRBEC (*op.cit.* in footnote 1), chapter 2.
[39] *Ibid*.
[40] See LEANZA (*op.cit.* in footnote 3), p. 1. See also ŠKRK,, *Exclusive Economic Zones in Enclosed or Semi-Enclosed Sea*, in VUKAS (ed.), *The Legal Regime of Enclosed or Semi-Enclosed Seas: The Particular Case of the Mediterranean*, in *Contributions to the Study of Comparative and International Law*, Zagreb, 1988, p. 164.
[41] *"For the purposes of this Convention [UNCLOS], '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".*
[42] Even if one adopts the position that the approximately 40-n.m. wide Channel of Otranto does not qualify as a 'narrow outlet', the Adriatic Sea still fulfils the second alternative requirement of Art. 122 of UNCLOS.

predated the adoption of the UNCLOS[43]. Furthermore, it seems reasonable that in the case of a sub-sea forming part of a wider juridical enclosed or semi-enclosed sea, an important factor in its classification, in addition to the requirements embodied in Art. 122 UNCLOS, is also the level of autonomy that a certain sub-sea shows in relation to the principal sea[44].

Having established that the Mediterranean, Adriatic and the Ionian Seas are juridical enclosed or semi-enclosed seas it is worth reiterating that Art. 123 UNCLOS, entitled *"Cooperation of States bordering enclosed or semi-enclosed seas"* provides as follows:

> States bordering an enclosed or semi-enclosed sea should cooperate with each other in the exercise of their rights and in the performance of their duties under this Convention. To this end they shall endeavour, directly or through an appropriate regional organization:
>
> (a) to coordinate the management, conservation, exploration and exploitation of the living resources of the sea;
>
> (b) to coordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment;
>
> (c) to coordinate their scientific research policies and undertake where appropriate joint programmes of scientific research in the area;
>
> (d) to invite, as appropriate, other interested States or international organizations to cooperate with them in furtherance of the provisions of this article.

It can thus be concluded that States bordering the same enclosed or semi-enclosed sea are under a good faith obligation to establish among themselves closer means of cooperation than those applying in other seas.

Noteworthy is the fact that the Joint Declaration on the Trilateral Cooperation in the North Adriatic, signed in Ljubljana on 21 April 2021 by the Ministers of Foreign Affairs of Croatia, Italy and Slovenia stresses in this regard that

> (…) the Adriatic Sea is a semi-enclosed sea with a unique coastal landscape and an ecosystem of marine biodiversity that the coastal states have a shared responsibility to protect and promote. Bearing in mind the cooperation of states bordering semi- enclosed seas as enshrined in the [UNCLOS], they [Ministers] agreed on the importance of joint addressing the present and future challenges to the protection of the Adriatic Sea and the sustainability of its resources, such as long-term impacts of pollution, climate change and sea level rise, and loss of biodiversity[45].

[43] See, for example, the adoption of the MAP in 1975 and the conclusion of the 1974 Belgrade Agreement between Italy and the former Yugoslavia.

[44] See LEANZA (*op.cit.* in footnote 3), p. 13. It is not completely clear what is the appropriate test to determine whether a certain sub-sea shows the necessary level of autonomy. It is suggested that a useful consideration, in addition to the already established level of cooperation among the bordering States, is whether a sub-sea is forming a separate management (functional) sub-region within the wider marine region.

[45] Text available at http://www.mvep.hr/files/file/2021/Joint-Declaration-on-the-Trilateral-Cooperation-in-the-North-Adriatic.pdf.

An important consideration with regard to the juridical status of the Adriatic and Ionian seas is that once all coastal States will proclaim an exclusive economic zone – namely: Albania, Italy, Greece and Montenegro, in addition to Croatia that has already proclaimed a full exclusive economic zone in 2021 – the high seas will disappear from the Adriatic and Ionian Seas. The present trend towards the establishment of exclusive economic zones could become an incentive towards the adoption of a coherent and coordinated Mediterranean – and Adriatic and Ionian – network of marine protected areas and other effective area-based conservation measures. The UNCLOS and other treaties applicable at the world or regional level promote the establishment of marine protected areas and other effective area-based conservation measures in any kind of marine spaces, irrespective of their legal condition. There is a need to comply with the UNCLOS and customary international law and to take into account that the regime applicable in coastal areas and, in particular, the rights that are granted to coastal States vary in accordance with the legal condition of the waters where the marine protected area is established (internal waters, territorial sea, exclusive economic zone, continental shelf). The extension of jurisdiction by a European Union member State (e.g., Croatia) automatically entails the extension of the European Union legal order and policies on that part of the sea (as it happened with the Croatian exclusive economic zone). Such order includes, *inter alia*, the European Union Integrated Maritime Policy, having the European Union Marine Strategy Framework Directive (hereafter: MSFD) as its environmental pillar, the Birds and Habitats Directive with its NATURA 2000 Network of protected areas and Maritime Spatial Planning as one of the most important cross-sectoral policies. The MSFD clearly identifies the Adriatic Sea as a separate management sub-region (eco-region) within the wider Mediterranean region, while the Ionian Sea forms a separate sub-region, together with the Central Mediterranean. Both the Adriatic and Ionian Seas qualify as juridical 'enclosed or semi-enclosed seas' based on the provisions of Part IX UNCLOS. Accordingly, coastal States are under a good faith obligation to establish among themselves closer means of cooperation than those applying in other marine spaces. Currently, all States bordering the Adriatic and Ionian Seas are parties to the UNCLOS.

CHAPTER 2

THE INTERRELATION BETWEEN GLOBAL, EUROPEAN UNION, REGIONAL, SUB-REGIONAL AND NATIONAL LEGAL FRAMEWORKS

2.1. The interrelation between different legal frameworks

Marine protected areas are usually established at the national level according to the domestic legislation of the State concerned. Different kinds of marine protected areas can be noticed according to a heterogenous terminology (marine park, marine reserve, marine protected area, marine sanctuary, marine monument, wildlife sanctuary, no-take zone, closed area, protected seascape, etc.); different authorities can be in charge of their institution and management (e.g., State or regional authorities); and different kinds of protection measures can be envisaged within the areas. In this regard, States are entitled to exercise a broad margin of discretion that is a manifestation of their sovereignty.

However, marine protected areas have also an international dimension, especially where they have a transboundary character or are intended to be included in networks that occur in semi-enclosed seas bordered by several countries. This is why the subject of marine protected areas is also regulated by some international treaties that set forth rights and obligations for the States parties and that have been concluded at different levels of international cooperation: global, regional and sub-regional. An additional level is based on the legislation (regulations and directives) enacted by the European Union, applicable to those States that are members of this international organization.

As regards possible conflicts between the domestic legislation of a State and a treaty to which this State is a party, Art. 27 of the Convention on the Law of Treaties (Vienna, 1969) provides for the priority of international obligations:

> A party may not invoke the provisions of its internal law as justification for its failure to perform a treaty. (…).

Another question is the possible conflict between the provisions of different treaties to which the same State is a party. Normally, substantive conflicts do not occur between different environmental treaties, because these instruments are inspired by similar general principles and protection objectives and because the regional or sub-regional treaties provide for a more specific and enhanced protection than that achieved through global treaties (criterion of the added value). It would be useless to merely reproduce at the regional or sub-regional level the same regime that can be found in global treaties.

However, in certain cases the multiplication and the stratification of provisions contained in different treaties may create very complex legal problems, where successive treaties relating to the same subject-matter are in principle applicable. Under Art. 30 of the above-mentioned Vienna Convention on the Law of Treaties,

1. (...) the rights and obligations of States parties to successive treaties relating to the same subject-matter shall be determined in accordance with the following paragraphs.

2. When a treaty specifies that it is subject to, or that it is not to be considered as incompatible with, an earlier or later treaty, the provisions of that other treaty prevail.

3. When all the parties to the earlier treaty are parties also to the later treaty but the earlier treaty is not terminated or suspended in operation under article 59, the earlier treaty applies only to the extent that its provisions are compatible with those of the later treaty.

4. When the parties to the later treaty do not include all the parties to the earlier one:

a) as between States parties to both treaties the same rule applies as in paragraph 3;

b) as between a State party to both treaties and a State party to only one of the treaties, the treaty to which both States are parties governs their mutual rights and obligations.

Accordingly, from a logical point of view, the questions to be addressed in order to determine the rights and obligations of States in cases of successive treaties are the following:

a) whether the States concerned are parties to both the earlier and the later treaty (a *ratione personae* question);

b) if they are parties to both treaties, whether a provision of the earlier treaty and a provision of the later one relate to the same subject-matter and have the same scope of territorial application (a *ratione materiae* and a *ratione loci* question);

c) if so, whether one of the two treaties specifies that it is subject to the other;

d) if not, whether and to what extent the two provisions in question are incompatible; in this respect and whenever possible, the provisions should be interpreted according to a meaning that leads to their reconciliation; for instance, a special provision contained in a treaty may be compatible with a more general provision contained in another treaty (*lex specialis derogat legi generali*);

e) finally, if reconciliation between the two provisions is not possible, it must be determined which one is the later treaty[46] and, consequently, which is the prevailing provision according to Art. 30, para. 3, of the Vienna Convention[47].

Luckily, the UNCLOS, the only global treaty on the law of the sea from the point of view of both its general subject matter and its world application, states that its provisions on the protection of the 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 the furtherance of the general principles set forth in the UNCLOS itself (Art. 237, para. 1). However, *"specific obligations assumed by States under special conventions, with respect to the protection and preservation of the marine environment, should be carried out in*

[46] Incidentally, this is a problematic question. It may be asked whether the concepts of *"earlier"* and *"later"* are to be determined according to the dates of signature of the two treaties or to the dates of their entry into force at the international level or to the dates on which the treaties have become binding in the relationship between the States concerned. The answer is far from being clear.

[47] Under Art. 44, para. 3, of the Vienna Convention on the Law of Treaties, the provisions of a treaty are separable, as far as termination is concerned.

a manner consistent with the general principles and objectives" of the UNCLOS (Art. 237, para. 2)[48].

Coming to the specific case of the Mediterranean Sea, while they have a number of innovative aspects, all the instruments of the Barcelona system seem fully consistent with the general principles and objectives of UNCLOS, bringing an added value at the regional level to the global regime for the protection of the marine environment.

In the case of the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (hereafter: ACCOBAMS), Art. XI, para. 1, provides that

> the provisions of this Agreement shall not affect (…) the rights or obligations of any Party deriving from any existing treaty, convention or agreement to which it is a party, except where the exercise of those rights and obligations would threaten the conservation of cetaceans.

Also the ACCOBAMS seems fully consistent with the general principles and objectives of UNCLOS. It can thus be concluded that no significant substantive conflicts may be noticed between the provisions of the main treaties applicable in the field of marine protected areas.

From the point of view of international law, the European Union legislative instruments, such as regulations and directives, can be compared to national legislation in force for those States which are members of the European Union. For these States, the European Union instruments replace national legislation, where they are enacted in a subject-matter for which the European Union is entitled to exercise its exclusive competence, either exclusive (i.e., fisheries) or shared (i.e., the protection of the environment). Thorny legal questions would arise for European Union member States in the hypothetical case in which an international treaty to which they are parties were in conflict with a European Union instrument. But no specific instances can be envisaged in the case of marine protected areas.

2.2. Global instruments

A review of the main treaties of global scope of application that are relevant for the subject of marine protected areas in the Mediterranean Sea will be made hereunder. Other instruments could be added, such as the Convention concerning the Protection of the World Cultural and Natural Heritage (Paris, 1972)[49], the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar, 1971)[50] and the Man and the Biosphere Programme, established in 1971 by the United Nations Organization

[48] The conditional mood (*"should be carried out"*) does not contribute to the clarity of this provision.

[49] Natural properties may be included in the World Heritage List, as established under the convention, and States parties are bound to ensure their *"identification, protection, conservation, presentation and transmission to future generations"* (Art. 4). However, the convention applies only to the heritage having an *"outstanding universal value"* (Art. 11, para. 2). Moreover, such heritage must be located in the territory of a State party (Art. 4). The high seas seem consequently excluded from the geographical scope of application of the convention.

[50] Wetlands are defined by the convention as *"areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static of flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres"* (Art. 1, para. 1).

for Education, Science and Culture (UNESCO)[51]. However, they seem of limited importance for the purposes of this study.

A. The United Nations Convention on the Law of the Sea

The UNCLOS is a framework treaty of codification that regulates all aspects of international law of the sea. It has entered into force on 16 November 1994 and is today binding for 168 parties. Most of the Mediterranean States are parties to the UNCLOS, with the exception of Israel, Libya, Syria and Turkey. The European Union is also a party to the UNCLOS.

The UNCLOS includes among its objectives the conservation of the living resources of the seas and oceans and *"the study, protection and preservation of the marine environment"* (Preamble). According to Art. 192:

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

This general provision also corresponds to a customary rule of international law. Part XII UNCLOS (*Protection and preservation of the marine environment*) specifies the obligations that bind States at both the world and the regional level with respect to different sources of pollution (from land-based sources, from seabed activities, from dumping, from vessels, from the atmosphere)[52]. Marine protected areas and other effective area-based conservation measures are implicitly referred to in Art. 194, para. 5, UNCLOS, which includes among the measures for the protection and preservation of the marine environment *"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"*.

B. The International Convention for the Regulation of Whaling

The International Convention for the Regulation of Whaling (Washington, 1946) was adopted *"recognizing the interest of the nations of the world in safeguarding for future generations the great natural resources represented by the whale stocks"* (Preamble). 88 States are parties to it, including 9 Mediterranean States[53].

Under the Convention, the International Whaling Commission (hereafter: 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"* (Art. V, para. 1). Sanctuaries where commercial whaling is prohibited were established by the IWC in the Indian Ocean (1979) and the Southern Ocean (1994). They cover extremely large extents of high seas waters, where whaling for commercial purposes is prohibited.

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[51] The world network of biosphere reserves includes *"areas of terrestrial and coastal-marine ecosystems which are internationally recognized for promoting and demonstrating a balanced relationship between people and nature"* and are used for testing interdisciplinary approaches to understanding and managing changes and interactions between social and ecological systems, including conflict prevention and management of biodiversity.

[52] Notably, pollution of the sea from noise is missing.

[53] Croatia, Cyprus, France, Israel, Italy, Monaco, Morocco, Slovenia and the United Kingdom.

In the case of the Mediterranean Sea, it is within the framework of the specific regional treaty (i.e., ACCOBAMS) that a number of marine protected areas were recommended, as areas of importance for cetaceans[54].

C. The Convention on Biological Diversity

The United Nations Convention on Biological Diversity (Rio de Janeiro, 1992; hereafter: CBD) entered into force on 29 December 1993 and is now binding on 196 parties, including all the 23 Mediterranean States and the European Union. The parties affirm *"that the conservation of biological diversity is a common concern of humankind"* and declare themselves *"concerned that biological diversity is being significantly reduced by certain human activities"* (Preamble).

The CBD sets out a series of measures for *in-situ* conservation of biological diversity, defined as

> (...) all variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems" (Art. 2).

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"* (Art. 8, *a*), 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"* (Art. 8, *b*), 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"* (Art. 8, *c*). The parties are bound to apply the convention *"with respect to the marine environment consistently with the rights and obligations of States under the law of the sea"* (Art. 22, para. 2).

Particularly notable at the regional level is the identification by the Conference of the Parties to the CBD of Ecologically or Biologically Significant Marine Areas in Need of Protection in Open Waters and Deep-sea Habitats (so-called EBSAs), which are located in different oceans and seas, including the Mediterranean Sea[55].

D. The Convention for the Prevention of Pollution from Ships

The International Convention for the Prevention of Pollution from Ships, called MARPOL (London, 1973, amended in 1978), aims at preventing and minimizing pollution from ships, both accidental and operational pollution. Six technical annexes are attached to it. The MARPOL entered into force on 2 October 1983 and 160 States are parties to it, including 20 Mediterranean States[56].

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[54] See *infra*, para. 5.3.
[55] See *infra*, sub-para. 3.3, B.
[56] Albania, Algeria, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Montenegro, Morocco, Slovenia, Spain, Syria, Tunisia, Turkey, and the United Kingdom.

The MARPOL, which was adopted within the framework of the IMO, provides for the establishment of special areas that may include also the high seas, 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 Control of Pollution by Noxious Substances in Bulk*) and V (*Regulations for the Prevention of Pollution by Garbage from Ships*) to the MARPOL[57]. The whole Mediterranean Sea area is a special area for the purposes of Annexes I and V.

Particularly relevant in the field of other effective area-based conservation measures is the decision by the IMO Assembly to adopt in 1991 a set of Guidelines for the Identification of PSSAs, where special measures can be established to prevent pollution from ships[58].

E. The Convention on the Protection of the Underwater Cultural Heritage

The Convention for the Protection of the Underwater Cultural Heritage (Paris, 2001) was concluded within the framework of UNESCO. It aims at protecting the underwater cultural heritage, which is recognized as part of the cultural heritage of mankind. 69 States, including 15 Mediterranean States[59], are parties to this Convention, which entered into force on 2 January 2009. The Convention defines underwater cultural heritage as

> *a*) (…) all traces of human existence having a cultural, historical or archaeological character which have been partially or totally under water, periodically or continuously, for at least 100 years such as:
>
> (i) sites, structures, buildings, artefacts and human remains, together with their archaeological and natural context;
>
> (ii) vessels, aircraft, other vehicles or any part thereof, their cargo or other contents, together with their archaeological and natural context; and
>
> (iii) objects of prehistoric character.
>
> *b*) Pipelines and cables placed on the seabed shall not be considered as underwater cultural heritage.
>
> *c*) Installations other than pipelines and cables, placed on the seabed and still in use, shall not be considered as underwater cultural heritage (Art. 1, para. 1).

According to the Convention, *"the preservation in situ of underwater cultural heritage shall be considered as the first option"* (Art. 2, para. 5). Some States have established marine protected areas around underwater cultural properties (for example, Italy by decrees of 7 August 2002 has created the two submarine parks of Gaiola, in the Gulf of Naples, and of Baia, in the Gulf of Pozzuoli). From the point of view of the protection of the environment, this kind of measures could be considered among the other effective area-based conservation measures.

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[57] For example, under Regulation 1, para. 10, of Annex I, *"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".*

[58] See *infra*, sub-para. 3.4., A.

[59] Albania, Algeria, Bosnia and Herzegovina, Croatia, Egypt, France, Italy, Lebanon, Libya, Montenegro, Morocco, Palestine, Slovenia, Spain, and Tunisia. On the application of the Convention to the Mediterranean Sea, see SCOVAZZI (ed.), *La protezione del patrimonio culturale sottomarino nel Mare Mediterraneo*, Milano, 2004.

Art. 6 of the Convention encourages States parties to enter into bilateral, regional or other multilateral agreements which would ensure better protection of underwater cultural heritage. The possibility to negotiate regional agreements should be carefully considered by the States bordering enclosed or semi-enclosed seas where the underwater cultural heritage is particularly rich, such as the Mediterranean Sea. In 2003, an intergovernmental Conference on Cooperation in the Mediterranean for the Protection of the Underwater Cultural Heritage was held in Syracuse and discussed the possibility of an agreement on the protection of the underwater cultural heritage in the Mediterranean Sea that would include the establishment of specially protected areas of Mediterranean cultural importance. However, no further steps towards the finalization of this project have so far been taken.

2.3. Regional and sub-regional instruments

A number of regional and sub-regional treaties address different aspects of international co-operation in the Mediterranean Sea and are relevant for marine protected areas[60].

A. The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols

21 Mediterranean States and the European Union are parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (hereafter: Barcelona Convention) and its Protocols, including all the Adriatic and Ionian States[61]. The Barcelona Convention is a framework treaty that has been concluded *"to prevent, abate, combat and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area and to protect and enhance the marine environment in that area so as to contribute towards its sustainable development"* (Art. 4, para. 1).

The Barcelona Convention, that has to be implemented through specific Protocols[62], is open to the participation by States, as well as the European Union and similar regional economic groupings at least one member of which is a coastal State of the Mediterranean Sea and which exercise competence in fields covered by the Barcelona Convention (Art. 30). In fact, the European Union is a party to the Barcelona Convention and some of its Protocols, together with the Mediterranean States which are members of this organization.

In 1995, the geographical coverage of the Convention was extended to include all maritime waters of the Mediterranean Sea, irrespective of their legal condition. The sphere of territorial application of the Barcelona instruments is flexible, in the sense that any protocol may extend the area to which it applies, to include also some terrestrial areas, such as coastal lands.

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[60] See SCOVAZZI, *International Cooperation as regards Protection of the Environment and Fisheries in the Mediterranean Sea*, in *Anuario de Derecho Internacional*, 2018, p. 301.

[61] The Convention entered into force on 12 February 1978 and the amendments on 9 July 2004.

[62] No one may become a party to the Convention, unless it is a party to at least one of the Protocols. No one may become a party to a Protocol, unless it is a party to the Convention (Art. 29).

The amended text of the Barcelona Convention recalls and applies at a regional scale the main concepts embodied in the instruments adopted by the 1992 Rio Conference (the Declaration on Environment and Development and the Programme of action 'Agenda 21'), such as sustainable development, the precautionary principle, the integrated management of the coastal zones, the use of best available techniques and best environmental practices, as well as the promotion of environmentally sound technology, including clean production technologies.

Compliance with the Barcelona Convention and the Protocols, as well as with the decisions and recommendations adopted during the meetings of the parties, is assessed on the basis of the periodical reports that the parties are bound to transmit to the United Nations Environment Programme (hereafter: UNEP) at regular intervals. Such reports, which are examined at the biannual meetings of the parties, relate to the legal, administrative or other measures taken by the parties, their effectiveness and the problems encountered in their implementation. The meeting of the parties can recommend, when appropriate, the necessary steps to bring about full compliance with the Convention and the Protocols and to promote the implementation of decisions and recommendations (Arts. 26 and 27).

In 2008, the Meeting of the parties adopted the procedures and mechanisms on compliance and established a compliance committee. Its objective is *"to facilitate and promote compliance with the obligations under the Barcelona Convention and its Protocols, taking into account the specific situation of each Contracting Party, in particular those which are developing countries".*

Seven Protocols have been adopted within the framework of the Barcelona Convention, namely:

- the Protocol for the Prevention of the Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft (Barcelona, 1976), which, as amended in Barcelona in 1995, has been called Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea[63]; the amended Protocol has not yet entered into force and the original Protocol is today in force for 20 States and the European Union, including 6 Adriatic or Ionian States (the exception is Montenegro);

- the Protocol concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea (Valletta, 2002; in force from 17 March 2004)[64], which is intended to replace the previous Protocol concerning Co-operation in Combating Pollution of the Mediterranean Sea by Oil and Other Harmful Substances in Cases of Emergency (Barcelona, 1976)[65]; the 2002 Protocol is in force for 16 States and the European Union, including 5 Adriatic or Ionian States (the exceptions are Albania and Bosnia and Herzegovina);

[63] The Protocol entered into force on 12 February 1978.
[64] The Protocol, also called hereafter 'Prevention and Emergency Protocol', entered into force on 17 March 2004.
[65] The Protocol entered into force on 12 February 1978.

- the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources (Athens, 1980), which, as amended in Syracuse in 1996, has been called Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities[66]; the Protocol is in force for 21 States and the European Union, including all the Adriatic and Ionian States[67];

- The Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (Barcelona, 1995)[68], which is intended to replace the previous Protocol concerning Mediterranean Specially Protected Areas (Geneva, 1982)[69]; the 1995 Protocol is today in force for 16 States and the European Union, including 5 Adriatic or Ionian States (the exceptions are Bosnia and Herzegovina and Greece[70]);

- The Protocol concerning Pollution resulting from Exploration and Exploitation of the Continental Shelf, the Seabed and its Subsoil (Madrid, 1994)[71]; the Protocol is in force for 7 States and the European Union, including 2 Adriatic or Ionian States (Albania and Croatia);

- The Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal (Izmir, 1996)[72]; the Protocol is in force for 7 States, including 2 Adriatic or Ionian States (Albania and Montenegro);

- The Protocol on Integrated Coastal Zone Management in the Mediterranean (Madrid, 2008)[73]; the Protocol is in force for 11 States and the European Union, including 4 Adriatic or Ionian States (Albania, Croatia, Montenegro and Slovenia).

B. The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area

A treaty specifically concluded for the protection of endangered marine species in the Mediterranean is the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (Monaco, 1996, amended in 2010; so-called ACCOBAMS)[74]. The ACCOBAMS is binding on 24 States parties, including 6 Adriatic or Ionian States (the exception is Bosnia and Herzegovina).

The ACCOBAMS applies to all *"maritime waters"* within the *"Agreement area"* that includes the Black Sea, the Mediterranean Sea and a contiguous Atlantic area. Its objective is *"to achieve and maintain a favourable conservation status for cetaceans"* (Art. II, para. 1).

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[66] The Protocol, also called hereafter 'Land-Based Protocol', entered into force on 17 June 1983 and the amendments on 11 May 2008.

[67] However, Bosnia and Herzegovina is not a party to the amended Protocol.

[68] The Protocol entered into force on 12 December 1999. On it see *infra*, sub-para. 5.1, A.

[69] The Protocol entered into force on 23 March 1986.

[70] Bosnia and Herzegovina and Greece are parties to the previous 1982 Protocol.

[71] The Protocol entered into force on 24 March 2011. On it see *infra*, sub-para. 5.1, B.

[72] The Protocol entered into force on 18 March 2008.

[73] The Protocol entered into force on 24 March 2011 and is today in force for 12 parties. On this Protocol see *infra*, sub-para. 5.1, C.

[74] The ACCOBAMS entered into force on 1 June 2001. On the ACCOBAMS, see SCOVAZZI, *The Agreement on the Conservation of Cetaceans of the Black Sea, the Mediterranean Sea and the Contiguous Atlantic Area*, in MEKOUAR & PRIEUR (coord.), *Droit, humanité et environnement – Mélanges en l'honneur de Stéphane Doumbé-Billé*, Bruxelles, 2020, p. 589.

To this end, the parties are bound to *"prohibit and take all necessary measures to eliminate, where this is not already done, any deliberate taking of cetaceans"* and to *"co-operate to create and maintain a network of specially protected areas to conserve cetaceans"*[75].

C. The General Fisheries Commission for the Mediterranean

The General Fisheries Commission for the Mediterranean (hereafter: GFCM) was established by an agreement concluded in 1949 as an institution within the framework of the Food and Agriculture Organization of the United Nations (FAO)[76]. 22 States and the European Union are today parties to the GFCM Agreement, including 6 Adriatic or Ionian States (the exception being Bosnia and Herzegovina).

According to the 2014 amendments, the objective of the GFCM Agreement is to ensure the conservation and sustainable use, at biological, social, economic and environmental level, of living marine resources, as well as the sustainable development of aquaculture in an area of application that includes *"all marine waters of the Mediterranean Sea and the Black Sea"* (Art. 3, para. 1).

The GFCM is entitled to adopt *"recommendations"* on conservation and management measures aimed at ensuring long term sustainability of fishing activities, in order to preserve the marine living resources, as well as the economic and social viability of fisheries and aquaculture. In adopting such recommendations, the GFCM must give particular attention to measures to prevent overfishing and minimize discards, paying particular attention to the potential impact on small-scale fisheries and local communities (Art. 5, *a*). The GFCM is also called to formulate appropriate measures based on the best scientific advice available, taking into account relevant environmental, economic and social factors (Art. 5, *b*), and to take the appropriate measures to ensure compliance with its recommendations to deter and eradicate illegal, unreported and unregulated fishing activities (Art. 5, *f*).

The GFCM can formulate and recommend appropriate measures for various purposes, namely: the conservation and management of living marine resources; to minimize impacts for fishing activities on living marine resources and their ecosystems; to adopt multiannual management plans based on an ecosystem approach to fisheries to guarantee the maintenance of stocks above levels which can produce maximum sustainable yield and consistent with actions already taken at national level; to establish fisheries restricted areas for the protection of vulnerable marine ecosystems, including but not limited to, nursery and spawning areas; to ensure, if possible through electronic means, the collection, submission, verification, storing and dissemination of data and information, consistent with relevant data confidentiality policies and requirements; to take action to prevent, deter and eliminate illegal, unreported and unregulated fishing, including mechanisms for effective monitoring, control and surveillance; to resolve situations of non-compliance (Art. 8, *b*).

[75] On the ACCOBAMS resolutions relating to marine protected areas for cetaceans, see *infra*, para. 5.3.
[76] The GFCM Agreement entered into force on 20 February 1952.

The recommendations referred to in Art. 8, *b*, are adopted by a two-thirds majority of Parties present and voting (Art. 13, para. 1). Despite their name, the *"recommendations"* adopted under Art. 8, *b*, have a binding nature. Parties are under an obligation to give effect to such recommendations (Art. 14, para. 1), unless they cast an objection to them within 120 days from the date of notification (Art. 13, para. 3). Particularly notable are the measures taken by GFCM in order to establish fisheries restricted areas in order to protect the deep-sea sensitive habitats[77].

D. The Convention on the Conservation of European Wildlife and Natural Habitats

The Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 1979; hereafter: Bern Convention) was adopted within the framework of the Council of Europe. 50 States and the European Union are parties to the Bern Convention, including all the Adriatic or Ionian States.

The Bern Convention requires parties to take the appropriate and necessary legislative and administrative measures to ensure the conservation of the habitats of the wild flora and fauna species, especially those specified in Appendices I (*Strictly Protected Flora Species*) and II (*Strictly Protected Fauna Species*), and of endangered natural habitats (Art. 4.1). The parties also undertake to give special attention to the protection of areas that are of importance for the migratory species specified in Appendices II and III (*Protected Fauna Species*) and which are appropriately situated in relation to migration routes, as wintering, staging, feeding, breeding or moulting areas (Art. 4.3). Several marine animals are listed in Appendices II and III.

Under the Bern Convention, the Emerald Network was developed. It is made up of *"areas of special conservation interest"* and is based on the same principles as the European Union NATURA 2000 Network[78], being a *de facto* extension of the network to non-European Union States. It is relevant to the whole Mediterranean basin.

According to Recommendation 16 (1989) of the Standing Committee on Areas of Special Conservation Interest, areas of special conservation interest should meet one or more of the following conditions:

- contribute substantially to the survival of threatened species, endemic species, or any species listed in Appendices I and II;

- support significant numbers of species in an area of high species diversity or important populations of one or more species;

- contain an important and/or representative sample of endangered habitat types;

- contain an outstanding example of a particular habitat type or a mosaic of different habitat types; represent an important area for one or more migratory species; or

- otherwise contribute substantially to the achievement of the objectives of the Convention.

[77] See *infra*, para. 7.3.
[78] See *infra*, sub-para. 4.3, C.

The same Committee, by Resolution No. 4 (1996), listed endangered natural habitats requiring specific conservation measures, by Resolution No. 5 (1998) adopted the rules for the Network of Areas of Special Conservation Interest (Emerald Network) and by Resolution No. 8 (2012) provided for the national designation of adopted Emerald sites and the implementation of management, monitoring and reporting measures.

A *"revised calendar for the implementation of the Emerald network of areas of special conservation interest 2011-2020"* was adopted in 2015. It includes the assessment of proposed Emerald sites in six West-Balkan countries, namely Albania, Bosnia and Herzegovina, Croatia, Montenegro, North Macedonia and Serbia.

E. Mediterranean sub-regional instruments outside the Adriatic and Ionian Seas

In certain areas of the Mediterranean Sea, sub-regional instruments are in place.

a. The RAMOGE Agreement

France, Italy and Monaco concluded an Agreement on the Protection of the Waters of the Mediterranean Shore (Monaco, 1976, amended in 2003; so-called RAMOGE)[79]. It applies to the territorial sea and coastal zone in an area located within two parallels of longitude that includes the French Region Provence-Alpes-Côte d'Azur, the Principality of Monaco and the Italian Region Liguria. The Agreement aims at preventing and combating pollution and degradation of the marine and coastal environment, preserving biodiversity and setting up a pilot zone to achieve these aims. It establishes a Commission, entrusted with several task, including the updating of plan of prompt intervention in cases of pollution (Ramogeplan).

b. The Pelagos Sanctuary

France, Italy and Monaco also concluded an Agreement on the Creation in the Mediterranean Sea of a Sanctuary for Marine Mammals (Rome, 1999; so-called Pelagos Sanctuary)[80]. This is the first treaty ever concluded at the international level with the specific objective to establish a sanctuary for marine mammals[81].

2.4. Existing forums and legal basis for Adriatic and Ionian sub-regional cooperation[82]

Reference should be made to the fact that Adriatic sub-regional cooperation has been in the past, even outside the Barcelona Convention (institutional) framework, particularly accentuated in the field of protection and preservation of the marine environment. This had been, however, prior to 1990, particularly due to the isolationistic policy of Albania, understood as a *de facto* cooperation between Italy and the former Yugoslavia[83]. The two States took active part in the existing Mediterranean cooperative

[79] The Agreement entered into force on 1st March 1981. On the Agreement, see SCOVAZZI, *La révision de l'Accord RAMOGE*, in *Annuaire de Droit Maritime et Océanique*, 2004, p. 107.
[80] The Agreement entered into force on 21 February 2002.
[81] On the Pelagos Sanctuary, see *infra*, para. 7.1.
[82] Para. 2.4 of this study is partially based on chapter 5.4 of GRBEC (*op.cit.* in footnote 1).
[83] Albania acceded to the Barcelona Convention in 1990. There was also substantial cooperation between Greece and Italy, which was however focussed on the Ionian Sea.

arrangements which included, beside the Barcelona System, also the GFCM[84], in the field of fisheries, and the Mediterranean Science Commission (CIESM)[85], in the field of marine scientific research, while specific sub-regional forms of cooperation were primarily aimed at supplementing those already existing at the regional (Mediterranean) level.

The four main existing forums for sub-regional cooperation within the Adriatic and Ionian may be accordingly summarized as follows:

a) Additional sub-regional cooperation within the institutional framework of the Barcelona Convention and its protocols;
b) Cooperation within the Joint Commission for the Protection of the Adriatic Sea and its Coastal Zones (Quadrilateral Commission) based on the 1974 Belgrade Agreement between Italy and former Yugoslavia;
c) Cooperation within the framework of the intergovernmental Adriatic-Ionian Initiative (hereafter: AII);
d) Cooperation within the framework of the European Union Strategy for the Adriatic Ionian macro region (EUSAIR).

Reference should be made to the fact that enhanced sub-regional cooperation requires also cooperation among various cooperative networks, as for example the Quadrilateral Commission and AII[86] or, nowadays an even more outstanding example, cooperation and coordinated action between the AII, EUSAIR and the Quadrilateral Commission[87].

A. Sub-regional cooperation within the institutional framework of the Barcelona Convention and its protocols

It is beyond doubt that the main instrument for the Mediterranean environmental protection is the Barcelona Convention with its Protocols (Barcelona System) originally adopted under the auspices of the UNEP Mediterranean Action Plan (MAP) in 1976[88]. The Barcelona Convention represents a flexible system which has been constantly updated and which allows for adequate and relatively prompt legislative response to new threats to the Mediterranean environment and prompt adjustments to new emerging principles in the field of marine environmental law and sustainable development in general. With the adoption of the 1995 amendments, the Barcelona Convention extended its scope of application, and was renamed as the Convention for the Protection of the Marine Environment and the Coastal Regions of the Mediterranean[89]. In seems possible to agree that *"international environmental governance cannot be fully understood if it is not*

[84] See discussion in GRBEC (*op.cit.* in footnote 1), chapter 5.2.
[85] *Ibid*., chapter 5.3.
[86] See discussion *infra* in this chapter, sub-paras. B and C.
[87] See discussion *infra* in this chapter, sub-paras. B, C and D.
[88] For a general discussion, see RAFTOPOULOS, *The Mediterranean Response to Global Challenges: Environmental Governance and the Barcelona Convention System*, in VIDAS and SCHEI (eds.) (*op.cit.* in footnote 35), p. 507.
[89] See *supra*, para. 2.3, A. The amendments incorporated within the Barcelona Convention and its Protocols include principles of environmental law emerged at the United Nations Conference on Environment and Development (Rio de Janeiro, 1992), e.g. the precautionary principle, the polluter-pays principle and the principle of sustainable development.

approached simultaneously as a multiplicity of conventional regimes governance and as a process of continuous and structured negotiation"[90]. This is, of course, a consideration entirely valid also for the Adriatic-Ionian sub-region. It is accordingly suggested that the Barcelona System has to be read and applied together with different conventional regimes managing the protection of the environment and sustainable development, both at regional and global levels[91]. The relation between the Barcelona System and the various IMO Conventions related to ship source pollution represent a prime example in this regard[92].

One of the improvements of the amended Barcelona Convention is that its geographical scope of application has been extended to *"all maritime waters of the Mediterranean Sea"*, including internal waters and the high seas[93]. At least from a legal standpoint, the geographical scope of application of the Barcelona Convention is not dependent on the extension of coastal States' jurisdiction in the Adriatic and Ionian Seas[94]. Two observations should be however made in this regard. The first is that the geographical scope of application of certain Protocols differs from that of the framework Convention, depending on the subject matter regulated (e.g., continental shelf, coastal zones, etc.). Secondly, reference should be also made to the fact that, although all Protocols to the Barcelona Convention are currently in force, not all Mediterranean and Adriatic or Ionian States are parties to those Protocols. Reference should be also made to the potential problems related with the enforcement of the provisions of certain Protocols against non-parties, particularly on the Adriatic and Mediterranean high seas[95].

It may be said in this regard that the evolving Barcelona System is a prime example of a proper application of Part IX UNCLOS in enclosed or semi-enclosed seas. An appropriate functioning of the system in the Adriatic and Ionian requires however specific sub-regional cooperation both in the implementation of the Protocols which are already in force and applicable to all States bordering the Adriatic and Ionian and even more accentuated in areas covered by Protocols which have not been widely ratified on the wider Mediterranean level and within the Adriatic and Ionian region[96]. It is important to point out that all Adriatic and Ionian States are now parties to the 'framework' Barcelona Convention, following the accession of Bosnia and Herzegovina to the latter on 19 October 2020. It is furthermore important to note that the amended Barcelona Convention and the Protocols which have been so far acceded to by the European Union are forming part of

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[90] RAFTOPOULOS (*op.cit.* in footnote 88), p. 509.
[91] *Ibid*., p. 508.
[92] See discussion in chapter 2 and, as an example, the Regional Strategy for Prevention Off and Response to Marine Pollution from Ships prepared by the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) in 2005. The first specific objective of the regional strategy relates to the ratification of relevant IMO Conventions (vessel source pollution) by Mediterranean States. See UNEP(DEC)/MED IG. 16/10, 30 September 2005, Annex 1, p. 1. See also Mediterranean Strategy for Prevention of and Response to Marine Pollution from Ships (2022-2031) and its Action Plan, Note by the Secretariat, REMPEC/WG.51/5, 8 April 2021.
[93] The original Barcelona Convention does not apply to internal waters. See Article 1(2).
[94] See *supra*, sub-para. 2.3, A.
[95] See also RUIZ, *Mediterranean Cooperation and Third States*, paper delivered at the 11th Mediterranean Research Meeting Florence and Montecatini Terme, 24-27 March 2010, pp. 9-13.
[96] See *infra*, sub-paras. 5.1, B and C.

the European Union legal order. This, however, does not necessarily eliminate the need for additional sub-regional cooperation in the Adriatic Sea and Adriatic-Ionian region, although such cooperation may have different forms and extents and considering that it can be undertaken in the Adriatic-Ionian region primarily in the context, or at least by taking into account, relevant European Union policies and regulations. Reference should be finally made to the fact that practically all protocols to the Barcelona Convention include provisions which directly or impliedly call or at least allow additional sub-regional cooperation[97].

Apart from the possibility of a sub-regional cooperation in the preparation of a proposal and ultimately proclamation of a (transboundary) SPAMI or SPAMIs within the Adriatic and Ionian based on the provision of the Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (Barcelona, 10 June 1995; hereafter: Areas Protocol) to the Barcelona Convention, a prime example of a sub-regional Adriatic cooperation in the implementation of a protocol to the Barcelona Convention is represented by the 2005 Agreement on the Sub-Regional Contingency Plan for Prevention of, Preparedness for, and Response to Major Marine Pollution Incidents in the Adriatic Sea, concluded by Croatia, Italy and Slovenia[98]. This Sub-Regional Contingency Plan was adopted within the institutional framework of the Barcelona Convention and in conformity with Art. 17 of the Prevention and Emergency Protocol.

The reasoning for the adoption of an Adriatic contingency plan is clearly explained in the Preamble to the 2005 Agreement, which provides that *"the Mediterranean Sea in general and the Adriatic Sea in particular, is the major route for transporting of oil and that there is a permanent risk of pollution, which imposes on the Mediterranean coastal States in the Adriatic sub-region an obligation to constantly develop measures for preventing pollution from ships and to organize and prepare response to marine pollution incidents, and that such permanent efforts have to be made at national, sub-regional and regional levels"*[99].

The approach adopted by the 2005 Agreement is indeed noteworthy. This sub-regional Agreement was initially concluded only by the three Adriatic European Union member States (Croatia, Italy and Slovenia), which were, at the time, already parties to the Prevention and Emergency Protocol and, supposedly, capable of implementing it. The Agreement, however, left the door open and envisaged the successive accession by the remaining Adriatic States[100]. Such geographical 'build-up' approach may represent a useful precedent also for the Adriatic and Ionian implementation of some other Protocols to the Barcelona Convention and cooperation in other fields. It is to a certain extent unfortunate that the said sub-regional agreement, although being ratified by Croatia and Slovenia, has not been so far ratified by Italy.

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[97] See, for example, Art. 5 of the Land-Based Protocol, and Arts. 17 and 18 of the Coastal Zone Protocol. See more extensive discussion of the various protocols and possibilities for additional sub-regional cooperation within a Protocol to the Barcelona Convention in GRBEC (*op.cit. in* footnote 1), chapters 5.1.3.1 - 5.1.3.5.

[98] Agreement of 9 November 2005 concluded in Portorož, Slovenia.

[99] *Ibid.*

[100] Art. 4 provides: *"Other parties to the Barcelona Convention and its Prevention and Emergency Protocol, in the Adriatic sub-region, may join this Agreement subject to the consent of the Signatories of the Agreement".*

There are good perspectives, nonetheless, that the 2005 Agreement will be, in the near future, upgraded and extended to other States in the Adriatic and Ionian region[101]. Noteworthy is the fact that a Joint Declaration on the Trilateral Cooperation in the North Adriatic, signed by the Ministers of Foreign Affairs of Italy, Slovenia and Croatia on April 2021 in Ljubljana, provides that *"bearing in mind the need for integrated and coordinated action in cases of pollution accidents and their prevention, the sides will consider the need to review the Agreement on the Sub-Regional Contingency Plan"* (for prevention of, preparedness for, and response to major marine pollution accidents in the Adriatic Sea)[102]. Furthermore, the Development and Implementation of the Adriatic-Ionian sub-regional oil spill contingency plan has been included in June 2021 as one of the main objectives (flagships) within Pillar 3 (Environmental Quality) of EUSAIR for the period 2021-2027.

It would derive that, at least traditionally, or outside the framework of European Union law and (macro regional) policies, the two main forms of Adriatic Ionian sub-regional cooperation have been, on the one hand, a sub-regional cooperation in the implementation of a certain Protocol to the Barcelona Convention within its institutional framework, and, on the other hand, a cooperation in a field not directly addressed by the Barcelona Convention (i.e., safety of navigation), outside the institutional framework of the Barcelona Convention (i.e., Quadrilateral Commission, AII).

B. Cooperation within the Joint Commission for the protection of the Adriatic Sea (Quadrilateral Commission) based on the provisions of the 1974 Belgrade Agreement

An important milestone in the sub-regional environmental protection of the Adriatic, which even preceded the adoption the Barcelona Convention and its Mediterranean Action Plan, was the conclusion in 1974 of the Agreement on cooperation and prevention of pollution of the Adriatic waters and its coastal zones (Belgrade Agreement), concluded between Italy and the former Yugoslavia[103]. Notably, in the same period Greece and Italy also concluded an Agreement on the protection of the marine environment of the Ionian Sea and its coastal zones (Rome, 1979)[104].

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[101] In the Ancona Declaration, adopted at the 12th Adriatic and Ionian Council of 5 May 2010, the members of the Adriatic and Ionian Council *"encourage the application of the criteria foreseen by the 'Sub-Regional Contingency Plan for Prevention of, Preparedness for, and Response to Major Marine Pollution Incidents in the Adriatic Sea' by all AII Participating States"* (para. 17).

[102] Available at http://www.mvep.hr/files/file/2021/Joint-Declaration-on-the-Trilateral-Cooperation-in-the-North-Adriatic.pdf.

[103] Official Gazette of the Italian Republic of 22 February 1977. The Agreement entered into force on 20 April 1977 and seems still in force for Italy and some of the successor States of the former Yugoslavia, namely Slovenia and Croatia. In a Joint Declaration on the trilateral cooperation in the North Adriatic, signed in Ljubljana on 21 April 2021, Croatia, Italy and Slovenia *"discussed the continuation of the Joint Commission for the Protection of the Adriatic Sea's work, which produced significant results in the past".*

[104] The Agreement entered into force on 3 February 1983. The Agreement provides for the establishment of a joint commission. The parties undertake to adopt all possible measures to ensure that exploration and exploitation of the continental shelf will not prejudice the ecological balance or other legitimate uses of the Ionian Sea.

The Belgrade agreement did not contain specific provisions regarding the protection of the Adriatic marine environment and was more intended as a framework for the identification of various problems and a forum for the conclusion of additional agreements in this field[105]. Its main achievement was the establishment of a Joint Commission for the Protection of the Adriatic Sea against pollution. The latter, however, did not have decision making powers and its goals were primarily to carry out research activities, and to advise the two governments on any question relating to marine pollution. It is noteworthy that the scope of application of the 1974 Belgrade Agreement extended to all Adriatic waters, including therefore the high seas[106].

Although the raging war on the territories of the former Yugoslavia stopped for almost ten years a comprehensive Adriatic multilateral (sub-regional) cooperation, trilateral cooperation continued during the 1990s between Croatia, Italy and Slovenia within the already mentioned framework of the Commission for the protection of the Adriatic Sea, although in a form and under the name of a 'Commission for the Protection of the Adriatic Sea and Coastal area from Pollution', many times referred to also as a 'Trilateral Commission'. The latter replaced the mixed Italo-Yugoslav Commission established on the basis of the Belgrade Agreement and achieved substantial results, also due to the work of its sub-commissions first among which the Working Group for environmentally safe-sea traffic'[107] The latter has been at the origin of the preparation of important agreements between the three States particularly in the field of safety of navigation and prevention of ship-source pollution, therefore in areas not directly addressed by existing regional cooperative arrangements (i.e., Barcelona System, GFCM and CIESM).

Noteworthy is the fact, that the Trilateral Commission, which was joined by Montenegro in 2010, and is accordingly referred as the "Quadrilateral Commission" has undertaken (or should have undertaken) its work in four sub-commissions, each covering *"priority areas"* of Adriatic cooperation. In addition to the sub-commission for ballast water management and the sub-commission for the preparation of amendments to the sub-regional (Adriatic) contingency plan[108], reference should be made to the sub-commission for the unification of methods of assessment and development of indicators to assess the state of the marine environment. The latter was established with the specific aim of coordinating activities and exchanging information regarding the implementation of the MSFD among Adriatic States[109]. These sub-commissions were joined in 2010 by the sub-commission on integrated coastal zone management in the Adriatic.[110]

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[105] GESTRI, *I rapporti di vicinato marittimo tra l'Italia e gli Stati nati dalla dissoluzione della Iugoslavia*, in RONZITTI (ed.), *I rapporti di vicinato dell'Italia con Croazia, Serbia-Montenegro e Slovenia*, Rome, 2005, pp. 207-208.

[106] See Art. 1. See also *infra*, in sub-para. D of this chapter.

[107] See GESTRI (*op.cit.* in footnote 105), p. 208.

[108] See *supra*, sub-para A of this chapter.

[109] See *infra*, para. 4.2.

[110] See GRBEC (*op. cit.* in footnote 1), section 5.1.3.5. At the 12th ordinary meeting of the Commission for the Protection of the Adriatic Sea Waters and Coastal Areas, held in Portorož on 27-28 October 2011, the member States decided to rename the existing three sub-commissions as follows: (1) sub-commission for implementing the MSFD; (2) sub-commission for the ICZM and sustainable development, and, (3) sub-

It is nonetheless regrettable that the activities of the Quadrilateral Commission, and particularly its sub-commissions, have substantially diminished in the period 2011-2021, particular as they were supposed to cover some of the most important recognized areas of needed sub-regional cooperation. Reference should be, nonetheless, again made to the Joint Declaration on the Trilateral Cooperation in the Northern Adriatic, signed by the Ministers of Foreign Affairs of Croatia, Italy and Slovenia on 21 April 2021. The ministers recalled in the introduction to the Joint Declaration *"the IMO Traffic Separation Schemes in the North Adriatic, and the arrangements reached within the framework of the Joint Commission for the Protection of the Adriatic Sea and coastal areas against pollution"*, while in the part related to Environmental Protection, the three sides first of all reconfirmed their commitment to the protection of the Adriatic Sea and to intensifying their cooperation in this regard. Secondly, reference was made to the fact that the three sides *"discussed the continuation of the Joint Commission for the Protection of the Adriatic's sea work which produced significant results in the past"*[111].

It is suggested, accordingly, that the Quadrilateral Commission may nowadays be regarded as one of the most important institutional frameworks for the cooperation of Adriatic States, particularly in the context of Northern Adriatic. Its activities, in fact, have not just covered the field of marine environmental protection, but related instead to the holistic governance of the Adriatic Sea and its coastal zones. Its potential, however, still has to be fully exploited, through an enhanced coordination with other regional (Mediterranean) and sub-regional (Adriatic and Ionian) cooperative frameworks, particularly the EUSAIR. A weakness of the Quadrilateral Commission, at least in comparison with the AII and EUSAIR, is represented by the fact that, having the former its legal base in the 1974 Belgrade agreement between Italy and the former Yugoslavia as well as in subsequent arrangements concluded – after the dissolution of the Yugoslav federation – between Croatia, Italy and Slovenia, it does not include all coastal States bordering the Adriatic and Ionian (i.e., Albania and Greece) nor all States members to the AII and EUSAIR (i.e., Serbia and North Macedonia). Noteworthy is the fact that, on occasion of the 12th Ordinary Meeting held in Portorož, Slovenia, on October 27 and 28 2011, the Commission for the Protection of the Adriatic Sea Waters and Costal Areas tasked the at -that-time Croatian presidency to officially invite Albania and Bosnia and Herzegovina to join the Commission.

C. Cooperation within the framework of the intergovernmental Adriatic-Ionian Initiative (AII)

It is noteworthy that one of the important documents in the Adriatic and Adriatic-Ionian sub-regional cooperation, which eventually paved the way to the AII some ten years later and among other started the era of the active involvement of the European Union (European Commission) in the process of the sub-regional Adriatic Ionian

commission for ballast-water management and contingency plan. . Minutes of the meeting on file with the authors.

[111] Text available at http://www.mvep.hr/files/file/2021/Joint-Declaration-on-the-Trilateral-Cooperation-in-the-North-Adriatic.pdf.

Cooperation, was signed less than three weeks after the proclamation of independence of Croatia and Slovenia (25 June 1991) and the breaking up of the war on the territories of the former Yugoslavia. Reference is made here to the Declaration on the Adriatic Sea**,** signed in Ancona (Italy) on 13 July 1991[112]. The importance of the 1991 Declaration derives from the fact that it was the first multilateral document aimed at the protection of the Adriatic Sea, signed not just by Italy and by the former Yugoslavia, but also by Albania, Greece and the European Commission. The adopted document was therefore a political declaration, with, however, a strong wording and clear commitments. The signatories declared their firm intention to cooperate in the environmental protection of the Adriatic Sea and the preservation of its ecological balance and to undertake joint comprehensive regional programmes in this regard[113].

The next important milestone in the Adriatic sub-regional cooperation was the launching of the AII and the signature of the Ancona Declaration in 2000*.* The roots of the AII are related to the Stability Pact for South Eastern Europe which was promoted during 1990s by the European Union as a result of the Balkan crisis and primarily addressed to all States in the region and aspiring to join the European Union. Within that treaty, the Italian government presented on the occasion of the European Union Summit, held in October 1999 in Tampere (Finland), the proposal of the AII. The latter got immediate support from the European Commission and from Greece, at that time the second European Union member state in the region.

The AII was accordingly established, and the Ancona Declaration adopted at the Conference on Development and Security in the Adriatic and Ionian, held on 19 and 20 May 2000 and signed by almost all Adriatic States (with the exclusion at that time of Serbia-Montenegro)[114] and the European Union. The AII is therefore an intergovernmental organisation, which today includes among its membership nine States: Albania, Bosnia and Herzegovina, Croatia, Greece, Italy, Montenegro, North Macedonia, Serbia and Slovenia.

Although the Ancona Declaration*,* at least in its maritime part, seems to build on the structure and content of the already discussed (1991) Adriatic Sea Declaration, reference should be made to the fact that it is broader in its scope of application. The aim of the Ancona Declaration (and of AII in general) is in fact not only to achieve the protection and preservation of the Adriatic Sea and its ecological balance, but also to foster peace and security in the Adriatic and Ionian Region by promoting sustainable economic growth and environmental protection and by exploiting cultural heritage that the countries in this region share[115]. The second important difference between the two documents is represented by the geographical scope of application. The Ancona

[112] At that time, it was disputed whether Yugoslavia still represented also the Republic of Slovenia and the Republic of Croatia, which both formally proclaimed independence on 25 June 1991.

[113] The Adriatic Sea Declaration has been listed as a treaty by the official Italian publication on treaties in force. See SCOVAZZI, *Regional Cooperation in the Field of the Environment*, in SCOVAZZI (ed.), *Marine Specially Protected Areas*, The Hague, 1999, p. 97.

[114] Serbia and Montenegro joined the AII in 2002. After the dissolution of the union in 2006, both Serbia and Montenegro retained their membership.

[115] Preamble, para. 4.

Declaration is not focused on the Adriatic Sea only, but on the Adriatic and Ionian region. An interesting question has been whether the Ancona Declaration treats the Adriatic and Ionian as a separate marine region or sub-region of the wider Mediterranean Sea. It would seem, however, that the expression *"Adriatic and Ionian region"* refers to the overall territories of all the signatories and not specifically to the Adriatic and Ionian seas. This can be implied from Art. 1 of the Declaration, where emphasis is placed on the Adriatic and Ionian as an *"area of peace, stability and increasing prosperity"*, while the ultimate answer seems to be provided by the Preamble to the Ancona Declaration, according to which the aim of the Declaration is to foster *"synergies, coordination and complementarities between the Adriatic and the Ionian cooperation network launched at the Conference"*. The original aim of the 'Ancona Process' seems to have been to better coordinate and to foster synergies between two up to that time distinct cooperation networks, the Adriatic and Ionian. Such interpretation seems to find its confirmation also in the 2008 European Union Marine Strategy Framework Directive, which defines the Adriatic and Ionian as two separate sub-regions of the Mediterranean Sea[116], and seems to be ultimately confirmed by the concluded agreements within the framework of the AII at the time of the launching of the Initiative.

The AII was therefore originally launched with the aim of providing common and concerted solutions to shared problems, from fighting against organized criminality to the need to protect the natural environment of the Adriatic-Ionian Sea[117]. Areas of cooperation, more specifically, included economics, transport and tourism cooperation, sustainable development and protection of the environment, cooperation in the fields of culture, science and education, and cooperation in the fight against illegal activities[118]. However, particularly after the accession of Slovenia and Croatia to the European Union, in 2004 and 2013 respectively, and also following a somehow increased support and involvement of the European Union (Commission) within the process of Adriatic and Ionian sub-regional cooperation, cooperation within the AII has gradually assumed different forms, which include the establishment of partnerships involving Adriatic Ionian networks**,** such as the Forum of the Adriatic Ionian Chambers of Commerce, the Adriatic Ionian Forum of Cities and Towns and UniAdrion (the Adriatic Ionian network of Universities)[119].

The AII is therefore an intergovernmental organisation with member States (4 European Union members and 5 non-members), with a permanent Secretariat and permanent bodies, the most important being the Adriatic and Ionian Council. The latter is the decision-making political body of the AII, which meets once a year at the level of Ministers of Foreign Affairs. The Committee of Senior Officials acts as the executive body of the AII, where each member State has one representative[120]. The AII, as a regional intergovernmental organisation, is accordingly a broader and obviously a distinct

[116] See Art. 4(2) of the European Union Marine Strategy Framework Directive. See also *infra*, para. 4.3.
[117] See https://www.aii-ps.org/about/who-we-are.
[118] *Ibid.*
[119] *Ibid.*
[120] See https://www.aii-ps.org/about/working-structures/committee-of-senior-officials-cso.

cooperative arrangement from that of the Quadrilateral Commission that founds its legal basis in the 1974 Belgrade agreement.

When it comes to the relation of AII with other cooperative arrangements in the Adriatic and Ionian Seas, noteworthy is the fact that the Ancona Declaration provides an express link to the Barcelona Convention. Art. 5 of the Declaration, in fact, stresses *"the need to take into account the Adriatic and Ionian dimension within the Convention for the Protection of the Mediterranean Sea against pollution".* This reinforces the assertion that cooperation undertaken within the framework of AII is not intended to conflict with that directly undertaken within the framework of the Barcelona Convention, nor, as it will be seen later in our discussion, with the EUSAIR and the Trilateral Commission.

In this regard, it is important to point out that the majority of the agreements in the maritime field concluded within the framework of the AII at the time of the launching of the AII in 2000, and particularly those from the field of safety of navigation in the Adriatic Sea, were prepared by the at that time Trilateral Commission (sub-commission on safety of navigation[121]) and then formally adopted on the occasion of the launching of the AII in Ancona in 2000.

The common characteristic of the at-that-time adopted agreements, particularly those from the field of safety at sea concluded on the occasion or in the month following the launching of the AII Initiative in May 2000, is that they relate either to the Adriatic (i.e., Northern Adriatic) or to the Ionian, and not to the Adriatic *and* Ionian basin. The goals of the Ancona Declaration have been in the past prevalently achieved through a coordinated network of bilateral or trilateral binding agreements on a certain topic and not, generally speaking, through a single multilateral convention involving all Adriatic States and the European Union[122].

Agreements in the field of safety of navigation in the Adriatic, concluded within the framework of the AII in 2000 and generally prepared by the at that time Trilateral Commission through its sub commission on safety of navigation, may be broadly divided in three groups. The first group relates to cooperation in the field of search and rescue operations in the (North) Adriatic Sea, where two (separate) bilateral agreements were concluded between Italy and Slovenia and Italy and Croatia[123].

A second group of agreements, based obviously on the successful conclusion of the first group of agreements, related to the establishment of a mandatory vessel reporting system in the Adriatic (ADRIREP)[124].

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[121] See *supra*, sub-para. 2.4, B.

[122] Such build up approach can be implied also from para. 7 of the Preamble, which provides that States *"build upon a multifaceted network of bilateral relations that they intend to further strengthen by promoting new bilateral agreements, such as those signed in the framework of the present Conference, which can create a homogeneous, multilateral pattern of cooperation through shared content and objectives".*

[123] Memorandum of Understanding between the Government of the Republic of Slovenia and the Government of the Italian Republic on Cooperation in Search and Rescue Operations at the North Adriatic Sea (Ancona, 19 May 2000), in force since 11 July 2007; Memorandum of Understanding between the Government of the Republic of Croatia and the Government of the Italian Republic on Cooperation in Search and Rescue Operations in the Adriatic Sea (Ancona, 19 May 2000), in force since 16 May 2001.

[124] See GESTRI (*op.cit.* in footnote 105), p. 209, footnotes 117-119.

A trilateral Memorandum of Understanding was concluded between Italy, Slovenia and Croatia[125], supplemented by two bilateral agreements concluded between Italy and Albania, and Italy and (Serbia) Montenegro[126]. In 2002, the IMO, upon a joint proposal by all Adriatic States, also formally confirmed the ADRIREP with its entry into force as of 1 July 2003[127]. Since then, all oil tankers of 150 gross tonnage and above and all ships exceeding 300 gross tonnage and carrying dangerous or polluting goods as cargo, need to report to the designated Adriatic coastal authorities their entry into the Adriatic, their position at certain points and their departure from the Adriatic Sea. In the elaboration of a comprehensive 'Adriatic system', the Adriatic States opted therefore for a two-tier approach. The first step was a conclusion of a series of bilateral and trilateral binding agreements between themselves, while the second was the submission of a joint proposal to the IMO.

The same approach has been followed with the third group of agreements, which relate to the establishment of a common routeing system and traffic separation schemes in the Adriatic. A Memorandum of Understanding has been concluded between Italy, Croatia and Slovenia relating to the Northern Adriatic[128], coupled with bilateral agreements between Italy and (Serbia) Montenegro and Albania regarding routeing measures in parts of the central and southern Adriatic[129]. Although the agreed traffic separation schemes did not cover the entire Adriatic, in 2003 the Adriatic States concerned jointly proposed to the IMO the adoption (confirmation) of the agreed measures[130]. These measures were then confirmed on 28 May 2004[131] and are still in force. This is an important consideration also for the purposes of the present study, as the established traffic separation (routeing) measures schemes are an important measure which should be taken into account when considering, for example, the setting of new marine (transboundary) protected areas, as well as in the process of marine spatial planning.

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[125] See Memorandum of Understanding between the Government of the Republic of Slovenia, the Government of the Republic of Croatia and the Government of the Italian Republic on Mandatory Ship Reporting System in the Adriatic Sea of 19 October 2000.

[126] See GESTRI (*op.cit.* in footnote 105), pp. 210-211, footnotes 120-123.

[127] Resolution MSC.139(76), Mandatory Ship Reporting Systems, 5 December 2002. See also the establishment of a mandatory ship reporting system in the Adriatic Sea known as 'ADRIATIC TRAFFIC' submitted by Albania, Croatia, Italy, Slovenia and Yugoslavia, NAV 47/3/4, 30 March 2001. See discussion in chapter 10.3.A.a.

[128] Memorandum of Understanding between the Government of the Republic of Slovenia, the Government of the Republic of Croatia and the Government of the Italian Republic on the Establishment of a Common Routeing System and Traffic Separation Scheme in the Northern Part of the Northern Adriatic of 19 October 2000. See also discussion in chapter 10.3.A.b.

[129] See GESTRI (*op.cit.* in footnote 105), p. 210, footnotes 123-126.

[130] See Albania, Croatia, Italy, Serbia and Montenegro, Slovenia, *Establishment of new recommended Traffic Separations Schemes and other new Routeing Measures in the Adriatic Sea*, IMO Doc. NAV 49/3/07, 23 March 2003.

[131] See IMO, Report of the Maritime Safety Committee on its Seventy-Eight Session, MSC 78/26 of 28 May 2004, p. 86, and Annex 21 and New and Amended Traffic Separation Schemes, COLREG.2/Circ. 54 of 28 May 2004.

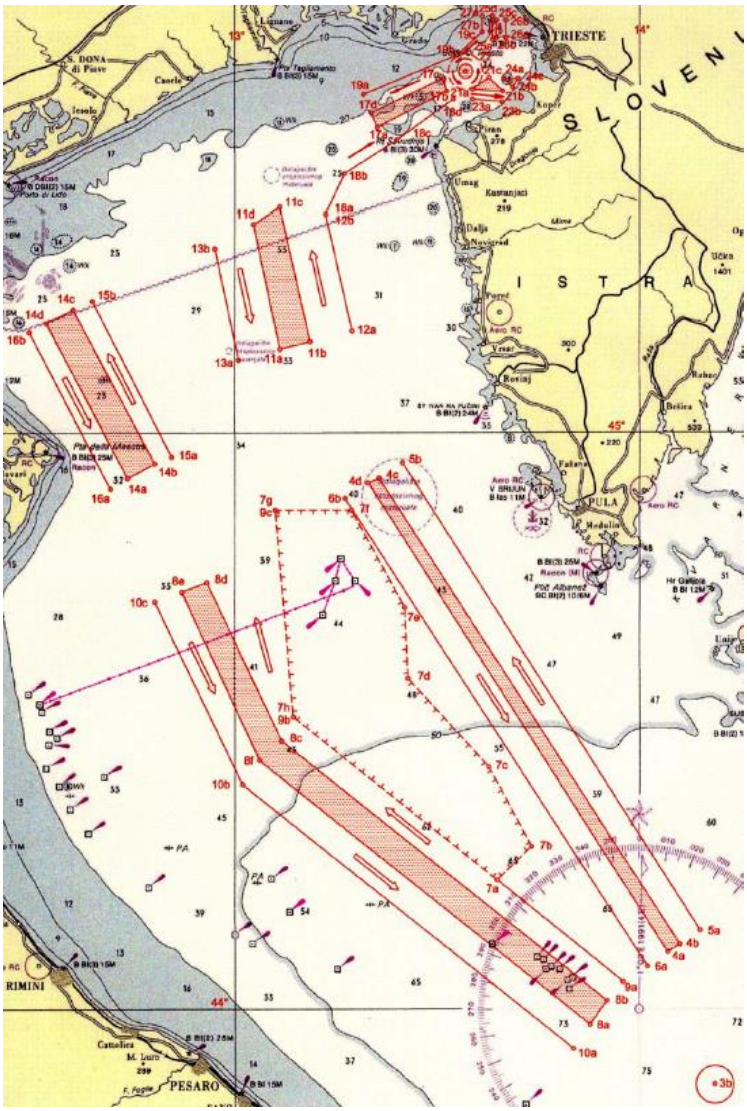

Figure 11 – Traffic separations schemes in the Northern Adriatic Sea[132]. Source: IMO Doc. NAV 49/3/07, 23 March 2003

The *modus* used with regard the preparation and adoption of the discussed agreements in the field of safety at sea represented an interesting precedent and shed some light also on the future possible relation between the AII and other cooperative arrangements (i.e., the Quadrilateral Commission and EUSAIR). As a regional (political) intergovernmental body including both European Union member and non-member States, also in the future the AII may represent an appropriate political forum where sub-regional agreements are finally adopted at the intergovernmental level, after having been previously prepared and agreed upon at experts levels, at times within the framework of other sub-regional cooperative arrangements (i.e., within one of the sub commissions of the Quadrilateral Commission, EUSAIR thematic group, etc.).

[132] Albania, Croatia, Italy, Serbia and Montenegro, Slovenia, *Establishment of new recommended Traffic Separations Schemes and other new Routeing Measures in the Adriatic Sea*, IMO Doc. NAV 49/3/07, 23 March 2003, Appendix 2.

An important change in the functioning and orientation of the AII occurred in 2010, after the European Union support for multilateral sub-regional cooperation became clear and following the successful adoption of the European Union Strategy for the Baltic Sea in 2009. Since 2010, the AII has been one of the main advocates of the idea of a macro-region for the Adriatic and the Ionian Seas**,** based *inter alia* on a common historical and cultural heritage, on the concept of a shared sea, the need to protect the marine environment from pollution, the opportunity of sustainable development and growth and the common goal to make the Adriatic and Ionian basin an internal sea of the European Union, once the integration process in the region is concluded. Based on that, the Ministries of Foreign Affairs of the eight countries of the AII approved, under Italian chairmanship, a Declaration on the Support of the European Union Strategy for the Adriatic Ionian Basin (5 May 2010, Ancona, Italy)[133].

Also as a result of the said activities, the European Council gave mandate to the European Union Commission in December 2012 to present a new strategy**[134]**, which became EUSAIR and was finally endorsed by the European Council on 24 October 2014[135].

D. Cooperation within the framework of the European Union Strategy for the Adriatic Ionian macro region (EUSAIR)

As already emphasised, an important driver of the Adriatic Ionian sub-regional cooperation, particularly in the field of protection and preservation of the marine environment of the Adriatic and Ionian Seas, has been played by the European Union, particularly through its Commission[136]. This is, of course, straightforward, taking into account the full European Union membership of Croatia, Italy, Greece and Slovenia, the European perspective of other States in the region and the exclusive or shared competences of the European Union in maritime affairs (i.e., fisheries and environment, respectively).

An important landmark occurred with the adoption of the 2007 Communication of the Commission regarding an Integrated Maritime Policy for the European Union (the Blue Book)[137], which advocates the exploitation of the potential of the sea in order to achieve growth in an environmentally sustainable manner. Furthermore, in 2008, the MSFD was adopted, with the objective of providing *"a framework within which Member*

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[133] Declaration of the Adriatic Ionian Council on the support to EUSAIR. Text available at https://www.esteri.it/mae/resource/doc/2019/03/12_declaration_of_the_aic_on_the_support_to_the_eu_strategy_final.pdf.

[134] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee on the Regions concerning the European Union Strategy for the Adriatic and Ionian Region, Brussels, 17 June 2014, COM(2014)357 final.

[135] Council conclusions on the European Union Strategy for the Adriatic and Ionian Region (EUSAIR), General Affairs Council Meeting, Brussels, 29 September 2014.

[136] See also *supra*, sub-para. 2.4, B. The Council of the European Union invited the Commission among other to "*keep playing a leading role in strategic coordination of the Strategy, where its involvement brings a clear added value, in partnership with the participating countries and in accordance with the subsidiarity principle; and ensure that the Strategy is taken into account in relevant EU policy initiatives and programme planning, taking into consideration the specific needs of the Adriatic and Ionian Region*". See Council of the European Union, *Council Conclusions*, General Affairs Council Meeting, Brussels, 29 September 2014, section P, a.

[137] COM (2007)575 final, Brussels, 10 October 2007. See *infra*, chapter 4.

States shall take the necessary measures to achieve or maintain good environmental status in the marine environment by the year 2020 at latest"[138]. Of particular importance in the Mediterranean and Adriatic context have been the adopted Communication by the Commission and the efforts by the European Union to promote an Integrated Maritime Policy (hereafter: EU-IMP) for a better Governance of the Mediterranean[139]. The latter were subsequently reflected in the adopted Communication by the Commission on 'A Maritime Strategy for the Adriatic and Ionian Seas' in 2012[140], which sets out the framework for the elaboration of a *"coherent maritime strategy and corresponding Action Plan by the end of 2013".* The Communication aimed to provide a framework for the adaptation of the EU-IMP to the needs and potential of the Adriatic and Ionian Seas and coastal areas, and reflected the established European Union's position that *"sea-basin cooperation is a milestone in the development and implementation of the EU's Integrated Maritime Policy".*

A further important development in the sub-regional Adriatic Ionian cooperation occurred during the same year (2012), when, as already mentioned, the European Council requested the European Commission to prepare EUSAIR, finally adopted by a Council Decision in 2014. Noteworthy is the fact that the said strategy was jointly developed by the Commission and the Adriatic-Ionian region countries and stakeholders in order to address areas of common interest[141]. The strategy and accompanying Action plan[142] build upon and upgraded the Maritime Strategy for the Adriatic-Ionian Seas, adopted by the Commission on 30 November 2012, which *inter alia* addressed blue growth opportunities for the sea basin. Moreover, it based itself on the lessons from other at that time existing macro-regional strategies, i.e. the European Union Strategy for the Baltic Sea Region, and the European Union Strategy for the Danube region, also with regard cooperation with States non-member of the European Union[143]. Reference should be made in this regard to the fact that EUSAIR is one of the currently four macro-regional strategies, which include also the European Union Strategy for the Baltic Sea Region (2009), the European Union Strategy for the Danube Region (2011) and the European Union Strategy for the Alpine Region (2016). Equivalently to the AII intergovernmental initiative, the EUSAIR currently includes 9 countries: 4 European Union member States (Croatia, Greece, Italy and Slovenia) and 5 non-member States (Albania, Bosnia and Herzegovina. Montenegro,

[138] Art. 1, para. 1. See also Communication from the Commission to the Council and the European Parliament Establishing an Environmental Strategy for the Mediterranean, 5 September 2006, COM (2006)475 final.
[139] Communication from the Commission to the Council and the European Parliament of 11 November 2009, *Towards an Integrated Maritime Policy for better governance in the Mediterranean*, COM (2009)/0466 final.
[140] *A Maritime Strategy for the Adriatic and Ionian Seas*, 30 November 2012, COM(2012) 713 final.
[141] See https://www.adriatic-ionian.eu/about-eusair/.
[142] See Commission Staff Working Document, Action Plan, accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the European Union Strategy for the Adriatic and Union Region, 2 April 2020, COM (2020)132 final.
[143] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the EUSAIR, 17 June 2014, COM (2014)357 final.

Serbia and North Macedonia)[144]. However, differently from the intergovernmental AII, EUSAIR is a result of, and based on, the relevant European Union policies (i.e., those related to macro-regions in general) and, as such, forms an integral part of the European Union legal order (*acquis*).

Reference should be made to the fact that the declared general objectives of the EUSAIR is *"to promote sustainable economic and social prosperity in the Region through growth and jobs creation and by improving its attractiveness, competitiveness and connectivity, while preserving the environment and ensuring healthy and balances marine and coastal ecosystems"*[145]. The Council conclusions on EUSAIR, adopted in Brussel on 29 September 2014, recognise in this regard the potential of macro-regional strategies also *"as an integrated framework relating to Member States and non-EU countries in the same geographical area in order to address common challenges and to benefit from strengthen cooperation, to contribute to the economic, social and territorial cohesion of the EU, therefore supporting the achievements of EU objectives and in particular the promotion of growth and job"*[146].

Reference should be furthermore made to the fact that macro-regional strategies, including EUSAIR, are based on the principle of no new funds, no additional European Union formal structures and no new legislation. Accordingly, macro-regional strategies are based on the idea that each one should contribute to an improved (optimal) use of existing financial resources, better use of (already) existing institutions and better implementation of existing legislation[147]. It is asserted that the application of the said (restrictive) principles leaves, as already discussed, ample room for coexistence with other already formalized regional cooperative arrangements (i.e., AII).

The participating countries of EUSAIR agreed in this regard on areas of mutual interest (thematic pillars) with relevance for the entire Adriatic and Ionian sub-region. The EUSAIR is actually built on priority areas (thematic pillars): (1) *Blue Growth*; (2) *Connecting the Region*; (3) *Environmental Quality*; and (4) *Sustainable Tourism*. There are two cross-cutting issues: (1) *Research, Innovation and Small and Medium Enterprises (SMEs)*; and (2) *Capacity Building, including Communication*. Each pillar addresses in turn some specific topics. The first pillar (*Blue Growth*) includes the topics of *Blue technologies*, *Fisheries and Aquaculture* and *Maritime and Marine Governance and Services*. The second pillar (*Connecting the Region*) includes the topics of *Maritime Transport*, *Intermodal Connections to the Hinterland*, and *Energy Networks*. The third pillar (*Environmental Quality*) includes the topics of *Marine Environment* and *Transnational Terrestrial Habitats and Biodiversity*. The fourth pillar (*Sustainable tourism*) includes the topics of *Diversified*

[144] North Macedonia was the last State to join EUSAIR in 2020. See Addendum to Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the European Union Strategy for the Adriatic and Union Region, 2 April 2020, COM (2020)132 final, Brussels.
[145] *Ibid.*, para. 1.
[146] Council conclusions on the European Union Strategy for the Adriatic and Ionian Region (EUSAIR), General Affairs Council meeting, 29 September 2014, section 8.
[147] *Ibid*., section 10.

Tourism Offer (Products and Services) and *Sustainable and Responsible Tourism Management (Innovation and Quality)*.

For the purposes of this analysis is important to point out that the objective of Pillar 3, coordinated by Slovenia and Bosnia and Herzegovina, is supposed to address environmental quality through cooperation at the level of the Adriatic and Ionian region. Such cooperation should contribute to a good environmental status for marine and coastal ecosystems, reducing pollution of the sea; limiting, mitigating and compensating soil sealing; reducing air pollution; and halting loss of biodiversity and degradation of ecosystems.

According to the 2012 Commission Communication, pressure on marine and costal ecosystems is reduced through better knowledge of biodiversity, and coordinated implementation of legislation on marine spatial planning and integrated coastal management – i.e., the MSFD and the Common Fisheries Policy. Furthermore, improving transboundary and high seas networks of marine protected areas and exchanging best practices among their managing authorities further preserves biodiversity. With regard to transnational terrestrial habitats and biodiversity, the mentioned Communication refers to the fact that joint management of eco-regions across borders should be encouraged, as well healthy populations of large carnivores, and measures to increase compliance with hunting rules for migratory birds. Examples of targets set at that time included (among other):

> (1) Enhancement of the NATURA 2000 and Emerald networks and establishment of a coherent network of Marine Protected Areas under the Marine Strategy Framework Directive by 2020; and
>
> (2) 10% surface coverage by 2020 of the Adriatic and Ionian Seas by Marine Protected Areas, in line with international commitments[148].

Noteworthy is the fact that, according to the EUSAIR Flagships 2021-2027 adopted at the Extraordinary EUSAIR Governing Board meeting of 10 June 2020, those flagships related to Pillar 3 on Environmental Quality are: (1) *Development and implementation of the Adriatic-Ionian sub-regional oil spill contingency plan*; (2) *Protection and enhancement of natural terrestrial habitats and ecosystems*; (3) *Promotion of sustainable growth in the Adriatic and Ionian region by implementing integrated coastal zone management (ICZM) and marine spatial planning (MSP) also to contribute a common regional framework (CRF) on ICZM of the Barcelona Convention and the monitoring and management of marine protected areas*[149].

The first flagship (*Development and implementation of the Adriatic-Ionian sub-regional oil spill contingency plan*) addressed the need of examination and extension of the already discussed contingency plan for the Northern Adriatic to other Adriatic and

[148] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee on the Regions concerning the European Union Strategy for the Adriatic and Ionian Region, 17 June 2014, COM (2014)357 final. See in this regard also OECD, *OECD EUSAIR Synthesis Report: Multi- level Governance and Cross- Sector Practices Supporting EUSAIR*; 24 July 2019, p. 18 (Slovenia's green and blue corridors initiative). Synthesis report available at https://www.adriatic-ionian.eu/library/.

[149] See https://www.adriatic-ionian.eu/wp-content/uploads/2020/07/EUSAIR-flagships-GB_F.pdf.

Ionian countries, possible risks and future events or circumstances that could damage the Adriatic and Ionian macro-region environment, taking also into account the provisions of the Protocol to the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil (Madrid, 14 October 1994) and of the European Union Directive 2013/30/EU of the European Parliament and of the Council of 12 June 2013 on safety of offshore oil and gas operations[150].

The aim of the second flagship (*Protection and enhancement of natural terrestrial habitats and ecosystems*) is to try to establish protection and enhancement of natural terrestrial habitats and ecosystems, with particular attention to the ecological connectivity of blue and green corridors and infrastructures.

The third flagship on the *Promotion of sustainable growth in the Adriatic and Ionian region by implementing ICZM and MSP also to contribute CRF on ICZM of the Barcelona Convention and the monitoring and management of marine protected areas* has as its main rationale the assumption that the extension of MSP and ICZM to the whole Adriatic and Ionian region would help strengthen and develop sustainable growth (economic and touristic), decrease pollution, protect unique biodiversity, and increase quality of life. Apart to promote sustainable development, one of the main goals is to facilitate the adoption of coastal and maritime spatial plans (under the relevant European Union instruments and the Barcelona System) by defining gaps in marine and coastal knowledge[151].

When it comes to the governance structure of EUSAIR, reference should be made to the fact that also in accordance with the Commission Report on Governance of macro-regional strategies of 10 May 2014 and the related Council Conclusions of 21 October 2014, three interrelated levels of governance are applicable, namely: (i) political leadership and ownership; (ii) coordination; and (iii) implementation. Apart from the highest political level, consisting of Ministers for European Union Funds and Ministers of Foreign Affairs of the 9 participating countries, the EUSAIR governance is composed of the Governing Board, which has a coordination role[152], while the implementation of the EUSAIR and its Action plan is prevalently in the hands of the 4 Thematic Steering Groups (TSG), each group being linked to a specific pillar[153]. It is interesting that TSGs are chaired as a general rule by two States, one European Union member States and one non-member State. Greece and Montenegro are in charge of Pillar 1. Italy, Serbia and North Macedonia govern Pillar 2. Slovenia and Bosnia and Herzegovina chair Pillar 3. Croatia and Albania are in charge of Pillar 4.

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[150] See also GRBEC (*op.cit.* in footnote 1), chapter 5.1.3.4.

[151] See https://www.adriatic-ionian.eu/wp-content/uploads/2020/07/EUSAIR-flagships-GB_F.pdf.

[152] See https://www.adriatic-ionian.eu/about-eusair/governance/.

[153] See Joint Statement of the Representatives of the Countries Participating in the EU Strategy for the Adriatic and Ionian Region on a Governance and Management System, Set up in Partnership with the European Commission for the Implementation of the Strategy, 18 November 2014. Text available at https://ec.europa.eu/regional_policy/sources/cooperate/adriat_ionian/pdf/joint_statement_governance_en.pdf.

When it comes to the relation with other cooperative arrangements, EUSAIR was in in fact intended to be an upgrade and benefit from the experience of more than a decade of inter-governmental cooperation within the AII, which had already at that time created strong links among the participating countries. As already mentioned, the AII was one of the main promotors of the adoption of the Adriatic and Ionian macro-regional strategy[154]. The current coexistence and complementarity between the AII and EUSAIR is indeed remarkable.

Reference should be made to the fact that, following the adoption of EUSAIR in 2014, the AII had to redefine its role in the new macro-regional context. The two institutions count in fact the same participating States and share a similar mission. Accordingly, there was a clear risk of duplication of activities. It was found that an alignment of the two institutions (and their priorities) was necessary in order to make them both more effective and complementary. Three types of activities were – successfully – undertaken in this regard, in order to achieve the said goal:

(a) the merging of the EUSAIR and AII highest political levels. The Adriatic Ionian Council and the EUSAIR Ministerial Meeting acts as the highest political level for both the AII and the EUSAIR in a coordinated way. In fact, already at the first EUSAIR Annual Forum, held in Dubrovnik in May 2016, the political levels of the AII and EUSAIR, represented by the Ministers of Foreign Affairs and the authorities for European Union Funds of the participating countries, were merged into a so-called Adriatic and Ionian Council/EUSAIR Ministerial Meeting;

(b) the round tables organized within the AII framework were aligned with the EUSAIR priorities, thus transforming them into a tool at the disposal of the EUSAIR governance, to be used particularly by the EUSAIR TSGs; and

(c) there was a change in the type of participants within the activities of the AII, from governmental representatives to other stakeholders (local authorities, commercial sector, universities, etc.). Emphasis is therefore placed on those who will have to implement the Action Plan.

Despite being (legally) two separate cooperative arrangements, the AII and EUSAIR are nowadays complementary, have the same priorities with intertwined governance structure and, in particular, are both involved in the EUSAIR implementation. It is accordingly asserted that sub-regional cooperation, particularly that of relevance for the whole Adriatic and Ionian region and in particular that falling under one of the four EUSAIR Pillars should be nowadays better undertaken within the auspices of EUSAIR, in close cooperation with the AII and the previously mentioned Quadrilateral Commission.

[154] See *supra*, sub-para. 2.4, C.

No significant substantive conflicts may be noticed between the provisions of the main treaties applicable in the field of marine protected areas, as all these instruments are inspired by similar general principles and protection objectives and because the regional or sub-regional treaties provide for a more specific and enhanced protection than that achieved through global treaties (criterion of the added value). Marine protected areas are implicitly referred to in Art. 194, para. 5, UNCLOS, which includes among the measures for the protection and preservation of the marine environment 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. The establishment of marine protected areas is also envisaged, as a special measure to conserve biological diversity, by the CBD. Sectoral treaties provide for the establishment of effective area-based conservation measures, as a means to achieve their objective: this is the case of the International Convention for the Regulation of Whaling, as regards sanctuary areas, the MARPOL, as regards special areas, or the Convention for the Protection of Underwater Cultural Heritage, as regards the preservation *in situ* of this heritage. Also regional agreements call for the creation of marine protected areas or the adoption of effective area-based conservation measures, in particular the Areas Protocol, as regards the SPAMIs, the Convention on the Conservation of European Wildlife and Natural Habitats, as regards the Network of Areas of Special Conservation Interest (Emerald Network), the ACCOBAMS, as regards areas for cetacean conservation, and the Agreement establishing the GFCM, as regards fisheries restricted areas.

For the Adriatic and Ionian Seas, four main existing forums for sub-regional cooperation have been established, namely: additional sub-regional cooperation within the institutional framework of the Barcelona Convention and its protocols; cooperation within the Joint Commission for the protection of the Adriatic Sea (Quadrilateral Commission), based on the 1974 Belgrade Agreement between Italy and the former Yugoslavia; cooperation within the framework of the intergovernmental Adriatic-Ionian Initiative (AII); cooperation within the framework of the EUSAIR. It is suggested that the Trilateral Commission – which, after the accession of Montenegro in 2010, should be referred to as the 'Quadrilateral Commission' – may nowadays be regarded as one of the most important institutional frameworks for the cooperation of Adriatic States. Its potential, however, has still to be fully exploited, *inter alia* through enhanced coordination and coordination with other regional (Mediterranean) and sub-regional (Adriatic and Ionian) cooperative frameworks, particularly the AII and EUSAIR. Despite being two separate cooperative arrangements, the AII and EUSAIR are nowadays complementary, as they share the same priorities with intertwined governance structure and are both involved in the implementation of the EUSAIR. It is accordingly asserted that regional cooperation, particularly that of relevance for the whole Adriatic and Ionian region and falling under one of the four priority EUSAIR pillars, should be nowadays better undertaken within the auspices of EUSAIR, although in close cooperation and coordination with the AII and the Quadrilateral Commission. The reactivation of the latter and its enlargement to all Adriatic and Ionian coastal States should be a clear priority.

CHAPTER 3

THE GLOBAL LEGAL BASIS FOR THE ESTABLISHMENT OF MARINE PROTECTED AREAS

This chapter elaborates on the main policy and legal instruments that have been adopted at the global level and are specifically relevant for the subject of marine protected areas and other effective area-based conservation measures.

While the UNCLOS does not specifically mention marine protected areas, but only implicitly refers to them in Art. 194, para. 5[155], there is a solid support for the proposition that the establishment of such areas is included in the obligation arising from customary international law to preserve and protect the marine environment. In fact, it is easy to find that in this regard a general practice has developed and is accepted as law by States, as this Chapter is intended to show.

While relatively recent, the notion of other effective area-based conservation measures goes in the same direction, being it understood as an additional opportunity, different from the establishment of a marine protected area, to achieve the objective of long-term conservation[156].

3.1. The main global policy instruments

A number of policy instruments call for action towards the establishment of marine protected areas and the adoption of other effective area-based conservation measures.

According to 'Agenda 21', the action programme for the 21st century adopted in Rio de Janeiro by the 1992 United Nations Conference on Environment and Development, States, acting individually, bilaterally, regionally or multilaterally and within the framework of the IMO and other relevant international organizations, should assess the need for additional measures to address degradation of the marine environment. 'Agenda 21' stresses the importance of protecting and restoring endangered marine species, as well as preserving habitats and other ecologically sensitive areas, both on the high seas and in the zones under national jurisdiction. In particular:

> States commit themselves to the conservation and the sustainable use of marine living resources on the high seas. To this end, it is necessary to: (...)
>
> e) Protect and restore marine species;
>
> f) Preserve habitats and other ecologically sensitive areas (para. 17.46).

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[155] See *infra*, para. 3.2. On marine protected areas see SCOVAZZI (ed.), *Marine Specially Protected Areas - The General Aspects and the Mediterranean Regional System*, The Hague, 1999; SCOVAZZI, *Marine Protected Areas in Waters beyond National Jurisdiction*, in RIBEIRO (ed.), *30 Years after the Signature of the United Nations Convention on the Law of the Sea*, Coimbra, 2014, p. 209; SCOVAZZI & TANI, *Problems Posed by Marine Protected Areas Having a Transboundary Character*, in MACKELWORTH (ed.), *Marine Transboundary Conservation and Protected Areas*, London, 2016, p. 17.

[156] See *infra*, sub-para. 3.3, D.

> 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 (para. 17.86).

The Plan of Implementation of the World Summit on Sustainable Development (Johannesburg, 2002) confirms the need to promote the conservation and management of the oceans and *"maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, including in areas within and beyond national jurisdiction"* (para. 32, a). To achieve this aim, the Plan puts forward the objective of a representative network of marine protected areas and the deadline of 2012 for its achievement. States are invited to

> develop and facilitate the use of diverse approaches and tools, including (...) 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 (...) (para. 32, c).

In Johannesburg, the concept of a 'network' of marine protected areas gained further acknowledgment as an important objective. 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. 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. Moreover, 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[157].

However, as States realized that the objective to establish a representative network of marine protected areas by the year 2012 could not be achieved, they shifted to 2020 the envisaged deadline and set forth the ratio of 10% of marine and coastal areas to be included in systems of protected areas. According to 'The Future We Want', that is the outcome document of the United Nations Conference on Sustainable Development, held in Rio de Janeiro in 2012 (so-called 'Rio+20 Conference')[158], 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

[157] See IUCN WORLD COMMISSION ON PROTECTED AREAS (IUCN-WCPA), *Establishing Marine Protected Area Networks - Making it Happen*, Washington, 2008.
[158] Doc. A/RES/66/288 of 11 September 2012.

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 (para. 177)[159].

On 25 September 2015, at the outcome of the United Nations summit for the post-2015 development agenda, the United Nations General Assembly adopted Resolution 70/1, *Transforming Our World: The 2030 Agenda for Sustainable Development*, which defines 17 sustainable development goals (SDGs). Within SDG 14 (*Conserve and sustainably use the oceans, seas and marine resources for sustainable development*), goal 14.5 provides for an invitation specifically directed at the establishment of marine protected areas and the adoption of other effective area-based conservation measures:

> By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.

The last United Nations General Assembly Resolution on Oceans and the Law of the Sea (Resolution 75/239 of 31 December 2020) reaffirms the invitation to make use of area-based management tools, including marine protected areas, and recalls the 10% commitment. In particular, the General Assembly

> *Calls upon* States to strengthen, in a manner consistent with international law, in particular the Convention, the conservation and management of marine biodiversity and ecosystems, and national policies in relation to area-based management tools, including marine protected areas (para. 265);
>
> *Recalls* that, in 'The future we want', States reaffirmed 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 noted decision X/2 of the tenth meeting of the Conference of the Parties to the Convention on Biological Diversity, 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 (para. 266);
>
> *Encourages* States, in this regard, to further progress towards the establishment of marine protected areas, including representative networks, and calls upon States to further consider options to identify and protect ecologically or biologically significant areas, consistent with international law and on the basis of the best available scientific information (para. 267).

Finally, although for geographical reasons the matter may be of little relevance for the Mediterranean Sea[160], an intergovernmental conference is today taking place, as convened by United Nations General Assembly Resolution 72/249 of 24 December 2017, to address the question of conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. *"Measures such as area-based management tools,*

[159] Reference is made to Target 11 of the Annex to Decision X/2 adopted in 2010 by the Conference of the parties to the Convention on Biological Diversity (Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets). See *infra*, sub-para. 3.3, C.

[160] As already remarked, when all the Mediterranean coastal States establish their exclusive economic zones, no area in the Mediterranean Sea will be located beyond national jurisdiction.

including marine protected areas" are among the main topics to be discussed by the conference, with a view of developing an international legally binding instrument under the UNCLOS.

3.2. Customary international law, as reflected in the United Nations Convention on the Law of the Sea

An important means to comply with the general obligation to protect the environment, set forth in Art. 192 UNCLOS[161], is the establishment of marine protected areas, which is implied in Art. 194, para. 5, UNCLOS:

> The measures taken to protect and preserve 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[162].

This obligation has a general scope of application. It covers any kind of rare or fragile marine ecosystems, including their living and non-living components, as well as any kind of depleted, threatened or endangered species, irrespective of the legal condition of the waters or seabed where they are located (marine internal waters, territorial sea, exclusive economic zone, continental shelf, high seas, seabed beyond national jurisdiction). It goes without saying that the typical, even if not the only, measure to protect such ecosystems and species is the establishment of a marine protected area.

However, rules of international law of the sea on the legal regime of different marine spaces and the activities that are carried out therein must be taken into consideration in the process for the establishment of marine protected areas and the implementation of the measures provided therein. In this regard, the UNCLOS provisions reflect also customary international law. The regime applying to marine waters subject to different regimes is the following.

A. Internal maritime waters

In the internal maritime waters[163], the coastal State exercises full sovereignty and is accordingly entitled also to establish marine protected areas.

B. Territorial sea

In the 12-n.m. territorial sea, the coastal State is granted sovereignty and is entitled to establish marine protected areas[164]. However, the coastal State may not hamper the

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[161] See *supra*, sub-para. 2.2, A.

[162] Rare or fragile marine ecosystems present various characteristics and are found in areas which have different legal conditions. While wetlands, lagoons or estuaries are located along the coastal belt, other kinds of ecosystems, such as seamounts, hydrothermal vents or submarine canyons, are frequently found at a certain distance from the coast, including in areas located beyond the limit of the exclusive economic zone.

[163] The internal marine waters are 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.

[164] The territorial sea includes the seabed and its subsoil.

innocent passage through its territorial sea of ships flying the flag of other States[165]. It follows that the measures associated to the establishment of a marine protected area in the territorial sea cannot be applied by the coastal State in a manner that would prevent the innocent passage of foreign ships.

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. Art. 22 UNCLOS provides that the coastal State, where necessary having regard to the safety of navigation and without discrimination, may require ships, in particular tankers, nuclear-powered ships and ships carrying nuclear or hazardous substances, to use certain designated lanes or traffic separation schemes.

C. Exclusive economic zone

Within the 200-n.m. exclusive economic zone, the coastal State has sovereign rights for the purpose of exploring and exploiting the natural resources of the water column, the seabed and subsoil, whether living or non-living, and producing energy from the water, currents and winds. 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. All the other States enjoy some specified high seas freedoms related to maritime communications, namely the freedoms of navigation, overflight and laying of submarine cables and pipelines, as well as other international lawful uses of the seas related to these freedoms.

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 (Art. 61 UNCLOS); on the other hand, it is under the duty to promote the objective of their optimum utilization (Art. 62 UNCLOS), granting to other interested States access to the surplus of resources where its capacity to harvest does not reach the total allowable catch.

It follows that the coastal State may well declare marine protected areas in its exclusive economic zone, 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, the establishment of marine protected areas where fishing activities are prohibited could be subject to objection by other States, where not supported by sufficient scientific evidence.

Certain living resources are subject to specific rules. For example, Art. 65 UNCLOS provides 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. This means that marine protected areas for marine mammals may be established in the exclusive economic zone

[165] Art. 19 UNCLOS explains the meaning of 'innocent passage' and lists the activities that are incompatible with it.

with a view to completely prohibiting the exploitation of these animals on a permanent basis, without any consideration of optimum utilization objectives.

The UNCLOS does not grant the coastal State the right to unilaterally adopt measures, such as the establishment of a marine protected area, that could interfere with freedom of navigation within its exclusive economic zone. However, under Art. 211, para. 6, the coastal States has a power of initiative in requesting the competent international organization, that is the IMO, to ascertain the presence of the conditions for the establishment of a 'clearly defined area' where special measures apply, due to oceanographical and ecological conditions, the need to protect its resources and the particular character of the traffic[166].

D. Continental shelf

In the Mediterranean, the continental shelf corresponds to the seabed and subsoil belonging the different bordering States, beyond the limit of the territorial sea[167], irrespective of whether the superjacent waters have the legal condition of exclusive economic zone or high seas. The regime of marine protected areas on the continental shelf is equivalent, in principle, to the regime applicable to such areas within the waters of the exclusive economic zone. However, there is a need of a careful *mutatis mutandis* exercise, due to the different kinds of marine activities involved[168].

E. High seas

All parts of the sea, which are not included in the exclusive economic zone, the territorial sea or the internal marine waters of a State, constitute the high seas. 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.

The high seas are subject to a regime of freedom that encompasses different activities, such as navigation, overflight, laying of submarine cables and pipelines, construction of artificial islands and other installations, fishing or scientific research. According to customary international law, as reflected in the UNCLOS, these activities are to be exercised by all States with due regard for the interests of other States in their exercise of the freedom of the high seas (Art. 87, para. 2, UNCLOS).

The high seas regime is based on the exclusive jurisdiction of any State over vessels to which it has granted its nationality and, consequently, fly its flag. No State can impose

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[166] So far, no coastal State has made use of Art. 211, para. 6, UNCLOS, probably because of the complexity of the cooperation procedure through the organization.

[167] Under the definition given by Art. 76 UNCLOS, the continental shelf of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea 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. Due to the fact that in the Mediterranean Sea no point is located at a distance of more than 200 n.m. from the nearest land or island, all Mediterranean seabed beyond the territorial sea falls under the regime of the continental shelf and needs to be delimited by the States concerned.

[168] Instead of navigation, the laying of cables and pipelines becomes relevant on the continental shelf. Fishing becomes relevant in the case of sedentary species, as defined in Art. 77, para. 4, UNCLOS. However, the obligation of the coastal State to promote the optimum utilization does not apply to such resources.

its own jurisdiction over vessels flying the flag of other States. It follows that no State can unilaterally establish a marine protected area on the high seas and claim that ships flying a foreign flag abide by the relevant provisions. Moreover, not all the flag States exercise the due control on the activities carried out by the ships flying their flag and it is well-known that instances of so-called flags of convenience may occur.

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 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.

The interested State are free to conclude a treaty and to agree on the establishment of a marine protected area on the high seas based on this international instrument. It is true that a treaty does not create either obligations or rights for a third State without its consent and 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 bound the ships flying its flag. In this connection, the main question is how to prevent conservation measures agreed upon by certain States from being frustrated by non-party States which enjoy the benefits of such measures without burdening themselves with the corresponding duties (so-called 'free-rider' States).

However, it may be pointed out that, 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 customary international law. It has already been remarked that States are under the general obligation to protect and preserve the marine environment everywhere in the sea, including by 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. The freedom to fish on the high seas is qualified by the obligation to adopt measures for the conservation of the living resources (Arts. 117 and 119 UNCLOS), as well as by the duty to cooperate in their management in order to maintain and restore both harvested and associated species (Art. 118 UNCLOS).

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 ensure a genuine link between it and the ship (Art. 91, para. 1, UNCLOS) and to *"effectively"* exercise such jurisdiction and control in administrative, technical and social matters (Art. 94, para. 1, UNCLOS). 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 or the sustainable exploitation of marine resources.

In international fisheries law, there are instances of treaties that, in addressing the problem of free-rider States, put emphasis on the customary international law obligations

that their behaviour infringes[169]. The same could occur also in the field of protection of the marine environment. According to Art. 28, para. 2, of the Areas Protocol, the parties undertake to adopt appropriate measures, consistent with international law, to ensure that no one engages in any activity contrary to the principles or purposes of the protocol. Where no other option is left, it could be justified to adopt lawful countermeasures to deter activities by third parties that undermine the conservation and management measures agreed upon by the States that have established a marine protected area on the high seas.

F. Seabed beyond national jurisdiction

The seabed beyond national jurisdiction (so-called 'Area') and its mineral resources are subject to the innovative regime of the common heritage of mankind (Part XI UNCLOS). For geographical reasons, this regime is not relevant for the Mediterranean Sea, a semi-enclosed sea of limited dimension.

In any case, marine protected areas occur also in the Area. Art. 145 of the UNCLOS requires that necessary measures be taken with respect to mining activities in the Area to ensure effective protection for the marine environment from harmful effects which may arise from such activities. In this regard, by a Decision of 26 July 2012, the Council of the International Seabed Authority (ISA) approved the environmental management plan for the Clarion-Clipperton Zone, including the designation, on a provisional basis, of a network of areas of particular environmental interest, as defined in an annex to the decision[170]. Moreover, according to Regulation 31, para. 6, of the 2013 Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area and Related Matters[171], the ISA Council may establish 'preservation reference zones', where *"no mining shall occur to ensure representative and stable biota of the seabed in order to assess any changes in the biodiversity of the marine environment".*

3.3. The United Nations Convention on Biological Diversity

A. The Jakarta Mandate

Particularly relevant in the field of marine protected areas is the programme of action to implement the CBD in marine and coastal ecosystems ('Jakarta Mandate on Marine and Coastal Biological Diversity') agreed in 1995 and reviewed and updated in 2004 by the Conference of the Parties (Decision VII/5).

The Jakarta Mandate 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 Marine and Coastal*

[169] See Art. 8, paras. 3 and 4, of the 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, 1995) and Recommendation 06-13 concerning trade measures adopted in 2006 by the International Commission for the Conservation of Atlantic Tunas (ICCAT), established by the International Convention on the Conservation of Atlantic Tunas (Rio de Janeiro, 1966).
[170] Doc. ISBA/18/C/22 of 22 July 2012.
[171] Doc. ISBA/19/C/17 of 22 July 2013.

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 (para. 6). 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 (para. 5).

In 2006, the Conference of the Parties (Decision VIII/24 on protected areas) 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 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 (para. 38).

B. The Ecologically or Biologically Significant Marine Areas

In 2008, the Conference of the parties 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' (Annex I to Decision IX/20; so-called CBD EBSA criteria), namely *"uniqueness or rarity"*[172], *"special importance for life history stages of species"*[173], *"importance for threatened, endangered or declining species and/or habitats"*[174], *"vulnerability, fragility, sensitivity, or slow recovery"*[175], *"biological productivity"*[176], *"biological diversity"*[177] and *"naturalness"*[178]. The Conference also adopted the 'Scientific guidance for selecting areas to establish a representative network

[172] *"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".*
[173] *"Areas that are required for a population to survive and thrive".*
[174] *"Area containing habitat for the survival of and recovery of endangered, threatened, declining species or area with significant assemblages of such species".*
[175] *"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".*
[176] *"Area containing species, populations or communities with comparatively higher natural biological productivity".*
[177] *"Area contains comparatively higher diversity of ecosystems, habitats, communities, or species, or has higher genetic diversity".*
[178] *"Area with a comparatively higher degree of naturalness as a result of the lack of or low level of human-induced disturbance or degradation".*

of marine protected areas, including in open-ocean waters and deep-sea habitats' (Annex II). It lists the required network properties and components, namely *"ecologically and biologically significant areas"*, *"representativity"*, *"connectivity"*, *"replicated ecological features" and "adequate and viable sites"*. The Conference of the Parties proposed *"four initial steps to be considered in the development of representative networks of marine protected areas"* (Annex III), 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".*

The Conference of the parties held in 2012 adopted Decision XI/17 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. For instance, in the Mediterranean region, 80 EBSAs are identified, including four in the Adriatic Sea, namely *"Northern and central Adriatic"*, *"Polygon 1"*, *"Polygon 2"* and *"Central western Adriatic"*, and five in the Ionian Sea, namely *"Ionian"*, *"Polygon 6"*, *"Eastern Ionian Sea"*, *"Lophelia and Madrepora in Gulf of Taranto"* and "*Lophelia reefs".*

The Annex to Decision XII/22, adopted by the Conference of the parties held in 2014, provides the results of seven regional workshops on the description of areas meeting the scientific criteria for EBSAs. The workshop for the Mediterranean, held in Malaga in 2014, described 15 EBSAs, including three located in the Adriatic and Ionian Seas (*Northern Adriatic*[179], *Jabuka/Pomo Pit*[180] and *South Adriatic Ionian Strait*[181]).

The EBSAs criteria can provide to the interested States useful information on where marine protected areas could be established according to scientific evidence. They do not enter into the political and legal questions that are linked to creation of marine protected areas. As recalled by Decision X/29, adopted by the Conference of the parties held in 2012,

> (…) the application of the ecologically or biologically significant areas (EBSAs) criteria is a scientific and technical exercise, that areas found to meet the criteria may require enhanced conservation and management measures, and that this can be achieved through a variety of means, including marine protected areas and impact assessments, and (…) the identification of ecologically or biologically significant areas and the selection of conservation and management measures is a

[179] *"Part of the Northern Adriatic Basin, off the coasts of Italy, Slovenia and Croatia. The area is roughly delimited by the 9 m isobaths, encompassing the area above the straight line linking Ancona (Conero) and the island of Ilovik. The area is located in the northern part of the North Adriatic Sea Basin, with an average depth of 35 m and is strongly influenced by the Po river plume".*

[180] *"The area encompassing three distinct, adjacent depressions, with maximum depths of ca. 270, respectively. The area extends 4.5 nautical miles from the 200 m isobath. The area encompassing the adjacent depressions, the Jabuka (or Pomo) Pit is situated in the Middle Adriatic Sea and has a maximum depth of 200 – 260 m".*

[181] *"The area is located in the centre of the southern part of the Southern Adriatic basin and in the northern part of the Ionian Sea. It includes the deepest part of the Adriatic Sea on the western side and it encompasses a coastal area in Albania (Sazani Island and Karaburuni peninsula). It also covers the slopes in near Santa Maria di Leuca. The area is located in the centre of the southern part of the Southern Adriatic basin and the northern Ionian Sea".*

matter for States and competent intergovernmental organizations, in accordance with international law, including the United Nations Convention on the Law of the Sea (para. 26).

C. The Aichi Targets and the Post-2020 Global Biodiversity Framework

In 2010, by Decision X/2, the Conference of the parties to the CBD adopted the Strategic Plan for Biodiversity 2011-2020, with its 20 'Aichi Biodiversity Targets'. According to Target 11,

> By 2020, at least 17 per cent of terrestrial and inland water areas, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

As it can be noticed, also the new notion of other effective area-based conservation measures contributes towards the achieving of the 10% objective.

However, taking into account the varying levels of progress towards the achievement of the Aichi Biodiversity Targets, the Conference of the parties to the CBD, scheduled for October 2021 and April-May 2022, is called to adopt the Post-2020 Global Biodiversity Framework. During the negotiations that are being undertaken for this purpose, a First Draft for the Post-2020 Global Biodiversity Framework has been prepared[182], including the following 2030 action targets, relating to the subject *"reducing threats to biodiversity"*:

> Target 1. Ensure that all land and sea areas globally are under integrated biodiversity-inclusive spatial planning addressing land- and sea-use change, retaining existing intact and wilderness areas.
>
> Target 2. Ensure that at least 20 per cent of degraded freshwater, marine and terrestrial ecosystems are under restoration, ensuring connectivity among them and focusing on priority ecosystems.
>
> Target 3. Ensure that at least 30 per cent globally of land areas and of sea areas, especially areas of particular importance for biodiversity and its contributions to people, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

As it can be noticed, the conservation objective is upgraded to 30%, but postponed to 2030 (so-called 30-30 objective).

D. The distinction between marine protected areas and other effective area-based conservation measures

The already recalled Aichi Biodiversity Target 11 sets forth a distinction between 'protected areas', including marine protected areas, and 'other effective area-based conservation measures'. The same distinction is repeated in the proposed targets of the

[182] Doc. CBD/WG2020/3/3 of 5 July 2021.

Post-2020 Global Biodiversity Framework[183]. The difference between the two different, but concurring, concepts is becoming a fundamental aspect in the current trends in environmental policy and law.

a. The notion of marine protected area

The notion of marine protected area has today a solid background. Already in the late '80s, the International Union for the Conservation of Nature (IUCN) put forward a general definition of marine protected area, to be understood 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[184].

In 2008, the IUCN provided a revised definition of 'protected area', as

> 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[185].

The CBD, that is a binding instrument today in force for many countries, provides for the following definition:

> 'Protected area' means a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives (Art. 2).

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, specifically 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,

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[183] See *supra*, sub-para. 3.3, C.

[184] IUCN General Assembly Resolution 17.38, 1988, para. 2, lett. *b*. According to the guidelines elaborated by IUCN in 1999, for the area in question to be called a marine protected area, the total area of sea encompassed by it has to exceed the area of land within its boundaries, or the marine part of a large protected area has 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 (see KELLEHER, *Guidelines for Marine Protected Areas*, Gland-Cambridge, 1999).

[185] See DUDLEY, *Guidelines for Applying Protected Areas Management Categories*, Gland, 2008; DAY, DUDLEY, HOCKINGS, HOLMES, LAFFOLEY, STOLTON, WELLS & WENZEL, *Guidelines for Applying Protected Areas Management Categories to Marine Protected Areas*, 2nd ed., Gland, 2019. The IUCN categories of protected areas are: *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 ecosystems).

with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings[186].

It thus appears that the notion 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. It should today to be understood as encompassing any area of marine waters or seabed that (1) is delimited within precise boundaries, including, if appropriate, buffer zones, and (2) is afforded a stricter protection (3) for specific nature conservation values as a priority. Other conditions that should equally be met, also in order to avoid that the marine protected area is established only on paper, are (4) a suitable size, location and design that deliver the conservation values; (5) a management plan or equivalent that addresses the need for conservation and achieves social and economic goals; (6) the provision of financial resources and staff capacity to effectively implement the protection measures[187].

In the case of a 'network' of marine protected areas[188], 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[189].

b. The notion of other effective area-based conservation measures

In 2018, the parties to the CBD agreed on the definition, guiding principles, common characteristics and criteria for identification of other effective area-based conservation measures (Decision XIV/8). The definition is the following:

> 'Other effective area-based conservation measure' means a geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the *in situ* conservation of biodiversity, with associated ecosystem functions and services and, where applicable, cultural, spiritual, socio–economic, and other locally relevant values.

It can be inferred that 'other effective area-based conservation measures' is a broad concept[190]. While marine protected areas are established exclusively for conservation purposes, other effective area-based conservation measures, while indirectly contributing to conservation objectives, may be adopted also for other purposes.

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[186] Doc. UNEP/CBD/SBSTTA/8/9/Add.1, 27 November 2002.
[187] IUCN-WCPA, *Applying IUCN's Global Conservation Standards to Marine Protected Areas (MPA)*, Gland, 2018, p. 2.
[188] For the importance of networks of marine protected areas, see *supra*, para. 3.1.
[189] IUCN-WCPA (*op.cit.* in footnote 157), p. 12.
[190] In the expression *"marine protected areas and other effective area-based conservation measures"* it is implied that marine protected areas are a kind of area-based conservation measure; however, the latter notion is broader and not limited to marine protected areas.

Annex III to Decision XIV/8 provides technical advice on other effective area-based conservation measures, as well as criteria for their identification. It explains, *inter alia*, that other effective area-based conservation measures apply to areas that are not currently recognized or reported as a protected area or parts of a protected area and may be adopted also for protecting cultural, spiritual, socio-economic and other relevant values.

Annex IV to Decision XIV/8 puts forward considerations in achieving Aichi Biodiversity Target 11 in marine and coastal areas and generally categorizes other effective area-based conservation measures different from marine protected areas, as *"territories and areas governed and managed by indigenous peoples and local communities"*[191], *"area-based fisheries management measures"*[192] and *"other sectoral area-based management approaches"*[193]. Corridors inside networks of marine protected areas could also be considered as other effective area-based conservation measures. In short, while designated for other purposes (for example, fishing, shipping, underwater archaeology, security, etc.), other effective area-based conservation measures are nonetheless relevant, because they indirectly achieve also conservation purposes.

The adoption of a definition and criteria of other effective area-based conservation measures opens new opportunities for States to assess the extent of potential such measures and to recognize and report them also for the objective of achieving Aichi Biodiversity Target 11 and its successor target under the post-2020 Global Biodiversity Framework[194].

3.4. The measures adopted within the framework of IMO Conventions

A. The Particularly Sensitive Sea Areas

A set of Guidelines for the Identification of PSSAs were adopted on 6 November 1991 by the Assembly of the IMO under Resolution A.720(17) and revised under Resolutions A.927(22) of 29 November 2001 and A.982(24) of 1 December 2005. A PSSA is defined as

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[191] *"In these types of approaches, some or all of the governance and/or management authority is often ceded to the indigenous peoples and local communities, and conservation objectives are often tied to food security, and access to resources for indigenous peoples and local communities".*

[192] *"These are formally established, spatially defined fishery management and/or conservation measures, implemented to achieve one or more intended fishery outcomes. The outcomes of these measures are commonly related to sustainable use of the fishery. However, they can also often include protection of, or reduction of impact on, biodiversity, habitats, or ecosystem structure and function".*

[193] *"There are a range of area-based measures applied in other sectors at different scales and for different purposes. These include, for example, Particularly Sensitive Sea Areas (areas designated by the International Maritime Organization for protection from damage by international maritime activities because of ecological, socioeconomic or scientific significance), Areas of Particular Environmental Interest (areas of the seafloor designated by the International Seabed Authority for protection from damage by deep-seabed mining because of biodiversity and ecosystem structure and function), approaches within national work on marine spatial planning, as well as conservation measures in other sectors".*

[194] This is what is being envisaged by the post-2020 regional strategy for marine and coastal protected areas and other effective area-based conservation measures in the Mediterranean Sea (doc. UNEP/MED WG.502/12 of 22 May 2021).

> an area that needs special protection through action by IMO because of its significance for recognized ecological or socio-economic or scientific reasons and which may be vulnerable to damage by international maritime activities.

It is intended to function as

> (…) a comprehensive management tool at the international level that provides a mechanism for reviewing an area that is vulnerable to damage by international shipping and determining the most appropriate way to address that vulnerability[195].

To be identified as a PSSA, an area should meet at least one among a number of ecological criteria (namely: uniqueness or rarity; critical habitat; dependency; representativity; diversity; productivity; spawning or breeding grounds; naturalness; integrity; vulnerability; bio-geographic importance), social, cultural and economic criteria (namely: economic benefit; recreation; human dependency) or scientific and educational criteria (namely: research; baseline and monitoring studies; education). In addition, the area should be at risk from international shipping activities, taking into consideration vessel traffic (operational factors; vessel types; traffic characteristics; harmful substances carried) and natural factors of hydrographical, meteorological and oceanographic character. The 2005 revised PSSAs guidelines specify that at least one of the relevant criteria should be present in the entire proposed PSSA, though this does not have to be the same criterion throughout the area. Cultural heritage has been reinstated as a criterion under the label of *"social, cultural and economic criteria".*

PSSAs may be located within or beyond the limits of the territorial sea. They are identified by the Marine Environment Protection Committee of the IMO on proposals by one or more member States and under a procedure which takes place at the multilateral level. PSSA proposals should be accompanied by proposals for 'associated protective measures', identifying the legal basis for each measure. Associated protective measures that may be taken in PSSAs include those available under IMO instruments and cannot be extended to fields different from shipping. They encompass the following options: designation of an area as a Special Area under MARPOL Annexes I, II, V and VI; adoption of ships' routeing systems under the 1974 International Convention for the Safety of Life at Sea, including areas to be avoided, that is areas within defined limits in which either navigation is particularly hazardous or it is exceptionally important to avoid casualties and which should be avoided by all ships, or by certain classes of ships; reporting systems near or in the area; other measures, such as compulsory pilotage schemes or vessel traffic management systems.

17 PSSAs have been established by the IMO so far. The only PSSA so far designated in the Mediterranean Sea relates to the Strait of Bonifacio[196].

[195] Guidance Document for Submitting PSSA Proposals to IMO (MEPC Cir/398).
[196] See *infra*, para. 7.2.

All the main policy instruments approved at the international level in the last three decades, such as 'Agenda 21' (1992), the 'Plan of Implementation of the World Summit on Sustainable Development' (2002), 'The Future We Want' (2012), the '2030 Agenda for Sustainable Development' (2015) and the last United Nations General Assembly Resolution on Oceans and the Law of the Sea (2020) call for action towards the establishment of marine protected areas and the adoption of other effective area-based conservation measures. This action can be considered as a corollary of the customary international law obligation to protect the marine environment and as applicable to any kind of marine waters, irrespective of their legal condition (internal waters, territorial sea, exclusive economic zone, continental shelf, high seas, seabed beyond national jurisdiction). However, rules of international law of the sea on the legal regime of different marine spaces and the activities that are carried out therein must be taken into consideration in the process for the establishment of marine protected areas and the implementation of the measures provided therein. In particular, it would be a mistake to think that the freedom of the high seas is an insurmountable obstacle against the adoption of environmental measures, including the establishment of marine protected areas. Even if treaties do not apply to third parties, also non-party States are bound to abide by general provisions of international law and not to undermine the reasonable measures for the protection of the environment and the sustainable development of marine resources that have been agreed upon by other States. The general trend to protect the marine environment by establishing marine protected areas or adopting other effective area-based conservation measures is confirmed by the practice developed within the CBD, where EBSAs have been identified and the objective to protect at least 30% of sea areas has been put forward, as well as within the IMO, where PSSAs have been identified and navigation therein has be subjected to restrictions (for example, in the Mediterranean, in the Strait of Bonifacio). The new concept of 'other effective area-based conservation measures' has been elaborated to identify measures that, while being adopted for other purposes (fishing, shipping, underwater archaeology, security, etc.), indirectly contribute to the achievement of conservation objectives.

CHAPTER 4

EUROPEAN UNION LAW[197]

4.1. The European Union maritime policy and its goals

Noteworthy is the fact that there are more than 5 million people employed within marine and maritime sectors within the European Union. According to data from the European Commission (2014), approximately 200 million people live and 88 million people work in European coastal regions[198]. In 2007, after one year of consultation process, the European Commission presented its 'vision document', i.e. a 'Blue Book on an Integrated Maritime Policy for the EU'[199], based on an inter-sectoral – holistic – approach to maritime activities. The 'Blue Book' had as its central goal the creation of optimal conditions for the growth of maritime sectors and coastal regions, while ensuring that the objectives of European Union environmental legislation, including those of the MSFD are met[200]. The latter represents the environmental pillar of the EU-IMP and, as such, a *"framework within which Member States shall take the necessary measures to achieve or maintain good environmental status in the marine environment by the year 2020 at latest"*.

The European Union has different competences regarding different areas or sectors included within the EU-IMP. The European Union competences in the field of 'protection and preservation of the marine environment' are shared with member States[201], unlike in the field of 'conservation and management of living resources', where the organization's competences are exclusive. Nonetheless, the external competences may be also exclusive, if common European Union rules are affected[202]. Both in the case of exclusive or shared competence, the organization may decide to exercise its competences internally, by adopting the relevant legislation, or externally, by entering into binding international agreements on the subject.

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[197] This chapter is partially based on GRBEC (*op.cit*. in footnote 1), chapters 3.5 and 5.6.

[198] MANCE, DEBELIĆ and VILKE, *Integrated Maritime Policy for the European Union as the Planning Model for Croatia,* in *Journal of Maritime and Transportation Sciences (Pomorski zbornik)*, 2015, p. 29.

[199] See Communication from the Commission, *Integrated Maritime Policy for the EU*, 10 October 2007, COM (2007)575 final; Report from the Commission, *Progress of the EU's Integrated Maritime Policy*, 11 September 2012, COM (2012)491 final; PAVLIHA*, New European Maritime Policy for Cleaner Ocean and Seas*, in MARTÍNEZ GUTIÉRREZ (ed.) (*op. cit*. in footnote 5), pp. 26-28.

[200] Art. 11 of the Treaty on the Functioning of the European Union (TFEU) – previously Art. 6 of the Treaty Establishing the European Community (TEC) – provides that *"environmental protection requirements must be integrated into the definition and implementation of the Union policies and activities, in particular with the view of promoting sustainable development".*

[201] Art. 4, para. 2, *e*, TFEU.

[202] See Declaration concerning the competence of the European Community with regard to matters governed by the United Nations Convention on the Law of the Sea of 10 December 1982 and the Agreement of 28 July 1994 relating to the implementation of Part XI of the Convention, Official Journal of the European Union L 179 of 23 June 1998. See also Arts. 3, para. 2, and 2, para. 2, TFEU.

The EU-IMP seeks to provide a more coherent approach to maritime issues, with increased coordination between different policy areas[203]. As such, it attempts to coordinate complex and interdependent policies related to maritime affairs, and to allocate ecological economic resources in a holistic, integrated manner[204]. An important role is by necessity played by integrated coastal zone management (ICZM) and marine spatial planning (MSP). Their role is, broadly speaking, to efficiently plan cross-sectoral and cross-border management of coastal zones and, furthermore, to overview and coordinate possible uses of maritime and coastal resources[205]. The ICZM and MSP are – as explained in the continuation of this paragraph – two essential tools in the implementation of the EU-IMP both at the national, European Union and at the regional or sub-regional level. Accordingly, the EU-IMP bases itself on the recognition that all issues relating to maritime affairs and exploitation of maritime resources are interlinked; therefore, maritime policies need to be developed in a coordinated – holistic – way[206].

The EU-IMP is nowadays centred around five pillars, namely: (1) Sustainable marine and maritime growth (Blue Growth); (2) Maritime transport; (3) Energy; (4) Shipbuilding; and (5) Fisheries and aquaculture. It is supplemented (or upgraded) by five cross-cutting policies, namely: (1) Blue Growth; (2) Marine Data and Knowledge; (3) Maritime Spatial Planning (MSP), (4) Integrated Maritime Surveillance (IMS); and, of particular importance for the purposes of this study, (5) Sea Basin Strategies (SBS) (including the EUSAIR).

The 'Blue Growth', as a cross-cutting policy within the EU-IMP, may be defined as a set of policy measures aiming at the elimination of institutional and administrative constraints related to marine and maritime activities[207]. It is deemed to be the marine and maritime contribution towards achieving the Europe 2020 strategy for smart, sustainable and inclusive growth[208]. One of the main aims of the said policy is to develop (maritime) sectors which have a potential for sustainable jobs and growth, including coastal tourism, alternative (ocean) energies; marine biotechnology, seabed mining and aquaculture, all in accordance, as previously pointed out, with the main principles embodied in the MSFD[209]. The latter aims through an ecosystem-based approach to the organisation and management of marine resources, to allow development initiatives without endangering the ecosystem's sustainability and the main interests of other stakeholders present in the area[210].

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[203] See https://ec.europa.eu/info/research-and-innovation/research-area/environment/oceans-and-seas/integrated-maritime-policy_en.
[204] MANCE, DEBELIĆ and VILKE (*op.cit.* in footnote 198), p. 29.
[205] *Ibid*., p. 31.
[206] *Ibid*., p. 31.
[207] *Ibid.*, p. 32.
[208] See https://ec.europa.eu/info/research-and-innovation/research-area/environment/oceans-and-seas/integrated-maritime-policy_en.
[209] See Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Innovation in the Blue Economy: Realising the Potential of our Seas and Oceans for Jobs and Growth*, COM/2014/0254 final/2.
[210] MANCE, DEBELIĆ and VILKE (*op.cit.* in footnote 198), p. 32.

The 'Marine Data and Knowledge', as the second cross-cutting policy within the EU-IMP, is based on the realisation that comprehensive marine research, including the collection and integration of marine data, are key for the sustainable development of maritime activities. Reference should be made to the fact that marine research and generally ocean observations are challenging and expensive activities which triggers the need for an enhanced cooperation in Europe and globally. The general aim of this cross-sectoral policy is accordingly that data is shared and secured for the long term. An important breakthrough in this area was the development of the Marine Knowledge 2020 strategy[211] adopted by the Commission in 2010. The aim of the latter is to improve the use of scientific knowledge on Europe's seas and oceans through a coordinated approach to data collection and assembly. Based on that, and after extensive consultation based on a prepared 'Green Paper' in 2014[212], the Commission published its roadmap regarding the Marine Knowledge 2020 strategy[213].

The third cross-cutting policy or tool within the EU-IMP is MSP. The latter actually represent a cornerstone – or even a *conditio sine qua non* – for the implementation of the EU-IMP. The mentioned policy tool is based on the realisation that coherent planning and scientific knowledge are indispensable to support the development of strategic plans for regulation, zoning, management and for the protection of the marine environment[214]. In fact, the increased human impact on the seas and oceans and the increased demand and competition for maritime space for different purposes, including fishing, renewable energy installations and protection of the marine environment (ecosystem conservation), highlighted the urgent need for integrated ocean management[215].

In order to achieve the said goals, the Parliament and the Council adopted in 2014 Directive 2014/89/EU[216] which established a framework for MSP in the European Union. The main aim of the said Directives is to promote the sustainable growth of maritime economies and the use of marine resources through better conflict management and greater synergy between the different maritime activities, whereby account should be taken of the land-sea interface. Based on the provisions of the above-mentioned Directive, MSP is a process by which the relevant Member State's authorities analyse and organise human activities in marine areas with the aim to achieve ecological, economic and social objectives[217]. Accordingly, MSP aims at reducing conflicts between sectors and creating synergies between different activities. On the other hand, while creating predictability and transparency, it also encourages development, while at the same time protecting the marine environment. The latter goal is pursued mostly through early identification of

[211] COM (2010)0461, Brussels, 8 October 2010.
[212] COM (2012)0473, Brussels, 29 August 2012.
[213] SWD (2014)014, Brussels, 22 January 2014.
[214] See https://ec.europa.eu/info/research-and-innovation/research-area/environment/oceans-and-seas/integrated-maritime-policy_en.
[215] EUROPEAN COMMISSION, *Integrated Maritime Policy of the European Union, Fact Sheet*, available at europarl.europa.eu/factsheets/en/sheet/121/integrated-maritime-policy-of-the-european-union.
[216] Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning, Official Journal of the European Union L 257 of 28 August 2014, pp. 135-145.
[217] *Ibid*., Art. 3, para. 2.

impacts and opportunities for multiple use of sea space. However, traditional uses of the sea, particularly considerations related to navigation (e.g., shipping lanes) and traditional (artisanal) fisheries should be necessarily taken into account.

It is important to note that Directive 2014/89/EU calls for an increased cross-border cooperation which is not limited exclusively to European Union member States. Areas of cooperation in this regard may include shipping, the laying of submarine cables and pipelines, protection of the marine environment and – most importantly from the standpoint of this study – nature and species conservation sites and protected areas[218]. Art. 11 of the said Directive, entitled 'Cooperation among member States', provides as follows:

> 1. As part of the planning and management process, Member States bordering marine waters shall cooperate with the aim of ensuring that maritime spatial plans are coherent and coordinated across the marine region concerned. Such cooperation shall take into account, in particular, issues of a transnational nature.
>
> 2. The cooperation referred to in paragraph 1 shall be pursued through:
>
> a) existing regional institutional cooperation structures such as Regional Seas Conventions; and/or
>
> b) networks or structures of member States' competent authorities; and/or
>
> c) any other method that meets the requirements of paragraph 1, for example in the context of sea-basin strategies.

Furthermore, based on the provisions of Art. 12 of the Directive (*Cooperation with third countries*):

> Member States shall endeavour, where possible, to cooperate with third countries on their actions with regard to maritime spatial planning in the relevant marine regions and in accordance with international law and conventions, *such as by using existing international forums or regional institutional cooperation*[219].

It should be pointed out, that the said obligations are applicable in all marine waters of coastal States, including the seabed and subsoil, over which such States exercises sovereign rights or jurisdiction, including therefore the continental shelf and the exclusive economic zone[220]. Noteworthy is the fact, that all European Union coastal States were required to prepare and formally adopt their maritime spatial plans by 31 March 2021[221].

The fourth cross-cutting policy within the EU-IMP is Integrated Maritime Surveillance (IMS). This policy is based on the realisation that a safe and secure marine

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[218] *Ibid*., Art. 8, para. 2. See also https://seaplanspace.eu/msp/.

[219] Emphasis added.

[220] According to Art. 3, para. 4 of Directive 2014/89/EU, *"marine waters"* means the waters, the seabed and subsoil as defined in Art. 3, para. 1, *a*, of Directive 2008/56/EC and coastal waters as defined in Art. 2, para. 7, of Directive 2000/60/EC and their seabed and their subsoil.

[221] In the case of Slovenia see Decree on Maritime Spatial Plan of Slovenia, available at https://dokumenti-pis.mop.gov.si/javno/veljavni/PPP2192/index.html. See also BRATINA, *State of the Art of MSP situation in Slovenia,* presentation delivered at the EUSAIR Workshop: *What can EUSAIR do to enable the blue and green sustainable growth in the EUSAIR: MSP in EUSAIR state of the art*, 9 November 2021, available at https://www.adriatic-ionian.eu/wp-content/uploads/2021/11/Item-2_Natasa-Bratina_MPS_Slovenia.pdf.

environment is also a precondition for the development of marine economic activities. Accordingly, IMS aims towards providing common ways for the sharing of information and data among authorities involved in different aspects of surveillance, as *inter alia* border control, prevention of marine pollution, fisheries control, general law enforcement and defence[222]. Noteworthy is the fact that, already in 2009, the Commission set out the guiding principles towards the development of a Common Information Sharing Environment (CISE) applicable to the European Union maritime domain[223]. The latter was followed in 2010 by a roadmap for establishing CISE[224] and subsequently in 2014 by a communication on the next steps for CISE[225]. The aim of the discussed cross sectoral policy and ultimately of the CISE on the European Union level is to improve the efficiency and cost-effectiveness of maritime surveillance by enabling appropriate, lawful, secure and efficient data sharing across sectors and borders throughout the European Union[226].

The fifth and final cross-cutting policy are Sea Basin Strategies (SBS). A SBS is, according to the European Commission, a region-tailored approach based on cooperation among countries (European Union member and non-member States) within the same sea basin, with the aim to addressing common challenges and opportunities related to the development of the maritime economy and marine environmental protection. SBSs, including the EUSAIR, are therefore not only forming part of the European Union *acquis*, but are also forming an integral part of the EU-IMP.

With regard to the Mediterranean – and, more specifically, in the Adriatic and Ionian context (EUSAIR) – reference should be first of all made to the relevant Communication by the Commission and the efforts by the European Union to promote an integrated maritime policy for a better Governance of the Mediterranean[227]. Based on the process of consultation, and within the framework of the EU-IMP, the European Commission adopted on 11 November 2009 a Communication 'Towards an Integrated Maritime Policy for better governance in the Mediterranean'[228], which proposed a set of actions aimed at driving coastal States towards a more coordinated and holistic approach to the management of activities impacting on the sea and oceans in the said sea. Reference should be made to the fact that, according to the 2009 Communication, one of the main governance weakness in the Mediterranean was deemed to be represented by the fact that

> the large proportion of marine space made up of high seas makes it difficult for coastal States to plan, organise and regulate activities that directly affect their territorial sea and coasts[229].

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[222] See https://ec.europa.eu/info/research-and-innovation/research-area/environment/oceans-and-seas/integrated-maritime-policy_en.
[223] COM (2009) 538, Brussels, 15 October 2009.
[224] COM (2010) 584, Brussels, 20 October 2010.
[225] COM (2014) 451, Brussels, 8 July 2014.
[226] *Ibid*.
[227] See GRBEC (*op. cit.* in footnote 1), chapter 3.5.2.2.
[228] Communication from the Commission to the Council and the European Parliament, *Towards an Integrated Maritime Policy for better governance of the Mediterranean,* 11 November 2009, COM (2009)466.
[229] *Ibid*., section 3.

The said observations were also echoed in the adopted Communication by the Commission on 'A Maritime Strategy for the Adriatic and Ionian Seas'[230], which set out the framework for the elaboration of a *"coherent maritime strategy and corresponding Action Plan by the end of 2013".* The Communication aimed at providing a framework for the adaptation of the Integrated Maritime Policy to the needs and potential of the Adriatic and Ionian Seas and coastal areas, and reflected the already at that time established European Union's position that sea-basin cooperation is a milestone in the development and implementation of the EU-IMP. The said achievements were furthermore upgraded in 2012, when the European Council requested the Commission to present the EUSAIR, which was finally adopted by a Council Decision in 2014.

Reference should be made to the fact that the main aim of the EU-IMP is to support the sustainable development of seas and oceans and in that regard to develop coordinated, coherent and transparent decision-making in relation to the European Union's sectoral policies affecting the oceans, seas, islands, coastal and outermost regions and maritime sectors. The mentioned aim should be achieved also through SBSs or macro-regional strategies (including the EUSAIR), whilst achieving 'good environmental status' in accordance with the MSFD Directive.

4.2. The Marine Strategy Framework Directive and its regional application

It is beyond doubt that the marine environment is subject to extensive pressures and impact from human activities, both on sea and on land. The latter has resulted among other in pollution of the marine environment, sea-bed damage, overexploitation, biodiversity loss and ocean warming and acidification. The aim of the MSFD is to maintain marine ecosystems in a healthy, productive and resilient condition, while securing a more sustainable use of marine resources for the benefit of current and future generations. Its main objectives may be summarized as the protection and preservation of the marine environment, the prevention of its deterioration and where practicable the restoration of the marine environment in areas where it has been adversely affected[231]. The mentioned objectives should be achieved through the application of the ecosystem-based approach to the management of human activities which should ultimately result in a sustainable use of marine goods and services. Nonetheless, priority should be given to achieving or maintaining good environmental status in the European Union's marine environment through its protection and preservation, and prevention of subsequent deterioration[232]. The overriding goal of the MSFD is, accordingly, to promote the integration of environmental considerations into all relevant policy areas. The MSFD nowadays represents an essential part and furthermore the environmental pillar of the previously discussed EU-IMP[233].

Among the main requirements of the MSFD is the obligation for member States to develop national marine strategies in order to achieve, or ideally maintain, 'good

[230] *A Maritime Strategy for the Adriatic and Ionian Seas*, 30 November 2012, COM (2012)713 final.
[231] MSFD, Recital 43.
[232] *Ibid*., Recital 8.
[233] *Ibid*., Recital 3.

environmental status' of its waters[234]. Marine strategies should be based on regular assessment of the marine environment, on objectives and targets, monitoring programmes and on putting in place measures to improve the state of marine waters[235]. Noteworthy is the fact that such actions should be done in close coordination with neighbouring countries at regional or sub-regional level. The MSFD is implemented in a six-year cycle, whereby the main milestones for member States have been so far:

1) in 2021 and 2018, member States had to report on the status of their marine waters and set targets to achieve good environmental status based on the 11 descriptors (objectives) set by the MSFD, which cover the health of ecosystems and the human pressure and impact affecting them[236];

2) In 2014, member States had to set up monitoring programmes to collect data in order to assess progress in order to achieve good environmental status and reaching targets;

3) In 2016, member States had to set up programmes of measures that would help them to deliver their objectives, and in 2018 they had to report on their progress in implementing the programmes.

As pointed out by a recent implementation report of the MSFD:

> The MSFD is one of the most ambitious international marine protection legal frameworks, aligning the efforts of 23 (now 22) coastal and 5 landlocked States - in coordination with non-EU countries, to apply an ecosystem-based management and to achieve good environmental status in 5.720.000 km^2 of sea surface area across four sea regions[237], an area one fourth larger than the EU's land territory. The Directive stretched from the coastline to the deep sea, thus protecting the full range of marine biodiversity from unicellular algae to huge cetaceans, analysing all environmental aspects from ecosystem functions to chemical properties, and assessing the effects of all human activities, from tourism to commercial fisheries bottom trawling[238].

One of the important goals of the MSFD has been also to translate the most important international and European Union commitments related to environmental protection of the marine environment into the European Union legal order. This is achieved through the inclusion of the most important principles of contemporary environmental law into the MSFD and, consequently, within the European Union *acquis.*

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[234] According to Art. 3, para. 5, MSFD, 'Good environmental status' means the environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive within their intrinsic conditions, and the use of the marine environment is at a level that is sustainable, thus safeguarding the potential for uses and activities by current and future generations.

[235] European Commission, *Combined Evaluation Roadmap / Inception Impact Assessment: Protecting the Environment in the EUs Seas and Oceans (review of the Marine Strategy Framework Directive),* Ares (2021)2411326. Available at https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=PI_COM:Ares(2021)2411326.

[236] See Commission Decision (EU) 2017/848 of 17 May 2017 laying down criteria and methodological standards on good environmental status of marine waters and specifications and standardised methods for monitoring and assessment, and repealing Decision 2010/477/EU, C/2017/2901**,** Official Journal of the European Union L 125 of 18 May 2017, pp. 43-74.

[238] Report from the Commission to the Council and the European Parliament on the implementation of the Marine Strategy Framework Directive (Directive 2008/56/EC), COM/2020/259 final, 22 June 2020, Brussels.

The cornerstone principles governing the operation of the MSFD may be summarized as follows:

1) the ecosystem-based approach[239], as the MSFD refers to the ecosystems approach as the guiding principle to the management of the marine environments (recitals 8 and 44) and it expressly requires it application in marine strategies (Arts. 1 and 3);

2) the integration of environmental concerns into other policies and integrated cross-sectoral management of marine waters. The MSFD requires member States to include spatial and temporal distribution controls measures in their programmes of measures (Annex VI), including ICZM and MSP;

3) the precautionary principle and the polluter-pays principle in the marine environment[240]. Both principles are included in the MFSD as guiding principles for its implementation (recitals 27 and 44) and they form the basis for the programme of measures Member States shall develop for their marine waters to reach 'good environmental status';

4) knowledge-based adaptive management and public information and participation, as the MSFD requires an initial assessment (Art. 8) and the undertaking of monitoring programmes (Art. 11) with the aim to achieve the general review of the marine environment. Subsequent management measures, such as environmental targets (Art. 10) and programmes of measures (Art. 13), are based on the initial assessment. Art. 3, para. 5, embodies in this regard the concept of 'adaptive management', as it requires that marine strategies should be updated in a 6-year cycle[241].

A crucial principle of the MSFD is that *"[t]he diverse conditions, problems and needs of the various marine region or sub-regions making up the marine environment in the Community [European Union] require different and specific solutions"*[242]. Accordingly, member States are required to develop a marine strategy for their own marine waters, in accordance with a plan of action set up by the MSFD, which should in any case reflect the overall perspective of the regions or sub-regions involved[243]. 'Community [European

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[239] "An 'ecosystem-based approach' is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. The goal of ecosystem-based management is to maintain an ecosystem in a healthy, productive and resilient condition so that it can improve the goods and services humans want and need. Ecosystem-based management differs from current approaches that usually focus on a single species sector, activity or concern, it considers the cumulative impacts of different sectors ". *Ibid*., p. 3. On the ecosystem approach to coastal planning and management to ensure the sustainable development of coastal zones, see BRICELJ, *International Environmental Law: Contemporary Concerns and Challenges*, Paper presented at the First Contemporary Challenges of International Environmental Law Conference (Ljubljana, 28-29 June 2012).

[240] Report from the Commission to the Council and the European Parliament, *Contribution of the Marine Strategy Framework Directive (2008/56/EC) to the implementation of existing obligations, commitments and initiatives of the Member States or the EU at EU or international level in the sphere of environmental protection in marine waters*, 16 November 2012, COM (2012)662 final.

[241] *Ibid*., pp. 3-4.

[242] MSFD, Recital 10.

[243] MSFD, Recital 11. According to Art. 5, para. 1, *"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 plan of action set out in points (a) and (b) of paragraph 2"*. For a further discussion see MARKUS et al., *Legal Implementation*

Union] waters' are, for the purposes of the MSFD, divided into four regions: (i) the Baltic Sea, (ii) the North-East Atlantic Ocean, (iii) the Mediterranean Sea, and (iv) the Black Sea. The Mediterranean Sea is then subdivided into four sub-regions, on the basis of Article 4(2)(b), namely: (i) the Western Mediterranean Sea; (ii) the Adriatic Sea; (iii) the Ionian and Central Mediterranean Sea; and (iv) the Aegean-Levantine Sea.[244] Accordingly, the MSFD clearly identifies the Adriatic Sea as a separate management sub-region within the wider Mediterranean region, while the Ionian Sea forms a separate sub-region, together with the Central Mediterranean. The Adriatic and Ionian Seas are based on the said provisions – the MSFD forming two different subregions within the wider Mediterranean Sea region.

It should be noted, however, that the geographical scope of the MSFD is limited to waters over which member States or third States of the same region or sub-region exercise sovereignty or jurisdiction in accordance with the UNCLOS[245] – and not on the high seas. This is an important consideration which has been taken – and should be taken – into account by the present and future European Union member States, including those bordering the Adriatic and Ionian Seas, when considering their options with regard to the extension of coastal state jurisdiction beyond the limits of their territorial sea (i.e., through the proclamation of exclusive economic zones). The extension of jurisdiction by a European Union coastal State, in fact, automatically entails the extension of the competences of the European Union (including the provisions of the MSFD, as transposed into national legislation) on those waters that previously formed part of the high seas[246].

Due to the transboundary nature of the marine environment, member States should cooperate to ensure the coordinated development of marine strategies for each marine region or sub-region[247]. The MSFD has, in this regard, also an external dimension, as it calls upon member States to make every effort to ensure a close coordination not only with all member States, but also with *"concerned third countries in a particular region or sub-region"* and, in this regard, *"where practical and appropriate"*, to make use of *"existing institutional structures established in marine regions or sub-regions, in particular Regional Seas Conventions [i.e., the Barcelona Convention]"*[248]. Regional cooperation is in this regard defined by Art. 3, para. 9, of the MSFD, as cooperation and coordination of

of Integrated Ocean Policies: The EU's Marine Strategy Framework Directive, in *International Journal of Marine and Coastal Law*, 2011, pp. 59-90.

[244] Art. 3, para. 2, provides that maritime regions and sub-regions are designed for the purpose of facilitating the implementation of this Directive and are determined by taking into account *hydrological, oceanographic and biogeographic features.* Emphasis added.

[245] According to Article 3(1) marine waters' means: (a) waters, the seabed and subsoil on the seaward side of the baseline from which the extent of territorial waters is measured extending to the outmost reach of the area where a Member State has and/or exercises jurisdictional rights, in accordance with the Unclos, with the exception of waters adjacent to the countries and territories mentioned in Annex II to the Treaty and the French Overseas Departments and Collectivises; and (b) coastal waters as defined by Directive 2000/60/EC, their seabed and their subsoil, *in so far as particular aspects of the environmental status of the marine environment are not already addressed through that Directive or other Community legislation* (emphasis added).

[246] See GRBEC (*op.cit.* in footnote 1), chapter 5.6.

[247] MSFD, Recital 13.

[248] MSFD, Recital 13 and Art. 6, para. 1.

activities between member States and, whenever possible, third countries sharing the same marine region or sub-region, for the purpose of developing and implementing marine strategies. Third countries with waters in the same region or sub-region should be accordingly invited to participate in the process of implementation of the MFSD, with the aim to facilitating the achievement of a 'good environmental status' in the marine region or sub-region concerned[249].

The concerned 'third countries' in the Adriatic and Ionian are currently Albania, Bosnia and Herzegovina, and Montenegro. Obviously, a third country cannot be legally bound to cooperate with European Union member States in the implementation of the provisions of a European Union Directive. Nevertheless, the MSFD obliges European Union member States to *"consider the implications of their programmes of measures on waters beyond their marine waters in order to minimise the risk of damage to, and if possible have a positive impact on, those waters"*[250]. This provision, read in the light of the relevant UNCLOS provisions, seems to require member States to ensure at least *"that they do not cause damage or threats of damage, or transfer damage to areas in the high seas"*[251].

Noteworthy is the fact that, on 16 June 2008, on the occasion of the meeting of the Quadrilateral Commission attended for the first time by all Adriatic States and the European Union[252], all Adriatic States signed a Joint Statement on the Environmental Protection of the Adriatic Sea[253]. With the latter they *"declared themselves committed to endeavour to cooperate towards a common operative approach in order to achieve the goals of the Marine Strategy Directive".* Slovenia went even further when, on 17 December 2009, its Parliament adopted a Resolution on the Strategy for the Adriatic Sea[254]. The latter directly exhorts for the preparation of a Marine Strategy for the Adriatic in line with the MSFD and calls upon the Slovenian Government to start the necessary procedure regarding the convening of a multilateral diplomatic conference. The mentioned Resolution further expressly calls for the establishment of a (marine) protected area over the waters of the Northern Adriatic [255]. Both the 2008 (Portorož) Joint Statement and the discussed 2009 Resolution by the Slovenian Parliament confirmed the commitment of Adriatic States to endeavour to cooperate in the achievements of the goals of the MSFD.

Furthermore, the Quadrilateral Commission, at the time joined also by Montenegro (2010), should have undertaken its work in four sub-commissions, one of them being the

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[249] MSFD, Recital 20.
[250] MSFD, Art. 13, para. 8.
[251] MARKUS et al. (*op. cit.* In footnote 251), p. 70.
[252] The extension of the Trilateral Commission to all Adriatic States was one of the goals of the Slovenian initiative named the 'Adriatic Sea Partnership' launched at the MAP sub-regional conference on the Sustainable Development Strategy for the Adriatic in Portorož, Slovenia, on 5-6 June 2006. Montenegro became a full member of the Trilateral Commission on 25 May 2010.
[253] Skupna izjava o okoljski zaščiti Jadranskega morja (Resolution on Strategy for Adriatic Sea), 16 June 2008, Portorož, Slovenija. At the 12th Ordinary Meeting of the Quadrilateral Commission, held in Portorož on October 27-28, 2011, the parties supported the process to establish a common frame for the definition of a Strategy for the Adriatic Sea on the basis of national strategies. Minutes, Point 1. Copy on file with the authors.
[254] Art. 7 of Resolucija o strategiji za Jadran / Resolution on the Strategy for the Adriatic Sea (ReSJad), Official Gazette of the Republic of Slovenia No. 106/2009 of 22 December 2009.
[255] MSFD, Art. 7.

sub-commission for the unification of methods of assessment and development of indicators to assess the state of the marine environment. The latter sub-commission was therefore established within an existing institutional structure created within a marine sub-region (Quadrilateral Commission) with the specific aim of coordinating activities and exchanging information regarding the implementation of the MSFD among Adriatic States[256]. It may thus be concluded that the implementation of the MSFD at a sub-regional level represents another important cooperative framework with regard to the environmental governance of the Adriatic Sea and Ionian Seas. The use of existing cooperative networks (i.e., the Quadrilateral Commission, the AII and the EUSAIR) in this regard should be supported and further enhanced.

For the purpose of this study, it is additionally important that the MSFD recognizes that the establishment of marine protected areas, including NATURA 2000 sites designed or to be designed based on the provisions of the Habitats and Birds Directives[257], is an important contribution and an important tool for the achievement of 'good environmental status'. Furthermore, Art. 13, para. 4, of the MSFD provides that

> Programmes of measures established pursuant to this Article 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 pursuant to the Habitats Directive, special protection areas pursuant to the Birds Directive, and marine protected areas as agreed by the Community or Member States concerned in the framework of international or regional agreements to which they are parties (i.e. Barcelona Convention).

Accordingly, the MSFD acts as a framework, within which existing measures can be integrated and complemented with new initiatives[258], including those agreed at regional or sub-regional level. According to the recital of the MSFD, the establishment of such protected areas under the MSFD will be an important step towards fulfilling the commitments undertaken by the European Union at the World Summit on Sustainable Development and in the CBD, as approved by Council Decision 93/626/EEC, and will contribute to the creation of coherent and representative networks of such areas[259].

Noteworthy is the fact that, with regard to the goal of setting coherent and representative networks of marine protected areas, the MSFD goes beyond the NATURA 2000 Network based on the provisions of the Birds and Habitats Directives (European Union *acquis*), as it includes within such networks also marine protected areas as agreed by the organization or the member States concerned in the framework of international or regional agreements to which they are parties (i.e., Regional Seas Conventions). A prime example of such areas in the Mediterranean and Adriatic may be a (transboundary) SPAMI established on the basis of the Areas Protocol to the Barcelona Convention[260].

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[256] See *supra*, sub-para. 2.4, B.
[257] See *infra*, para. 4.3.

[259] MSFD, Recital 7.
[260] See *infra*, sub-para. 5.1, A, and chapter 8.

4.3. The Habitats and Birds Directives

The two principal conservation instruments in European Union law are the so-called Birds Directive[261] and Habitats Directive[262]. Reference should be made to the fact that, although envisaged as two different legal instruments, the two mentioned directives work together and are in fact nowadays often referred to collectively, as the 'Birds and Habitat Directives'. As previously discussed, the two instruments represent one of the cornerstones of the MSFD. The adoption of the original Birds Directive in 1979 was driven by the concerns of the impact hunting was having on migratory bird populations. Although an early example, the Birds Directive has been seen as an example of successful, although rather strict, environmental legislation. As such, it has represented a stepping stone for the adoption of the Habitats Directive some 13 years after. The main achievement of the Birds Directive has been to impose a strict obligation on member States with regard the designation of sites which meet certain ecological criteria as Special Protection Areas (SPAs) and their subsequent protection[263]. The Habitats Directive expanded such protection to other endangered species and habitats and put in place a NATURA 2000 Network, which includes both Special Protection Areas (SPAs) under the Birds Directive and Special Areas of Conservation (SACs) established under the Habitats Directive for habitats types listed in Annex I and the habitats of species listed in Annex II of the Habitats Directive. The overall aim of the two directives is to ensure that such species and protected habitats are maintained in, or restored to, a favourable conservation status throughout their natural range within the European Union[264].

A. The Birds Directive

The original Birds Directive adopted on 2 April 1979[265] on the conservation of wild birds had been substantially amended several times. A new directive was eventually adopted in 2009 in the interest of clarity and rationality. The main reason for its adoption lies in the fact that a large number of species of wild birds naturally occurring in the European territory of the Member States have been rapidly declining in numbers. Such decline represents a serious threat to the conservation of the environment, particularly due to the biological balance that was threatened[266]. The Birds Directive is based on the following assumptions: the species of wild birds naturally occurring in the European territory of member States are mainly migratory species; they constitute a common heritage; and effective birds protection is a typically trans-frontier environment problem, entailing common responsibilities[267].

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[261] Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds, Official Journal of the European Union L 20 of 26 January 2010, pp. 7-25.
[262] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, Official Journal of the European Union L 206 of 22 July 1992, pp. 7-50.
[263] AMOS, *Assessing the Impact of the Habitats Directive: A Case Study of Europe's Plants*, in *Journal of Environmental Law*, 2021, pp. 368-369.
[264] European Commission, *The EU Birds and Habitats Directives: For Nature and People in Europe*, Brussels, 2014.
[265] Directive 2009/147/EC, Recital 1.
[266] *Ibid*., Recital 3.
[267] *Ibid*., Recital 4.

The measures undertaken by the Birds Directive primarily addresses the main factors which may affect the number of birds, including the repercussions of human activities, in particular the destruction and pollution of habitats, capture and killing, as well as the trade resulting from such practices. The stringency of such measures should be adapted to the particular situation of the various species within the framework of a conservation policy[268]. Certain species of birds should be accordingly subject to special conservation measures concerning their habitats, in order to ensure their survival and reproduction in their area of distribution. Particular care should be taken that the introduction of any species of wild birds not naturally occurring in the European territory of member States does not cause harm to the local flora and fauna.

It is important to note, in this regard, that the scope of application of the Birds Directive is broad, as it relates to the conservation of all species of naturally occurring birds in the wild state in the European territory of the member States. As such, it covers the protection, management and control of these species and lays down rules for their exploitation. The Birds Directive applies to birds, their eggs, nests and habitats. Therefore, member States are required to preserve, maintain or re-establish a sufficient diversity and area of habitats. The preservation, maintenance and re-establishment of biotopes and habitats shall include primarily the following measures:

> (a) creation of protected areas (SPAs);
> (b) upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones;
> (c) re-establishment of destroyed biotopes and creation of new biotopes[269].

The species mentioned in Annex I shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in the area of reproduction. Member States are required to classify the most suitable territories in number and size as SPAs for the conservation of these species, both in the geographical sea- and land-area covered by the Birds Directive. In such designated areas, member States shall take appropriate measures to avoid pollution or deteriorating of habitats or any disturbance affecting the birds, insofar as these would be significant[270].

Member States are also required to take the requisite measures to establish a general system of protection for all species of birds covered by the Directive, prohibiting in particular:

> a) Deliberate killing or capture by any method;
> b) Deliberate destruction of, or damage to, their nests and eggs or removal of their nests;
> c) Taking their eggs in the wild and keeping these eggs even if empty,
> d) Deliberate disturbances of these birds particularly during the period of breeding and rearing, in so far as disturbances would be significant having regard to the objectives of the Directive;
> e) Keeping birds of species the hunting and capture of which is prohibited[271].

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[268] *Ibid*., Recital 6.
[269] *Ibid*., Art. 3, para. 2.
[270] *Ibid*., Art. 4, para. 2.
[271] *Ibid*., Art. 5.

B. The Habitats Directive

The Habitats Directive significantly expanded the European Union protection regime in order to potentially include all species of flora and fauna within the territory of member States[272]. Noteworthy is the fact that the Habitats Directive implements the Bern Convention within European Union law. The interrelations between the two instruments are noteworthy, primarily due to the fact that the Bern Convention is a mixed agreement to which both the European Union and European Union member States are parties. The influence of the Bern Convention on the Habitats Directive is straightforward, particularly when it comes to its language and structure. However, on the other hand, particularly due to the mixed competences of the European Union in the field of environmental protection and due to the majority of votes that the European Union and its member States exercise within the institutional bodies of the Bern Convention, one can see that also the Habitats Directive has influenced in turn the development and interpretation of the Bern Convention[273].

Of particular importance is the funding provided to the bodies of the Bern Convention by the European Union, particularly with the aim to expand habitat protection outside the European Union, particularly in Central Europe, Western Balkans and the Caucasus[274]. Reference should be made to the fact that the Habitats Directive and the Bern Convention are the primary legal instruments for species protection in Europe. When it comes to the protection of habitats and habitats species in the EUSAIR (through the NATURA 2000 Network), reference should be made both to the Bern Convention and the Habitats Directive, particularly in the light of their links and interdependency[275]. The Habitats Directive should be assessed also from the standpoint that all EUSAIR States, including non-European Union countries (Albania, Montenegro, North Macedonia, and Serbia), are parties to the Bern Convention.

The aim of the Habitats Directive is provided by Art. 2, para. 1: to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora. 'Natural habitats' means terrestrial or aquatic areas distinguished by geographic, abiotic and biotic features, whether entirely natural or semi-natural. However, not all types of habitats are protected by the Habitats Directive: only *"natural habitats types of community [European Union] interest".* These are defined as habitats which are first of all located within the territory covered by the Habitats Directive (i.e., the territory of the European Union) and which fulfil at least one of the following conditions: (i) are in danger of disappearance in their natural range; (ii) have a small natural range following their regression or by reason of their intrinsically restricted area; (iii) present outstanding examples of typical characteristics of one or more of the following biogeographical region (Alpine, Atlantic, Black Sea, Boreal, Continental,

[272] AMOS (*op.cit.* in footnote 263), p. 369.
[273] EPSTEIN, *The Habitats Directive and Bern Convention: Synergy and Dysfunction in Public International and EU Law*, in *The Georgetown International Law Review*, 2014, p. 139.
[274] *Ibid*., p. 139.
[275] See *infra* on the links between the NATURA 2000 Network and the Emerald Network of protected areas established on the basis of the Bern Convention.

Macaronesian, Mediterranean, Pannonian and Steppic). In order to be protected, such habitats shall be expressly listed in Annex I, while species of habitats should be listed in Annex II of the Habitats Directive. Some criticism towards the Habitats Directive entailed that the inclusion within the Habitats Directive is conditional on whether the previously mentioned criteria for being *"of European Union interest"* are met. In the case of species that would depend on whether they are rare, endangered, or endemic to Europe. Annex IV includes, in this regard, a list of species of European Union interest in need of strict protection[276]. Some other species, for example regional habitats, which are not deemed to be of community interests and, as such, are not included in one of the annexes of the Habitats Directive, are not protected under the instrument. This is by all means an important difference between the Habitats Directive and the Birds Directive, as the latter, on the basis of the provisions of Art. 1, covers all naturally occurring European bird species[277].

The principal measure of the European Union conservation regime, as embodied in the Habitats Directive, is the achievement of a 'favourable conservations status'. This will be achieved when population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitat; that the natural range of the species is neither being reduced or is likely to be reduced for the foreseeable future; and that there is – and will probably continue to be – a sufficiently large habitat to maintain its populations on a long term basis[278]. Favourable conservation status shall be achieved through the designation of protected area and other measures for the protection of species. In that regard, 'SAC' means a site of European Union importance designed by the member States through a statutory, administrative 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 the populations of the species for which the site is designed[279].

A paramount achievement of the Habitats Directive has been the establishment of a coherent European ecological network of special areas of conservation, under the title NATURA 2000. This network is nowadays composed of sites hosting the natural habitats types listed in Annex I and of species listed in Annex II of the Habitats Directive. The said network shall enable the natural habitat types and the species of habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range. Furthermore, based on the provisions of the Habitats Directive, the Natura 2000 Network shall include also the SPAs classified by the Member States according to the Wild Bird Directive. Each member States should have and actually has already contributed to the creation of the NATURA 2000 Network in proportion to the representation within its territory to the natural habitat types and habitats species.

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[276] Annex V provides a list of species of community (European Union) interests whose hunting in the wild and exploitation may be regulated with specific management measures. Annex VI lists prohibited methods and means of killing and transporting.
[277] See AMOS (*op.cit.* in footnote 263), p. 300.
[278] Habitats Directive, Art. 1, *i.*
[279] *Ibid*., Art. 1, *l.*

Noteworthy is also the fact, that, based on Art. 10 of the Habitats Directive, member States shall endeavour, where they consider it necessary, in their land-use planning and development policies and, in particular, with a view to improving the ecological coherence of the NATURA 2000 Network, to encourage the management of features of the landscape which are of major importance for wild fauna and flora. The said provision goes further on by saying that such features are those which, by virtue of their linear and continuous structure (such as rivers with their banks or the traditional system of marking field boundaries) or their function as steppingstones (such are ponds or small woods), are essential for the migration, dispersal and genetic exchange of wild species. The latter provision is important, as it seemingly tries to avoid the conservation technique which may lead to the establishment of 'islands' of protected areas creating thus genetically isolated populations, which may eventually undermine the viability of species[280]. This should be avoided though the maintenance and the setting up of new 'ecological corridors' between NATURA 2000 sites and other protected areas, either on land (green corridors) or on the sea (blue corridors). Concerns have been expressed in this regard with regard to large carnivores, while, on the other hand, plants are by its very (non-movable) nature at a greater risk from the island approach to conservation[281].

Emphasis should be furthermore made to the fact that, while the Habitats Directive has generally broadened the protection provided by the Birds Directive due to its extension to many other habitats and species, it has also in certain aspects reduced the protection afforded by the latter. Reference should be made to the fact that the Birds Directive imposes strict obligations regarding the designation of sites which met certain ecological criteria as SPAs and their subsequent protection[282]. The only exception or derogation from this is possible in cases where there is a risk to human life or health[283]. On the other hand, based on Art. 6 of the Habitats Directive, member States are allowed to derogate from their habitat conservation obligations also for socio-economic purposes[284], which is not possible under the Birds Directive, as also confirmed by various judgments of the Court of Justice of the European Union. The latter rejected on many occasions attempts by member States to derogate from their conservation objectives[285]. On the other hand, based on the provisions of Art. 6, para. 3, of the Habitats Directive, plans and projects that are not connected to the management of the site but are likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site, in view of the site conservation objectives. However, if in spite of a negative assessment of the

[280] See AMOS (*op.cit*. in footnote 263), p. 369.
[281] *Ibid*., p.369. See also *Council conclusions on a sustainable blue economy: health, knowledge, prosperity, social equity*, Brussels, 26 May 2021, para. 24 and *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a new approach for a sustainable blue economy in the EU – Transforming the EU's Blue Economy for a Sustainable Future*, COM(2021)240, Brussels, 17 May 2021, chapter 2.3.
[282] See furthermore Arts. 3 and 4 of the Habitats Directive.
[283] See, for example, Case C-57/89, Commission v. Germany, *Leybucht Dykes*, European Union Research, p. 883, 1991.
[284] See Art. 6, para. 3, of the Habitats Directive.
[285] See AMOS (*op.cit*. in footnote 263), p. 368.

implications for the site and in the absence of alternative solutions, a plan or project must be nevertheless carried out for imperative reasons or overriding public interest, including those of a social or economic nature, the member State shall take all compensatory measures necessary to ensure that the overall coherence of the NATURA 2000 network is protected[286].

C. The NATURA 2000 Network and the Adriatic and Ionian Seas

As mentioned, one of the main achievements of the Birds and Habitats Directives, often referred as the 'Nature Directives', lies in the creation of a European Union ecological network of nature conservation areas, called the NATURA 2000 Network. All member States are bound to designate NATURA 2000 sites based on the provisions of both the two instruments. More than 27,000 sites are nowadays included within the said network, either on land or on the sea. This in turn makes the NATURA 2000 Network of areas the largest coordinated network of conservation areas anywhere in the world.

Sites for the NATURA 2000 Network are selected on scientific grounds in order to ensure that the best areas in the European Union are protected with regard to habitats and habitats species of European Union importance, in accordance with a prescribed procedure listed in the Habitats Directive. According to Art. 4 of the latter, member States shall, as a first step, identify and propose for protection important areas with regard to species and habitats present on their territory. The European Commission then selects, with the help of the member States, the European Environment Agency and scientific experts, sites deemed to be of Community Importance (SCI). Once selected, the SCIs become part of the NATURA 2000 Network. Member States have then up to six years to designate them as SACs and, importantly, introduce the necessary management measures to maintain or restore the species and habitats present (again) to a good condition. On the basis of the Birds Directive, the procedure for site selection is similar, although it differs in certain particulars. According to the Directive, sites are classified by the member States and, after evaluation, included directly into the NATURA 2000 Network[287].

[286] See Art. 6, 4, of the Habitats Directive.
[287] European Commission (*op.cit* in footnote 264).

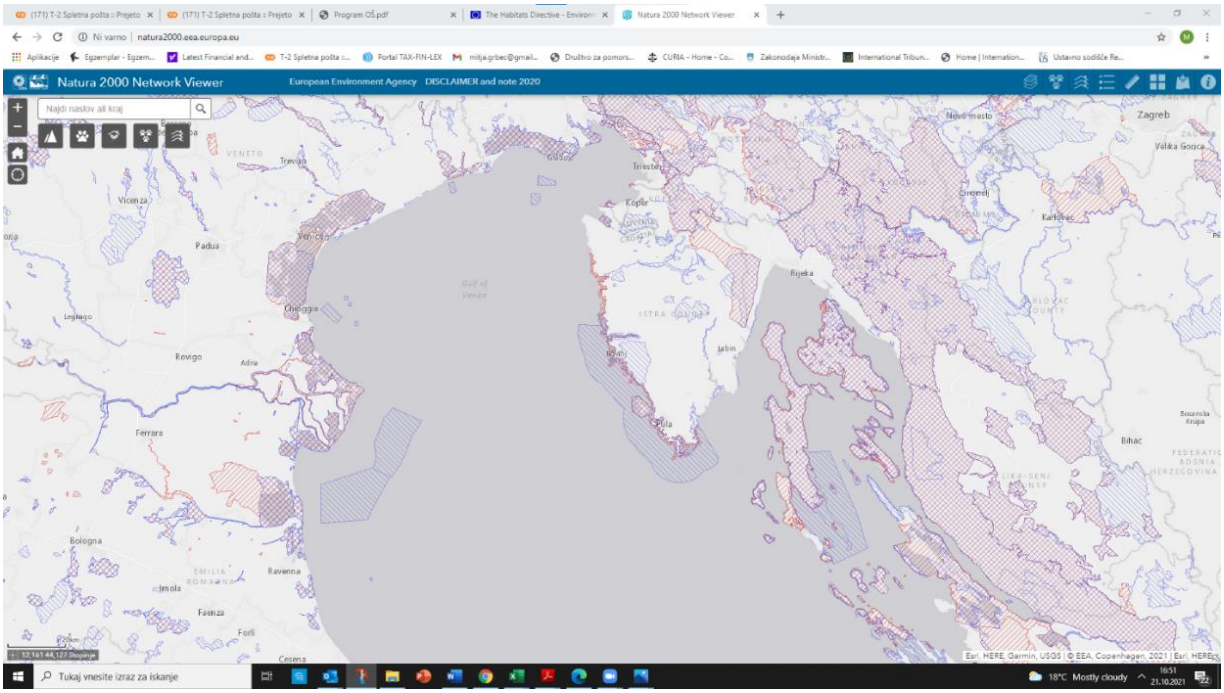

Figure 12 – NATURA 2000 Network in the Northern Adriatic. Source: Natura 2000 Network Viewer, available at https://natura2000.eea.europa.eu/.

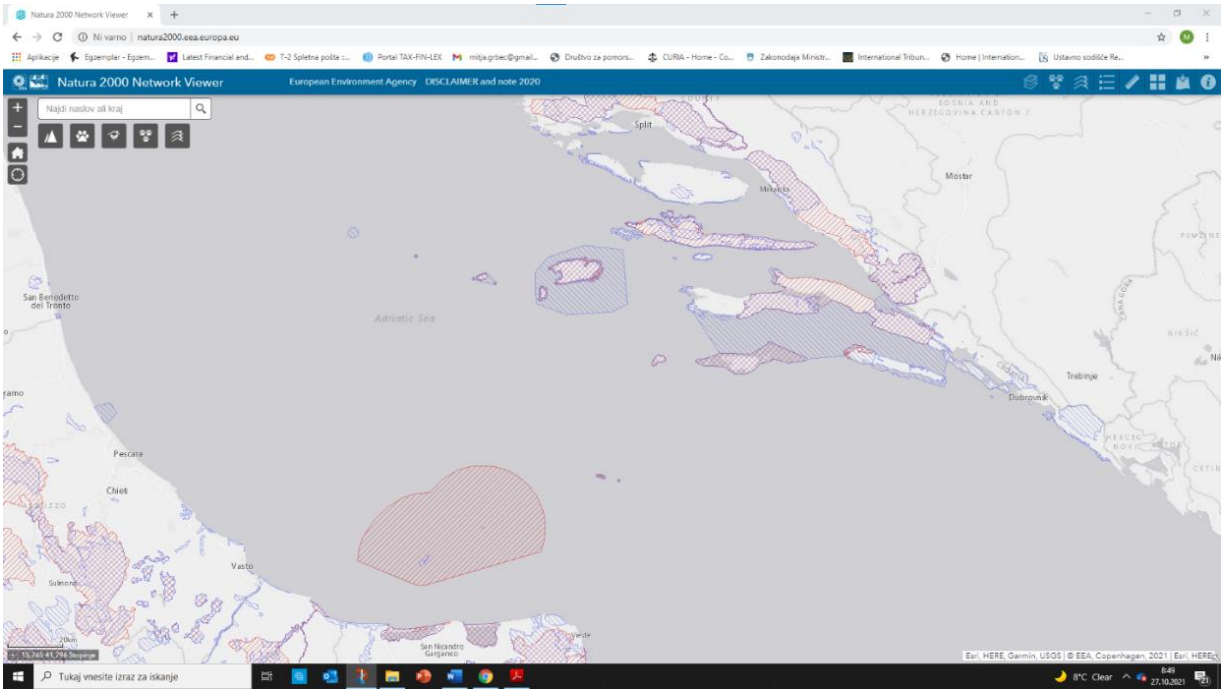

Figure 13 – NATURA 2000 Network in the Southern Adriatic (including the Jabuka island and the Klek/Neum area). Source: Natura 2000 Network Viewer, available at https://natura2000.eea.europa.eu/.

It seems important to point out that although the Habitats Directive strongly 'recommends', it does not compulsory 'require' either the use of management plans as a means of setting objectives and measures within a specific protection area or the setting up of a specific body for the purpose of managing a protected area or network of areas included in the NATURA 2000 Network. This has attracted some criticism, mostly as a

result of some 'paper areas' without a proper management plan and without a functioning management body. Based on the provisions of Art. 6, while for SACs member States shall establish the necessary conservation measures, they shall only involve, *"if need be"*, appropriate management plans specifically designed for the sites or integrated into other development plans, as well as appropriate statutory, administrative or contractual measures that correspond to the ecological requirements of the natural habitat types in Annex I and of the species in Annex II present on the sites.

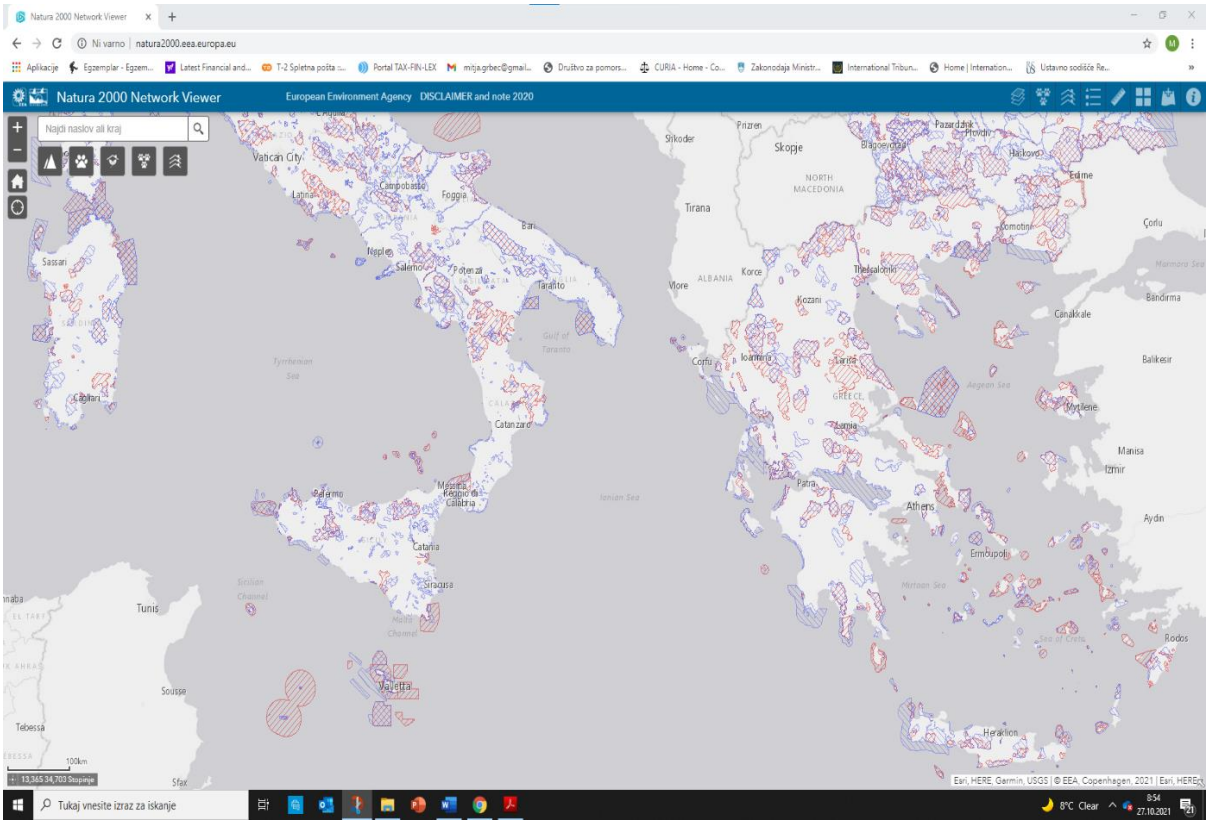

Figure 14 – NATURA 2000 Network in the Channel of Otranto area and Ionian Sea. Source: Natura 2000 Network Viewer, available at https://natura2000.eea.europa.eu/.

As regards habitat protection within the EUSAIR, reference should be made to the fact that the Habitats Directive has strongly influenced the institutional functioning of the Bern Convention. As a result, the Emerald Network is expressly based on the provisions of the Habitats Directive relating to the NATURA 2000 Network. This resulted from the fact that, when the Standing Committee of the Bern Convention adopted the Emerald Network in 1996, it based itself on the NATURA 2000 Network requirements according to the Habitats Directive. Thus, NATURA 2000 sites within European Union member States are deemed to form part also of the Emerald Network of protected areas[288]. In turn, the Emerald Network of protected areas gives to non-European Union countries within a specific region or sub-region (including within the EUSAIR) the possibility to align their

[288] See EPSTEIN (*op. cit*. in footnote 273), p. 153.

conservation policy with that of the European Union's NATURA 2000 Network of protected areas.

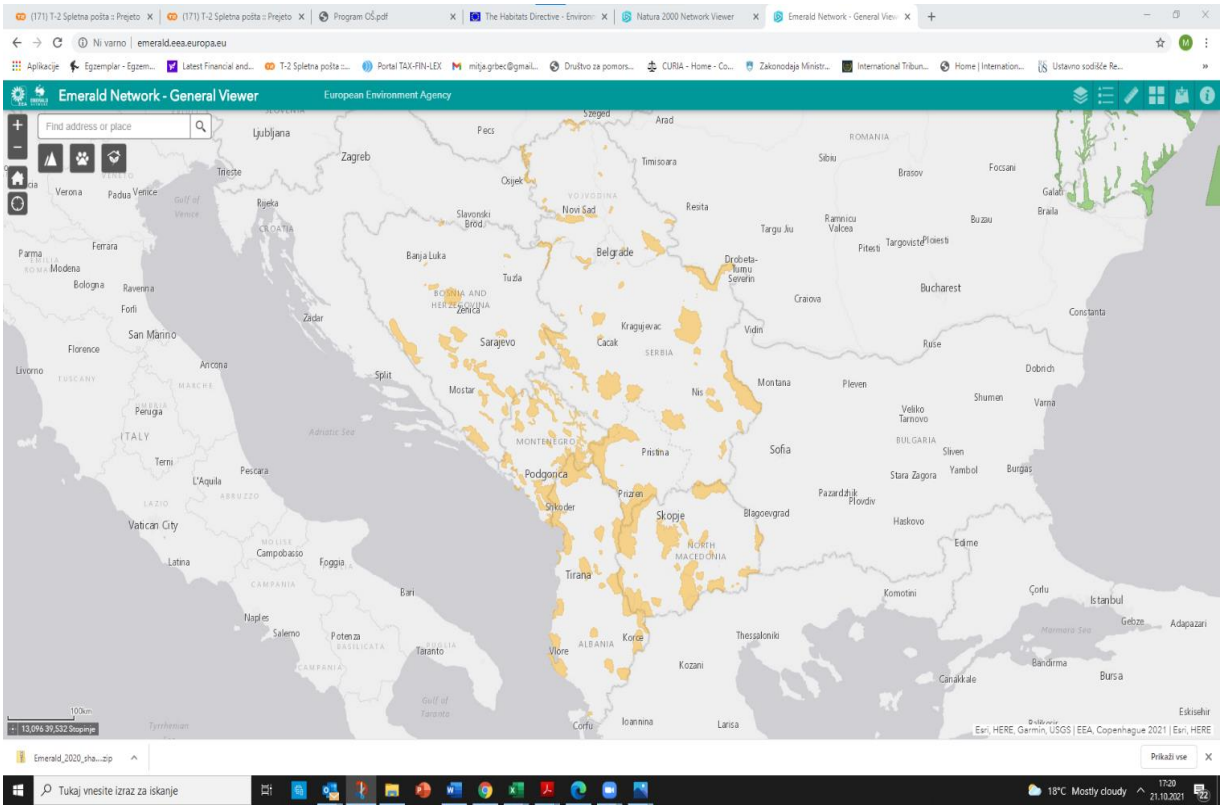

Figure 15 – Emerald Network in the EUSAIR area. Source: The Emerald Network Viewer, available at https://www.coe.int/en/web/bern-convention/emerald-viewer.

Some general observations could be made when assessing the maps of the NATURA 2000 Network of (marine) protected sites in the Adriatic and Ionian Seas together with the Emerald Network of marine protected areas in EUSAIR's non-European Union countries. In fact, there seems to be more marine protected sites in the Northern and Central Adriatic, compared to the Southern Adriatic and Ionian Seas. Reference should be also made to the fact that there are no NATURA 2000 marine protected sites beyond the territorial sea in the Adriatic, and only one such site in the Ionian Sea. Despite the fact that the EUSAIR States that are not members of the European Union have protected many sites on land based on the provisions of the Bern Convention (Emerald Network)[289], none of them is a marine protected area.

Again, reference should be pointed out to the fact that all EUSAIR members States are parties to the Bern Convention. This gives a possibility also to non-European Union countries in the Adriatic and Ionian Seas to establish (marine) protected areas actually equivalent to those established by European Union member States within the NATURA 2000 Network, as well as, in this regard, the possibility to coordinate their policies and undertake joint (transboundary) projects of cooperation with the European Union and its member States, including within the framework of the EUSAIR.

[289] See Figure 15.

4.4. The European Union Biodiversity Strategy 2030

In May 2020, in the middle of the COVID-19 emergency, the European Commission published a Communication on the 'European Union's Biodiversity Strategy for 2030'[290] (hereafter EU-BS 2030). This replaces the previous European Union's Biodiversity Strategy for 2020[291] and, in comparison with the latter, puts forward substantially more ambitious goals. In the words of the European Commission, the EU-BS 2030 is a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems[292]. The main goal of the EU-BS 2030 is to put European Union's biodiversity on a path to recovery by 2030 in line with the 2030 Agenda for Sustainable Development and with the objectives of the Paris Agreement on Climate Change[293]. The final global goal is to ensure that, by 2050, all of the world's ecosystems are restored, resilient and adequately protected.

The EU-BS 2030 is far from being just declaratory, as it contains specific actions and commitments to be realized by 2030. The said actions and commitments may be generally divided in four groups, namely: (1) establishing a larger European Union wide network of protected areas on land and at sea; (2) launching a European Union nature restoration plan; (3) introducing measures to enable the necessary transformative changes; (4) introducing measures to tackle the global biodiversity challenge. As pointed out by the Commission:

> To put biodiversity on the path to recovery by 2030, we need to step the protection and restoration of nature. This should be done by improving and widening our network of protected areas and by developing and ambitious EU Nature Restoration Plan.

For the purposes of this study, it is of particular interest the commitment by the European Union to establish by 2030 a larger European Union wide network of protected areas on land and at sea, although such commitment should not be seen separate from other goals and actions.

The European Commission is in this regard of the opinion that the current network of legally protected areas, including those under strict protection, is not sufficiently large to safeguard biodiversity and that, based on the available evidence, the Aichi Targets set under the CBD are insufficient to adequately protect and restore nature. The Commission also points out to the fact that the global Aichi Biodiversity Targets, which have been met by the European Union, although not in the Adriatic and Ionian Seas[294], are that protected areas should cover 17% on land and 10% at sea, albeit scientific studies figures a necessity

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[290] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *EU Biodiversity Strategy for 2030 - Bringing nature back into our lives*, 20 May 2020, COM/2020/380 final, Brussels.

[291] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Our life insurance, our natural capital: an EU biodiversity strategy to 2020*, 3 May 2011, COM/2011/0244 final, Brussels.

[292] https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_en.

[293] See *supra* (footnote 290), p. 3.

[294] SOVINC, *Analysis of marine (water) protected areas in EUSAIR and proposals for corrective measures,* Final Report, EUSAIR, 2021, pp. 27-28.

for a range from 30%-70%[295]. Furthermore, the Commission points out that global efforts are needed and that the European Union itself needs to do more and better for nature, particularly with regard to the building of a truly coherent trans-European nature network. The EU-BS 2030 sets in this regard a 2030 target, according to which at least 30% of the land and 30% of the sea should be protected in the European Union by that date. This is a minimum of an extra 4% for land and an extra 19% for protected sea in accordance with the present European Union situation. Additionally, one third of protected areas, representing 10% of European Union land and 10% of European Union sea should be strictly protected, leaving therefore natural processes essentially undisturbed to respect the areas' ecological requirements[296]. This is at least 7% more on land and 9% more on the sea, compared with the current situation[297]. Within this, there should be specific focus on areas of very high biodiversity value or potential.

It is important to note in this regard that member States will be responsible for designating the additional protected and strictly protected areas, either by expanding and completing the NATURA 2000 Network or under national protection schemes (marine protected areas). It is furthermore important to point out that all protected areas will need to have clearly defined conservation objectives and measures. The Commission, while working together with members States and the European Environmental Agency, will put in this regard forward criteria and guidance for identifying and designating additional areas, including a definition of strict protection, as well as for appropriate management planning. In doing so, it will also indicate how other effective area-based conservation measures and greening of cities could contribute to the targets. Furthermore, fisheries management will need to be established in all marine protected areas, according to clearly defined conservation objectives and on the basis of the best available scientific advice[298].

Although the targets relate to the European Union as a whole, they could be broken down according to the European Union bio-geographical regions and sea-basins or at a more local level. The Commission shares the opinion that, in order to have a truly coherent and resilient trans-European nature network, it will be important to set up 'ecological corridors' to prevent ecologic isolation, allow for species migration, and maintain and enhance healthy ecosystems. In this context, investment in green and blue infrastructure and cooperation across borders among member States should be promoted and supported, including through the European Territorial Cooperation (ETC)[299]. On the

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[295] See *supra* (footnote 290), p. 3, footnote 18.
[296] *Ibid*., p. 4, footnote 24.
[297] According to the Communication, 26% of European Union land area is already protected, with 18% as part of NATURA 2000 and 8% under national schemes. 11% of the European Union seas are protected, with 8% as part of NATURA 2000 and 3% under additional national protection. *Ibid*., p. 3, footnote 22. See also data provided within the COHENET *(Achieving coherent networks of marine protected areas: analysis of the situation in the Mediterranean Sea)* project". Available at https://ec.europa.eu/environment/marine/pdf/Cohenet_Brochure.pdf.
[298] *Ibid*., p. 12.
[299] See, in this regard, also Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Green Infrastructure (GI) — Enhancing Europe's Natural Capital*, 6 May 2013, COM(2013) 249 final. See also Report from the

international level, the European Union will support the conclusion of an ambitious legally binding agreement on marine biological diversity of areas beyond national jurisdiction (so-called BBNJ negotiating process). The latter must in turn set clear global procedures for identifying, designating and effectively managing ecologically representative marine protected areas in the high seas and, as such, it should be ratified and implemented as quickly as possible[300].

Furthermore, achieving 'good environmental status' of marine ecosystems, including through strictly protected areas, must involve the restoration of carbon-rich ecosystems as well as important fish spawning and nursery areas. The EU-BS 2030 points to the fact that marine resources must be harvested sustainably, and that there should be zero tolerance for illegal practices. Healthy fish stocks are the key to the long-term prosperity of fisherman and the health of our oceans and biodiversity. It is therefore imperative to maintain or reduce fishing mortality at or under maximum sustainable yield level in order to achieve a healthy population age and size distribution for fish stocks. Furthermore, the by-catch of species threatened with extinction must also be eliminated or reduced to a level which allows full recovery. The full implementation of the European Union's Common Fisheries Policy, the MSFD and the Birds and Habitats Directives is therefore essential in order to achieve the said goals[301]. The Commission will request member States to ensure that there is no deteriorating in conservation trends and status of all protected habitats and species by 2030[302].

The Commission points furthermore to the fact that full implementation and enforcement of European Union environmental legislation is at the heart of the EU-BS 2030. As regards the Birds and Habitats Directives, enforcement will focus on completing the NATURA 2000 Network, the effective management of all sites, species-protection provision and species and habitats that show declining trends[303]. Furthermore, the application of an ecosystem-based management approach under European Union legislation will reduce the adverse impact of fishing, extraction and other human activities, especially on sensitive species and seabed habitats. To support this, national maritime plans, which member States have to deliver in 2021, should aim at covering all sectors and activities, including area based conservation management measures.

For the purposes of this study, of particularly importance are the key European Union commitments in the field of nature protection provided by the EU-BS 2030. The latter may be summarized as follows:

Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Review of progress on implementation of the EU green infrastructure strategy*, 24 May 2019, COM(2019) 236 final. See also BRICELJ (ed.), *Handbook for Recognising and Planning Green Infrastructure*, Institute for Water of the Republic of Slovenia and the Ministry of Environment and Spatial Planning, 2021. Available at https://www.adriatic-ionian.eu/event/6th-annual-eusair-forum/handbook-for-recognising-and-planning-green-infrastructure/.

[300] *See supra* (footnote 290), p. 20.

[301] *Ibid*., p. 20.

[302] *Ibid* , p. 6.

[303] *Ibid*., p. 14.

1) legally protect a minimum of 30% of the European Union's land and 30% of the European Union's sea area and integrate ecological corridors, as part of the true trans-European nature network;

2) Strictly protect at least a third of the European Union's protected areas, including all remaining European Union primary and old growth forest; and

3) effectively manage all protected areas, defining clear conservation objectives and measures, and monitoring them appropriately.

Noteworthy is the fact that European Union member States will be responsible for designating the additional protected and strictly protected areas, either by expanding and completing the NATURA 2000 Network or under national protection schemes (marine protected areas), including possible (transboundary) marine protected areas established in accordance with the provisions of regional seas conventions (i.e., SPAMIs in the Mediterranean Sea). Fisheries management will need to be established in all marine protected areas, according to clearly defined conservation objectives and on the basis of the best available scientific advice[304]. The Commission will aim to agree upon criteria and guidance for additional designations of marine protected areas with member States by the end of 2021. Member States will then have until the end of 2023 to demonstrate significant progress in designating new protected areas and establishing integrated ecological corridors. Noteworthy is the fact that the Council of the European Union, in *Council conclusions on a sustainable blue economy: health, knowledge, prosperity, social equity* of 26 May 2021,

> Calls on Member States to use maritime spatial planning to strengthen the delivery of ecosystem goods and services and achieve ecological, economic and social objectives, as well as to minimise conflicts between different activities at sea;
>
> Acknowledges the concept of blue corridors in maritime spatial planning as a measure to improve the functional connectivity of ecological networks and to ensure sustainable fisheries and navigation in marine ecoregions.

[304] Regulation 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations 1954/2003 and 1224/2009 and repealing Council Regulations 2371/2002 and 639/2004 and Council Decision 2004/585/EC, Official Journal of the European Union L 354 of 28 December 2013, pp. 22-61. Art. 11 allows for the adoption of conservation measures in order to achieve the objectives of the MSFD and the Birds and Habitats Directives and the consequent establishment of protected areas of biological sensitivity.

The EU-IMP seeks to provide a more coherent approach to maritime issues, with increased coordination between different policy areas and, as such, it attempts to coordinate complex and interdependent policies related to maritime affairs and allocate ecological economic resources in a holistic and integrated manner. An important role is by necessity played by ICZM and MSP. Their role is to efficiently plan cross-sectoral and cross-border management of coastal zones and, furthermore, to overview and coordinate possible uses of maritime and coastal resources. The overriding goal of the MSFD, as the environmental pillar of the EU-IMP, is the integration of environmental considerations into all relevant policy areas. The geographical scope of this instrument, as well as, generally speaking, of the European Union *acquis* and coastal States legislation, is however limited to waters over which member States or third States of the same region or sub-region exercise sovereignty or jurisdiction in accordance with the UNCLOS – and not on the high seas. According to the MSFD, the establishment of marine protected areas, including NATURA 2000 Network sites designed or to be designed based on the provisions of the Habitats and Birds Directives, represents an important contribution towards the achievement of a 'good environmental status' of the European Union waters. Measures in this regard 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 SACs pursuant to the Habitats Directive, SPAs pursuant to the Birds Directive, and marine protected areas as agreed by the European Union or the member States concerned in the framework of international or regional agreements to which they are parties (i.e., the Barcelona Convention). Furthermore, with the aim to have a truly coherent and resilient trans- European nature network, it is of paramount importance to set up 'ecological corridors' in order to prevent ecologic isolation, allow for species migration, and maintain and enhance healthy ecosystems. These goals should be pursued though the maintenance and the setting up of new ecological corridors between NATURA 2000 Network sites and other protected areas, either on land (green corridors) or at sea (blue corridors), and through their interconnection.

Noteworthy is the fact that all EUSAIR States are parties to the Bern Convention. This implies that also non-European Union countries in the Adriatic and Ionian region (i.e., Albania, Montenegro, North Macedonia, and Serbia,) are in the position to establish (marine) protected areas that are equivalent to those established by European Union member States within the NATURA 2000 Network. In this regard, noteworthy is the possibility to coordinate national policies and undertake joint (transboundary) projects of cooperation with the European Union and its member States, including within the framework of the EUSAIR.

CHAPTER 5

REGIONAL LEGAL BASIS FOR THE ESTABLISHMENT OF TRANSBOUNDARY MARINE PROTECTED AREAS

The global and European legal contexts discussed above for the establishment of transboundary marine protected areas are to be read together with the relevant system of rules elaborated in the Mediterranean legal context, which presents some peculiarities. In fact, the Mediterranean Sea is a 'semi-enclosed sea' according to the definition of Art. 122 UNCLOS. It is connected to the Atlantic Ocean by the narrow outlet of the Strait of Gibraltar, to the Black Sea by the Straits of Dardanelles and Bosporus, and to the Red Sea by the artificial canal of Suez. The geographical configuration of the Mediterranean Sea implies a number of consequences from the perspective of international law.

The Mediterranean Sea is surrounded by 23 countries[305]. As States bordering the same semi-enclosed sea, these countries should cooperate with each other in the exercise of their rights and in the performance of their duties under the UNCLOS, in accordance with Art. 123 thereof. Although some Mediterranean coastal States are still not parties to the UNCLOS[306], the duty of cooperation relies on general rules of customary law, binding as such upon all States. In the pursuit of cooperation, the UNCLOS enumerates the goal of coordinating the management, conservation, exploration and exploitation of the living resources of the sea; the implementation of rights and duties in respect to the protection of the marine environment; scientific research policies and the undertaking, where appropriate, of joint programmes of scientific research in the area[307]. Furthermore, States bordering a semi-enclosed sea should endeavor to invite, as appropriate, other interested States or international organizations to cooperate with them in furtherance of the above goals. This may be accomplished by States directly or through appropriate regional organizations.

Indeed, a number of regional arrangements have been concluded by the States bordering the Mediterranean Sea, with a view to strengthening their cooperation in the fields of protection of the marine environment and the conservation of marine living resources. These arrangements comprise the resort to area-based management tools,

[305] Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Palestine, Slovenia, Spain, Syria, Tunisia, and Turkey. Eight among them are members of the European Union, which exercises, *inter alia*, an exclusive competence for fisheries management and conservation and shared competences with member States in the field of protection of the marine environment.

[306] Israel, Libya, Syria, and Turkey.

[307] The only organization having a specific competence in the field of Mediterranean scientific research is the International Commission for the Scientific Exploration of the Mediterranean Sea (CIESM), whose constitutive assembly was held in Madrid in 1919. It is engaged in promoting fundamental research activities.

including marine protected areas and other effective area-based conservation measures, which may also present a transboundary configuration.

5.1. The relevant Protocols to the Barcelona Convention

Three Protocols to the Barcelona Convention are of particular relevance for this study, as they envisage explicit provisions for the establishment or management of marine or coastal areas to which a special protection regime applies. Such areas may be extended beyond national jurisdictions and given a transboundary character, if the parties to the relevant Protocols wish to do so. This is done by including in the relevant spatial measures marine waters that encompass portions of maritime zones (i.e., internal waters, territorial sea, exclusive economic zone, continental shelf) pertaining to different States or even portions of the high seas.

For the purposes of this study, noteworthy is that, for what concerns 'Biodiversity & Ecosystems' (one of the seven themes addressed in the relevant document), the MAP Programme of Work for the biennium 2020-2021[308] includes the recourse to the tool of coastal and marine protected areas among its 'strategic objectives', which are listed as follows:

> 1. To strengthen the management, including socio-economic aspects, and extend the network of Coastal and Marine Protected Areas including SPAMIs;
> 2. To strengthen the implementation of action plans on endangered and threatened species key habitats and Non-Indigenous Species;
> 3. To promote Coastal and Marine Protected Areas as a contribution to Blue Economy;
> 4. To strengthen the resilience of Mediterranean natural and socioeconomic systems to the impacts of climate change.

A. The Areas Protocol

The Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean (Barcelona, 10 June 1995; in force from 12 December 1999; hereinafter: Areas Protocol) replaces the previous Protocol concerning Mediterranean Specially Protected Areas (Geneva, 1 April 1982; in force from 23 March 1986). The new instrument is applicable to all the marine waters of the Mediterranean, irrespective of their legal condition, as well as to the seabed, its subsoil and to the terrestrial coastal areas designated by each party, including wetlands[309]. The extension of the geographical coverage of the instrument was felt necessary to protect also those highly migratory marine species (such as marine mammals), which cross the artificial boundaries drawn by man in the sea.

In order to overcome the difficulties due to different types of Mediterranean coastal zones and unsettled maritime boundaries[310], the Areas Protocol includes two disclaimer provisions (Art. 2, paras. 2 and 3). On the one hand, the establishment of

[308] Decision IG.24/14 (Annex), UNEP/MED IG.24/22.
[309] On the contrary, the application of the previous instrument was limited to the territorial sea of the parties and did not cover the high seas.
[310] On the legal condition of marine waters in the Adriatic and Ionian region, see *supra*, paras. 1.2, 1.3 and 1.4.

intergovernmental cooperation in the field of the marine environment should not prejudice other legal questions which have a different nature and are still pending. On the other, the existence of such legal questions should not delay the adoption of measures necessary for the preservation of the ecological balance in the Mediterranean.

Under the Areas Protocol, parties are called to protect areas of particular natural or cultural value, through the establishment of Specially Protected Areas (SPAs) or Specially Protected Areas of Mediterranean Importance (SPAMIs). The Areas Protocol provides for the establishment of a List of SPAMIs (so-called SPAMI List). This 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"*. The procedures for the establishment and listing of SPAMIs are specified in detail in the Protocol. For instance, as regards an area located partly or wholly on the high seas, the proposal must be made *"by two or more neighbouring parties concerned"* and the decision to include the area in the SPAMI List is taken by consensus by the parties during their periodical meetings.

Once the areas are included in the SPAMI List, all the parties agree *"to recognize the particular importance of these areas for the Mediterranean"*, *"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».* This gives to the SPAMIs and to the measures adopted for their protection an *erga omnes partes* effect. As regards the relationship with third countries, the parties are called to *"invite States that are not Parties to the Protocol and international organizations to cooperate in the implementation"* of the Protocol. They also *"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 Protocol. This provision aims at facing the problems arising from the fact that any treaty, including the Areas Protocol, can create rights and obligations only for the parties.

The Areas 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), the 'List of endangered or threatened species' (Annex II) and the 'List of species whose exploitation is regulated' (Annex III). Regional Action Plans (RACs) with specific actions aiming at protecting, preserving and managing the species listed in the Areas Protocol have been developed, addressing the conservation of cartilaginous fishes (Chondrichthyans), cetaceans, marine vegetation, bird species, marine turtles, coralligenous and other calcareous bio-concretions, Mediterranean Monk Seals, species introduction and invasive species, and dark habitats.

According to 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 that guarantees 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).

So far, 39 SPAMIs have been listed. Among them, the Pelagos Sanctuary for the conservation of marine mammals, jointly proposed by France, Italy and Monaco, and the Cetacean Migration Corridor off the coasts of Spain cover also waters located beyond the territorial sea. With specific reference to the Adriatic and Ionian Seas, 6 areas have been included in the SPAMI List so far. In their respective order of listing: *Miramare Marine Protected Area* (Italy); *Plemmirio Marine Protected Area* (Italy); *Torre Guaceto Marine Protected Area and Natural Reserve* (Italy); *Porto Cesareo Marine Protected Area* (Italy); *Karaburun Sazan National Marine Park* (Albania); and *Landscape Park Strunjan* (Slovenia).

It may be noted (see Figure 16 below) that no area in the central portion of the region of concern – i.e., off the coasts of Croatia, Bosnia and Herzegovina, Montenegro, Greece, and the eastern coast of Italy – has yet been included under the special protection regime of the SPAMI List[311]. It should also be noted that, while the majority of Adriatic and Ionian States has already ratified the Areas Protocol, as amended in 1995, Bosnia and Herzegovina and Greece still have to do so. The European Union has ratified the Areas Protocol in 1999.

[311] But see *infra*, at the end of this paragraph, for new potential SPAMIs in the Adriatic and Ionian Seas.

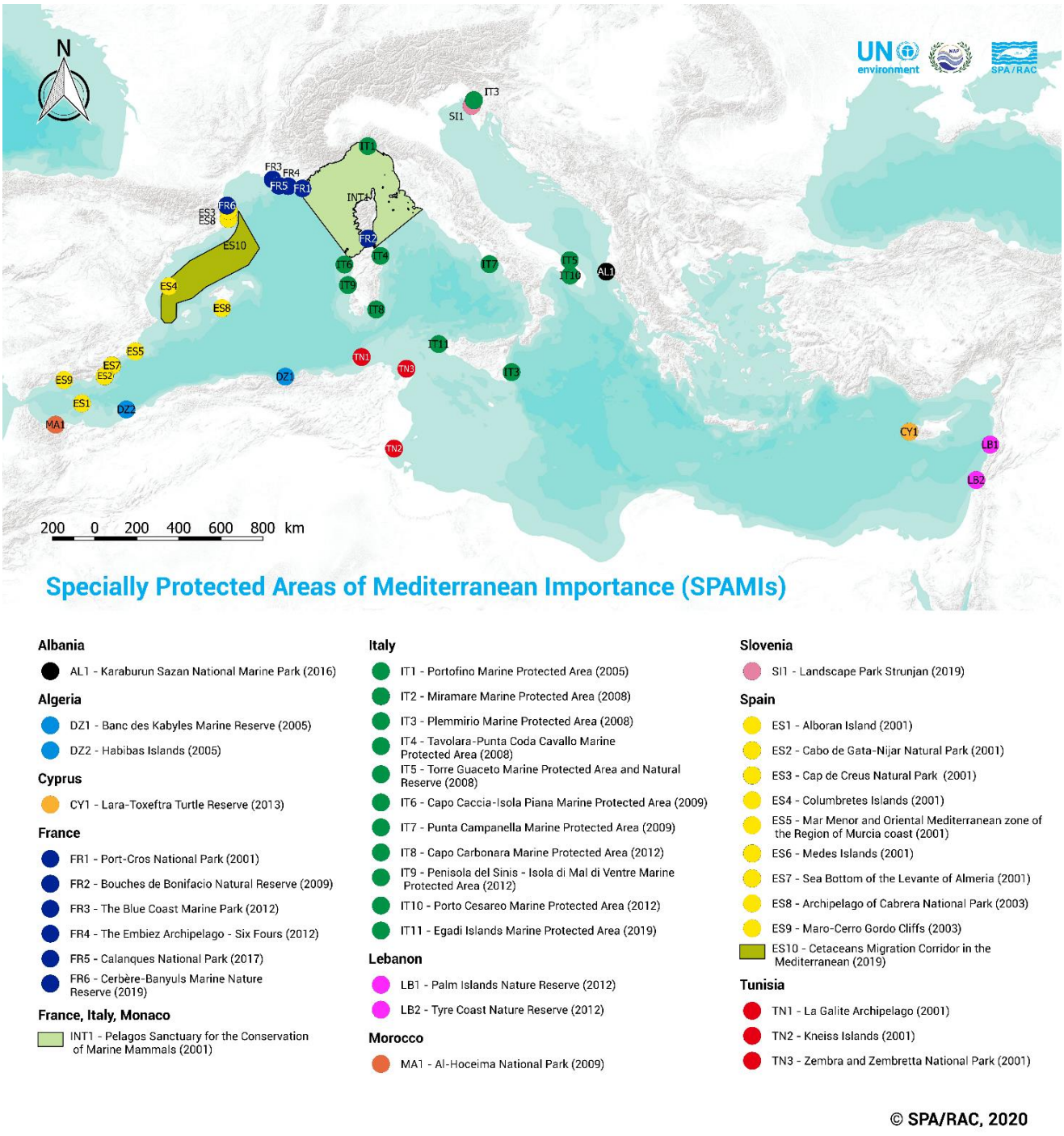


Figure 16 – Specially Protected Areas of Mediterranean Importance (SPAMIs). Source: SPA/RAC, 2020.

With regards to transboundary cooperation in the potential listing of new SPAMIs, SPA/RAC has put emphasis also on actions harmonized at sub-regional level. Under the proposed approach for the elaboration of the Post-2020 SAP BIO coordinated by SPA/RAC, and for the identification of the related priorities, it should be noted that the Mediterranean Sea has been divided into four sub-regions agreed by the parties to the

Barcelona Convention[312]. In this division, the Adriatic Sea stands alone, while the Ionian Sea has been coupled with the wider Central Mediterranean (see Figure 17 below).

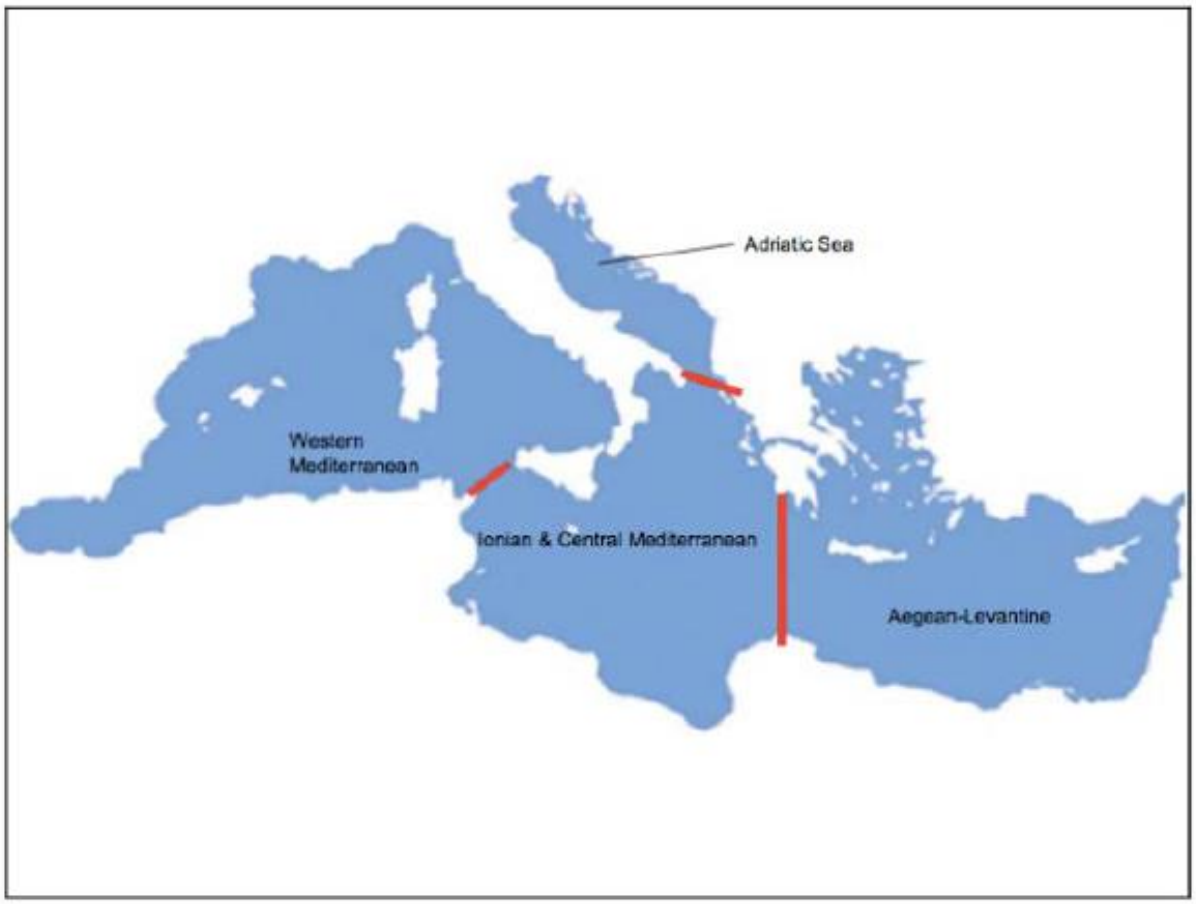
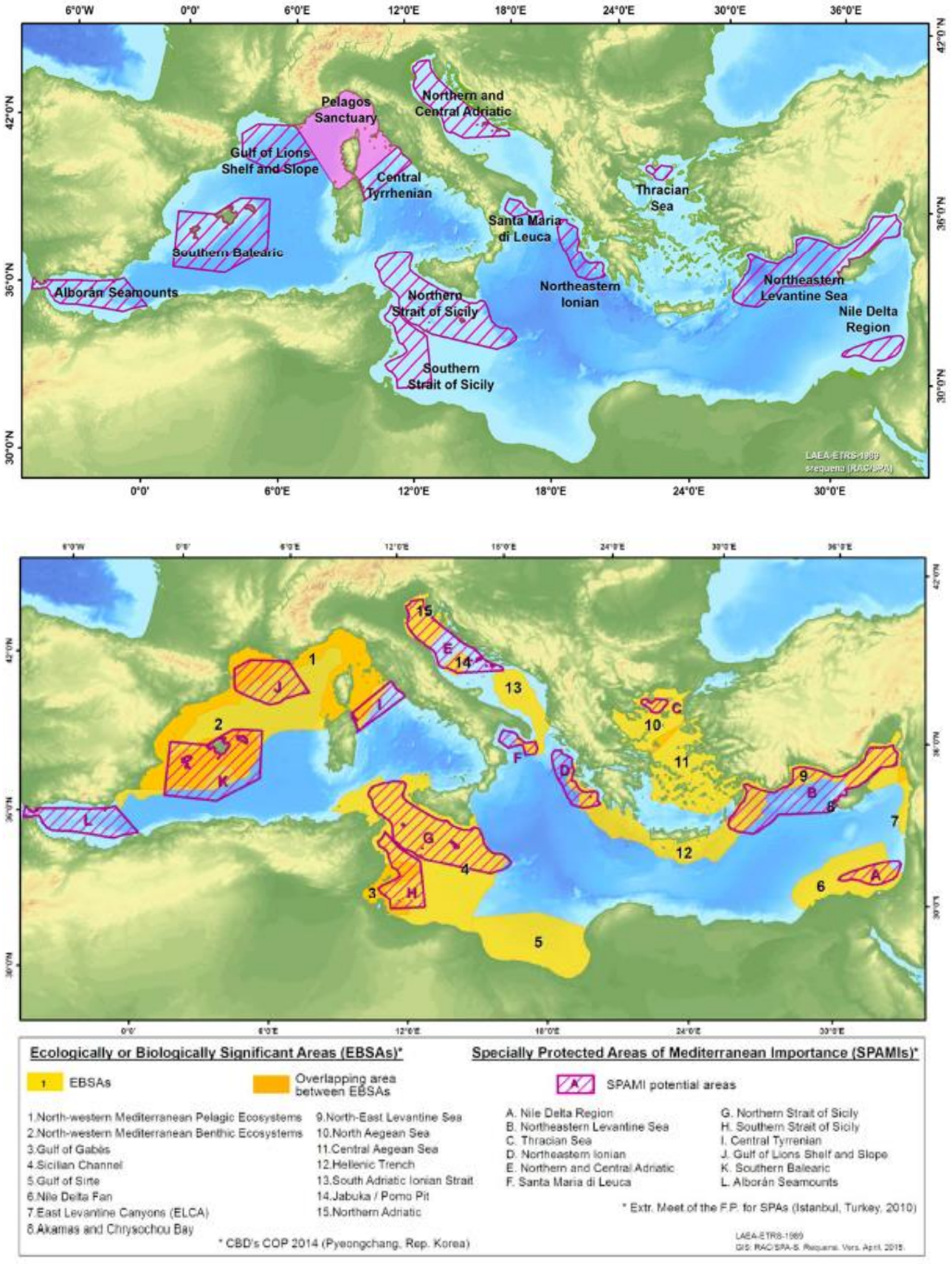


Figure 17 – Division of the Mediterranean Sea into sub-regions under the proposed approach for the elaboration of the Post-2020 SAP BIO.

With regards to the potential listing of new SPAMIs, some proposals were recalled at the Mediterranean Seminar on PSSAs held in Tirana (Albania) on 12 December 2019 that specifically concern the Adriatic and Ionian Seas. Such proposals were put forward a decade before and considered at the extraordinary meeting of the Focal Points for SPAs (Istanbul, Turkey, 1 June 2010). In particular, such proposals identify three potential SPAMIs in the *Northeastern Ionian*, in *Santa Maria di Leuca* and in the *Northern and Central Adriatic* (Figure 18 below).

[312] The sub-regions are: Western Mediterranean, Ionian and Central Mediterranean, Adriatic Sea, Aegean Sea – Levantine Sea. See Process for the Elaboration of the 'Post-2020 Strategic Action Programme for the Conservation of Biodiversity and Sustainable Management of Natural Resources in the Mediterranean Region' (Post-2020 SAP BIO), Online Advisory Committee Meeting, 2 April 2020, Meeting Report, Annex V: Post-2020 SAP BIO Elaboration Guidance Document, p. 4.



Figures 18 and 19 – Identification of future SPAMIs and their overlapping with EBSAs. Source: presentation by SIMARD, *Overview of Mediterranean Area-based Conservation Schemes*, at the Mediterranean Seminar on PSSAs (12 December 2019, Tirana, Albania).

The new three potential sites identified in the Adriatic and Ionian Seas as SPAMIs raise some remarks. The proposal concerning the *Northern and Central Adriatic* could represent a further means of transboundary cooperation between the relevant coastal States[313]. It is worth noting that this potential SPAMI would encompass also the site of the *Jabuka/Pomo Pit* FRA within the GFCM framework. The proposal concerning *Santa Maria di Leuca* seems to encompass waters falling only under Italian jurisdiction, including those waters claimed by such State as internal, within the Gulf of Taranto (historic bay). The proposal concerning the *Northeastern Ionian*, encompassing a substantial portion of Greek waters, seems rather difficult to be implemented – a situation that might change, however, should Greece decide to become a party to the Areas Protocol.

B. The Offshore Protocol

The Protocol for the Protection of the Mediterranean Sea against Pollution resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil (Madrid, 14 October 1994; in force from 24 March 2011; hereinafter: Offshore Protocol) sets forth obligations incumbent on the parties with respect to activities carried out by operators, who can also be private persons, either natural or juridical. This kind of obligations are to be understood in the sense that each party is bound to exercise the appropriate legislative, executive or judicial activities in order to ensure that the operators comply with the provisions of the Offshore Protocol. The parties are bound to take measures to ensure that liability for damage – caused by activities to which the Offshore Protocol applies – is imposed on operators, who are required to pay prompt and adequate compensation. The parties shall also take all measures necessary to ensure that operators have and maintain insurance cover or other financial security in order to pay compensation for damages caused by the activities covered by the instrument.

The definition of 'operator' is broad, as it includes not only persons authorized to carry out activities (for example, the holder of a license) or who carry out activities (for example, a sub-contractor), but also any person who does not hold an authorization, being *de facto* in control of activities. The parties are under an obligation to exercise due diligence in order to make sure, within the seabed under their jurisdiction, that no one engages in activities which have not previously been authorized or which are exercised illegally.

The geographical coverage of the Offshore Protocol – which encompasses the whole Mediterranean Sea Area as defined in the Barcelona Convention (Art. 1) – may be extended by any of the parties to include wetlands or coastal areas of their national territory. The Offshore Protocol provides for the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) to play an important role in support of the implementation of the instrument. The Offshore Protocol is also complemented by the 2016 Mediterranean Offshore Action Plan: in this context, the

[313] On the recourse to new potential SPAMIs as a means of transboundary cooperation in the Adriatic and Ionian Seas, see *infra*, chapter 8.

Barcelona Convention Offshore Oil and Gas Group (BARCO OFOG), through its Sub-Group on environmental impact, deals, *inter alia*, with 'precautions for specially protected areas'.

All activities in the Offshore Protocol area, including the erection of installations on site, are subject to the prior written authorization by the competent authority of a party. Before granting the authorization, the authority must be satisfied that the installation has been constructed according to international standards and practice and that the operator has the technical competence and the financial capacity to carry out the activities. Authorization must be refused if there are indications that the proposed activities are likely to cause significant adverse effects on the environment that could not be avoided by compliance with specific technical conditions[314]. In particular, special restrictions or conditions may be established for the granting of authorizations for activities in specially protected areas.

As anticipated, with specific reference to area-based management, in the context of the Offshore Protocol, 'precautions' are envisaged in particular for specially protected areas that have been identified under the Areas Protocol or established by a party. Measures of protection may be taken by the parties either individually or through multilateral or bilateral cooperation, with a view to preventing, abating, combating and controlling pollution arising from activities in these areas. In addition to those measures referred to in the Areas Protocol, for the granting of authorization the measures of the Offshore Protocol may encompass, *inter alia*: special restrictions or conditions when granting authorizations for such areas, including the preparation and evaluation of environmental impact assessments and the elaboration of special provisions concerning monitoring, removal of installations and prohibition of any discharge, as well as an intensified exchange of information among operators, the competent authorities, parties and UNEP regarding matters which may affect such areas (Art. 21).

It was recently reported that, as regards to special measures to prevent, abate, combat and control pollution in SPAs, two parties mentioned the complete prohibition of offshore activities in SPAs or in areas considered as strict reserves[315].

In the Adriatic and Ionian Seas, Albania is the only State party to the Offshore Protocol. The European Union has ratified the instrument in 2013. Improving participation to the Offshore Protocol by the States in the region of concern is critical, furthermore when considering that seabed activities are intensively carried out on the Adriatic continental shelf.

C. The Coastal Zone Protocol

The third instrument of the Barcelona System that proves particularly relevant for this study is the Protocol on Integrated Coastal Zone Management in the Mediterranean (Madrid, 21 January 2008; in force from 24 March 2011; hereinafter: Coastal Zone Protocol), which addresses the increase in anthropic pressure on the Mediterranean coastal zones. This instrument provides Mediterranean States with a legal and technical

[314] This obligation can be seen as an application of the precautionary principle.
[315] UNEP/MED WG.515/Inf.12, para. 330.

tool to ensure the sustainable development throughout the shores of this regional sea. The importance of this protocol lies also in the fact that it represents the first treaty ever adopted specifically devoted to the coastal zone.

The Coastal Zone Protocol defines 'integrated coastal management' as *"a dynamic process for the sustainable management and use of coastal zones, taking into the account at the same time the fragility of coastal ecosystems and landscapes, the diversity of activities and uses, their interactions, the maritime orientation of certain activities and uses and their impact on both the marine and land parts"* (Art. 2, *g*).

The precise delimitation of the geographical coverage of the Coastal Zone Protocol gave rise to lengthy discussion during the negotiations. It was finally agreed (Art. 3) that the seaward limit of the coastal zone is the external limit of the territorial sea and its landward limit is the limit of the competent coastal units as defined by parties. However, parties may establish different limits, in so far as certain conditions occur. This instrument certainly opens up to the opportunity of building transboundary integrated coastal management, also through the recourse to transboundary area-based management tools.

Art. 6 of the Coastal Zone Protocol lists a number of general principles of integrated coastal zone management. For instance, parties are bound to formulate *"land use strategies, plans and programmes covering urban development and socio-economic activities, as well as other relevant sectoral polices".* They shall take into account in an integrated manner *"all elements relating to hydrological, geomorphological, climatic, ecological, socio-economic and cultural systems», so as «not to exceed the carrying capacity of the coastal zone and to prevent the negative effects of natural disasters and of development".*

Parties are also required to take into account the diversity of activities in the coastal zone and to give priority *"where necessary, to public services and activities requiring, in terms of use and location, the immediate proximity of the sea".*

Art. 8 provides for the establishment of a 100-m zone where construction is not allowed. However, 'adaptations' are allowed *"for projects of public interest"* and *"in areas having particular geographical or other local constraints, especially related to population density or social needs, where individual housing, urbanisation or development are provided for by national legal instruments".* Other important obligations of the Parties relate to *"limiting the linear extension of urban development and the creation of new transport infrastructure along the coast"*, *"providing for freedom of access by the public to the sea and along the shore"* and *"restricting or, where necessary, prohibiting the movement and parking of land vehicles, as well as the movement and anchoring of marine vessels in fragile natural areas on land or at sea, including beaches and dunes".* Besides the need of protection of marine habitats, attention should be paid also to the terrestrial configuration of the Adriatic coast, which includes several features of this kind. Sand dune habitat types are still in good condition in Albania, while in Croatia sand dune plant communities are fragmentarily developed and in Montenegro under strong human impact[316]. Touristic facilities, for example along the Italian region of Emilia Romagna, have

[316] ŠILC et al., *Sand Dune Vegetation along the Eastern Adriatic Coast*, in *Phytocoenologia*, 2016, pp. 339-355.

taken over the protection of coastal ecosystems. However, coastal sand dunes along the Adriatic coasts host high levels of biodiversity and provide a substantial ecosystem services supply. The latter includes climate regulation, protection from wind and aerosol, erosion regulation, recreation and tourism, and existence value of biodiversity[317]. Transboundary coastal ecosystems along the Eastern Adriatic coast would benefit from cooperation by adjacent States in the implementation of the Coastal Zone Protocol.

Some provisions of the Coastal Zone Protocol deal with specific activities, such as *"agriculture and industry"*, *"fishing"*, *"aquaculture"*, *"tourism, sporting and recreational activities"*, *"utilization of specific natural resources and infrastructure"*, *"energy facilities, ports and maritime works and structure"* (Art. 9, para. 2), as well as with certain specific coastal ecosystems, such as *"wetlands and estuaries"*, *"marine habitats"*, *"coastal forests and woods"* and *"dunes"* (Art. 10). Due emphasis is granted to risks affecting the coastal zone, in particular climate change (Art. 22) and coastal erosion (Art. 23). The Priority Actions Programme Regional Activity Centre (PAP/RAC) assists the parties to the Coastal Zone Protocol in meeting their obligations.

In the Mid-Term Evaluation of the Action Plan for the implementation of the Coastal Zone Protocol (2012-2019)[318], an example can be found of transboundary cooperation by two States bordering the marine basin of concern. The 'Buna/Bojana Integrated Management Plan' has been jointly prepared by Albania and Montenegro in the framework of the MedPartnership project by PAP/RAC, the Global Water Partnership – Mediterranean (GWP-Med) and the International Hydrological Programme (UNESCO-IHP), in cooperation with a team of experts of the two countries, under the guidance of the Albanian Ministry of Environment, Forestry and Water Management and the Montenegrin Ministry of Sustainable Development and Tourism. It is the first pilot case testing the implementation of the Water Framework Directive and the Coastal Zone Protocol. With reference to the transboundary initiative, the parties acknowledged the complexity of the task. In particular, they reported that

> a number of difficulties were encountered since the beginning of the plan preparation. These were related in the first place to the significant difference in availability and type of data, insufficient local expertise, different legal systems, etc. In spite of all that, the Plan has been drafted and it is undergoing the consultation and harmonization process with national administrations and key stakeholders. Hopefully, it will represent a bundle full of lessons learned, ready to be replicated in other areas in the Mediterranean[319].

A Common Regional Framework (CRF) for ICZM was also adopted in 2019[320]. Tools to implement the CRF include monitoring activities; environmental assessments; coordination of planning processes and governance mechanisms; marine spatial planning; land policy; economic, financial and fiscal instruments; training, communication and information; and international cooperation.

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[317] DRIUS et al., *Not Just a Sandy Beach. The Multi-Service Value of Mediterranean Coastal Dunes*, in *Science of the Total Environment*, 2019, pp. 1139-1155.
[318] Decision IG.22/11 (Annex), UNEP(DEPI)/MED IG.22/28.
[319] *Ibid*., para. 40.
[320] Decision IG.24/5 (Annex), UNEP/MED IG.24/22.

In the context of this study, the tool of transboundary strategic environmental impact assessments (SEAs) is also worth mentioning. The CFR stresses that transboundary SEA processes, including transboundary consultation, should be activated when a policy, strategy, plan or programme is expected to have significant transboundary environmental effects. As an example of good practice in transboundary cooperation between neighboring countries, the CFR mentions the carrying out of a SEA of the Framework Plan and Program (FPP) for Exploration and Exploitation of Hydrocarbons in the Adriatic Sea:

> The FPP was developed in order to keep precise track of hydrocarbons exploration and exploitation activities, permit issuing, contract awarding, investor liabilities, imposition of charges and penalties as well as to keep track of the hydrocarbon reserve in the subsoil of the Adriatic Sea. It was produced by Croatian Hydrocarbon Agency together with the accompanying environmental report and, in accordance with the UN/ECE Espoo Convention and the Protocol on SEA to the 1991 UN/ECE Espoo Convention, competent authorities of the Italy, Montenegro and Slovenia were notified of the SEA process, the FPP and accompanying environmental report. In the process of transboundary SEA, Italy, Montenegro and Slovenia forwarded their opinions on both documents, which were amended accordingly[321].

Out of the Adriatic and Ionian coastal States, Albania, Croatia, Montenegro and Slovenia are Parties to the Coastal Zone Protocol, together with the European Union. Bosnia and Herzegovina, Greece and Italy still have to ratify the instrument.

5.2. The fisheries restricted areas of the GFCM

The GFCM recommendations so far adopted relate to a broad range of matters, including driftnets, closed seasons, fisheries restricted areas, mesh size, management of demersal fisheries, plans of actions, red coral, incidental by-catch of seabirds or turtles, conservation of monk seal, records of vessels, port State control, lists of vessels engaged in illegal, unreported and unregulated fishing, logbooks, vessel monitoring systems.

Particularly notable for the purposes of this study are the measures on the establishment of FRAs in order to protect the deep-sea sensitive habitats. According to the definition given by the GFCM,

> fisheries restricted area (FRA) means a geographically-defined area in which some specific fishing activities are temporarily banned or restricted in order to improve the exploitation and conservation of demersal stocks.

FRAs can therefore be considered as an example of other effective area-based conservation measures in the context of this study.

FRAs have been established through Recommendation 30/2006/3, 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 *Eratosthemes Seamount*; Recommendation 33/2009/1 on the FRA in the *Gulf of Lions*; Recommendation 41/2017/3 on the FRA in the *Jabuka/Pomo Pit* area of the Adriatic Sea; and a recent

[321] *Ibid*., p. 274.

recommendation (text not yet available at this time) on the FRA in the *Bari Canyon* (Southern Adriatic). A road-map is being developed for establishing another FRA in the Southern Adriatic. The specific FRAs that are directly relevant to the Ionian and Adriatic Seas will be addressed further in this study[322].

Among the other measures adopted within the GFCM framework, also Recommendation 2005/1 on the management of certain fisheries exploiting demersal and deep-water species can be recalled, insofar as it prohibits the use of towed dredges and trawl nets fisheries at depths beyond 1000 m of depth. GFCM members are under the duty to notify, each year, the Executive Secretary of the GFCM with a report on the implementation of the management measures adopted. The GFCM Scientific Advisory Committee on Fisheries evaluates the impact of the implementation of such management measures and recommends, if necessary, to the GFCM either possible adjustments or new additional measures.

It is worth noting that, at the first meeting of the Post-2020 Advisory Committee of the Strategic Action Programme for the Conservation of Biological Diversity and Sustainable Management of Natural Resources (Post-2020 SAP BIO) in the Mediterranean Region, the representative of the GFCM emphasized that the conservation of biodiversity is an important topic for GFCM and that GFCM and UNEP-MAP are in a position to go hand in hand to help Mediterranean countries to ensure a balance between conservation and food production. The Memorandum of Understanding between GFCM and UNEP-MAP is an example of cooperation between a regional sea convention and a regional fisheries management organization: it represents the institutional framework for the cooperation between the two entities, and the Post-2020 SAP BIO could identify ways to enhance this cooperation. The representative of GFCM put emphasis on the monitoring of fishery restricted areas as an opportunity to highlight how special protection measures can serve both fisheries and biodiversity conservation[323].

5.3. The proposed marine protected areas for cetaceans

The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS) is one of the agreements concluded within the framework of the Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 1979; hereafter: CMS).

In the preamble of the CMS, the parties recognize *"that wild animals in their innumerable forms are an irreplaceable part of the earth's natural system which must be conserved for the good of mankind"* and declare themselves aware *"that each generation of man holds the resources of the earth for future generations and has an obligation to ensure that this legacy is conserved and, where utilized, is used wisely".* Migratory animals face several threats, especially during their movements, such as pollution of habitats, deterioration of natural stop-over places, direct hazards from hunting or fishing. The

[322] See *infra*, sub-paras. 7.3, A, B, C and D.

[323] Process for the Elaboration of the 'Post-2020 Strategic Action Programme for the Conservation of Biodiversity and Sustainable Management of Natural Resources in the Mediterranean Region' (Post-2020 SAP BIO), Online Advisory Committee Meeting, 2 April 2020, Meeting Report, paras. 61-64.

parties to the CMS acknowledge *"the need to take action to avoid any migratory species becoming endangered"* (Art. II, paras. 1 and 2)[324]. Fifteen cetacean species are listed in Appendix I (*Endangered migratory species*) and many others in Appendix II (*Migratory species having an unfavourable conservation status*).

The CMS calls for the conclusion of specific agreements for the protection of certain species worldwide or in particular regions. Art. IV, para. 4, encourages the parties *"to take action with a view to concluding agreements for any population or any geographically separate part of the population of any species or lower taxon of wild animals, numbers of which periodically cross one or more national jurisdictional boundaries".*

ACCOBAMS, which is one of the agreements concluded under Art. IV, para. 4, CMS, was opened for signature in Monaco on 24 November 1996 and entered into force on 1st June 2001. It is now binding on 24 out of the 29 States that border the marine waters to which it applies. The only State in the region of concern for this study that is not a party to ACCOBAMS is Bosnia and Herzegovina. It should be noted that the European Union has not yet ratified the instrument, even though it has the right to do so.

As regards its main principles and objectives, ACCOBAMS is one of the products of the trend towards international cooperation for the protection of the environment that has taken place after the United Nations Conference on Environment and Development (Rio de Janeiro, 1992). The major environmental principles embodied in the Rio Declaration on Environment and Development are found in the ACCOBAMS text. In the preamble, the parties recognize that cetaceans must be conserved for the benefit of present and future generations (so-called principle of inter-generational equity) and that their conservation is a common concern. They acknowledge the importance of integrating actions to conserve cetaceans with activities related to socio-economic development, including fishing and free circulation of vessels (principle of sustainable development). They stress the need to ensure co-operation among all the stakeholders, namely States, regional economic integration organizations, intergovernmental organizations and the non-governmental sector. They call for the provision of assistance, in a spirit of solidarity, to developing range States for research, training, monitoring and the establishment or improvement of scientific and administrative institutions.

Art. II, para. 4, binds the parties to apply the precautionary principle in implementing the measures prescribed under the Agreement. According to para. 1, *c*, of Annex 2, environmental impact assessment is required for allowing activities that may affect cetaceans or their habitat, including fisheries, offshore exploration and exploitation, nautical sports, tourism and cetacean watching, as well as for establishing the conditions under which such activities may be conducted.

The ACCOBAMS parties declare in the preamble that cetaceans *"are an integral part of the marine ecosystem which must be conserved for the benefit of present and future generations, and that their conservation is a common concern"*. Several threats adversely

[324] 'Migratory species' means the entire population or any geographical separate part of the population of any species or lower taxon of wild animals, a significant proportion of whose members cyclically and predictably cross one or more jurisdictional boundaries (Art. I, para. 1, *a*). 'Habitat' means any area in the range of a migratory species which contains suitable living conditions for that species (Art. I, para. 1, *g*).

affect the conservation status of cetaceans in the waters where ACCOBAMS applies, such as degradation and disturbance of their habitats, pollution, reduction of food resources, use and abandonment of non-selective fishing gear, as well as deliberate and incidental catches, as stated in the ACCOBAMS preamble[325].

ACCOBAMS binds the parties to achieve and maintain a favourable conservation status for cetaceans[326]. The main obligations of the parties are to prohibit any deliberate taking of cetaceans, to create and maintain a network of specially protected areas to conserve cetaceans (Art. II, para. 1) and to take the measures specified in the conservation plan (Annex 2).

According to Art. I, para. 2, ACCOBAMS applies to all cetaceans that have a range which lies entirely or partly within the Agreement area or that accidentally or occasionally frequent the Agreement area. In order to avoid ambiguity, a list of cetaceans covered by the Agreement is drawn up in Annex 1. It includes three species of the Black Sea and eighteen species of the Mediterranean Sea and contiguous Atlantic waters. The list is only indicative (Art. I, para. 2) and, consequently, also other species of cetaceans can be covered by ACCOBAMS.

It is worth mentioning that ACCOBAMS does not contain any provisions that exclude its application to military ships or State-owned ships in general. It follows that military activities fall under the scope of ACCOBAMS.

ACCOBAMS applies in general to all 'maritime waters' within the 'Agreement area', irrespective of their legal condition, be they maritime internal waters[327], territorial seas, exclusive economic zones, fishing zones, ecological protection zones, high seas. An important element from the legal point of view is represented by the disclaimer provisions contained in ACCOBAMS (Art. I, para. 1, *b* and *c*):

> Nothing in this Agreement nor any act adopted on the basis of this Agreement shall prejudice the rights and obligations, 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.

[325] A more detailed list of threats affecting cetaceans is found in an introductory note on *ACCOBAMS – A Biodiversity Conservation Tool for the Mediterranean and Black Seas*, published in the booklet containing the official text of ACCOBAMS.

[326] Under Art. I, para. 3, ACCOBAMS, the expression favourable conservation status has to be defined as it is in Art. I, para. 1, *c*, CMS: 'Conservation status' will be taken as *"favourable"* when: (1) population dynamics data indicate that the migratory species is maintaining itself on a long-term basis as a viable component of its ecosystems; (2) the range of the migratory species is neither currently being reduced, nor is likely to be reduced, on a long-term basis; (3) there is, and will be in the foreseeable future sufficient habitat to maintain the population of the migratory species on a long-term basis; and (4) the distribution and abundance of the migratory species approach historic coverage and levels to the extent that potentially suitable ecosystems exist and to the extent consistent with wise wildlife management.

[327] However, under Art. XV, a reservation may be entered in respect of a specifically delimited part of internal waters.

> No act or activity undertaken on the basis of this Agreement shall constitute grounds for claiming, contending or disputing any claim to national sovereignty or jurisdiction.

In fact, while all the States bordering the Black Sea and the contiguous Atlantic area have established an exclusive economic zone beyond a 12-n.m. territorial sea, there is at present in the Mediterranean Sea a great variety of coastal zones subject to national jurisdiction beyond the territorial sea. This consideration also applies to the sub-region of interest for this study: three States (Italy, Greece and Croatia) have proclaimed an exclusive economic zone[328]; one State (Slovenia) has established an ecological protection zone; two States (Albania and Montenegro) have not yet extended their jurisdiction beyond the territorial sea; one State (Bosnia and Herzegovina) has such a small portion of sea under its jurisdiction that it has only delimited its borders with Croatia in 1999, through a treaty that divides *"the land, the sea and the interior bodies of water, as well as the air space and underground space"*[329] between the two countries. The situation is even more complicated by the fact that the exclusive economic zones proclaimed by some States in the region still need to be delimited or implemented through further instruments[330].

In order to overcome these and other problems, the ACCOBAMS disclaimer provisions can be understood in two consistent ways. First, the establishment of intergovernmental co-operation in the field of conservation of cetaceans is not intended to prejudice a number of legal and political questions that have a very different nature and are still pending, such as those relating to the nature and extent of national coastal zones or to the drawing of marine boundaries between adjacent or opposite States. Second, the existence of such questions should not jeopardize or delay the adoption of measures necessary for the conservation of cetacean species.

As provided for in Art. XIII, ACCOBAMS is open for signature and ratification "*by any range State, whether or not areas under its jurisdiction lie within the Agreement area".* 'Range State' is defined as *"any State that exercises sovereignty and/or jurisdiction over any part of the range of a cetacean population covered by this Agreement, or a State, flag vessels of which are engaged in activities in the Agreement area which may affect the conservation of cetaceans"* (Art. I, para. 3, *g*). In turn, 'range' is defined as *"all areas of water that a cetacean inhabits, stays in temporarily, or crosses at any time on its normal migration route within the Agreement area"* (Art. I, para. 3, *f*).

From the two definitions above it may be inferred that also States which do not border the waters of the Agreement area can become parties to ACCOBAMS, provided that they exercise sovereignty or jurisdiction over waters falling within the range of cetaceans that stay temporarily or cross the waters falling under the Agreement area. Moreover, also

[328] Although, in the first two cases, the zone still needs to be implemented.

[329] Treaty on the State Border between the Republic of Croatia and Bosnia and Herzegovina (Sarajevo, 30 July 1999). Source: CHARNEY & SMITH (eds.), *International Maritime Boundaries*, vol. IV, The Hague, 2002, p. 2891 (unofficial English translation). The treaty has not entered into force. It provisionally applies according to Art. 22, para. 1. A map of the boundary is available *supra*, in Figure 8.

[330] For example, the exclusive economic zone of Italy, proclaimed by Law No. 91 of 14 June 2021, is awaiting implementation through Presidential Decree.

other States are entitled to become parties to ACCOBAMS, provided that ships flying their flag are engaged in activities which may affect the conservation of cetaceans (for example, shipping, as it entails the risk of collisions with cetaceans, or naval exercises, as they produce underwater noise). Participation by the non-regional States concerned could only strengthen the co-operation established under ACCOBAMS.

As mentioned above, ACCOBAMS is also open to the participation by regional economic integration organizations at least one member of which is a range State, such as the European Union. According to its rules, this international organization is entitled to exercise an exclusive competence in the field of fisheries and a competence shared with its member States in the field of the protection of the environment. The European Union (at that time European Community) did participate to the negotiations for ACCOBAMS and pointed out that it is

> (…) fully committed to the conservation of these species. As a matter of fact, all cetaceans are fully protected under the EU Directive for the conservation of natural habitats, and of wild flora and fauna.
>
> Furthermore, this draft agreement has some important aspects in relation with fisheries regulations, a matter of full Community competence. This implies that any disposition dealing specifically with the regulation of fisheries will have to be agreed upon within the framework of the Common Fisheries Policy, by all the Member States of the European Union, before it can be agreed upon by those Member States who will become Parties to the proposed agreement.

Reference is made in the statement to Directive 92/43 of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. Another important subsequent European Union instrument is Directive 2008/56/EC of 17 June 2008, establishing a framework for community action in the field of marine environmental policy (MSFD). The legislation adopted by the European Union in the field of fisheries includes numerous enactments that are frequently revised and updated. Special relevance for ACCOBAMS have Regulation No. 1005/2008 of 29 September 2008, establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, and Regulation No. 1224/2009 of 20 November 2009, establishing a Community control system for ensuring compliance with the rules of the common fisheries policy, as well as the legislation prohibiting the use of drift nets.

One of the main obligations of the Parties to ACCOBAMS is to

> prohibit and take all necessary measures to eliminate, where this is not already done, any deliberate taking of cetaceans" (Art. II, para. 1).

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, CMS, that is:

> (…) taking, hunting, fishing, capturing, harassing, deliberate killing or attempting to engage in any such conduct.

Not only whaling in any of its forms, but also all activities which may harass cetaceans are consequently banned in the Agreement area. This kind of ban is in full

conformity with the UNCLOS: in fact, according to Art. 65, nothing in Part V (that is the UNCLOS part dealing with the exclusive economic zone) *"restricts the right of a coastal State or the competence of an international organization, as appropriate, to prohibit, limit or regulate the exploitation of marine mammals more strictly than provided for"* in Part V itself.

Two exceptions to the interdiction of 'taking' are envisaged by Art. II, para. 2, namely in emergency situations and for research purposes. The exceptions are defined in very strict terms. The emergency situations are only those *"where exceptionally unfavourable or endangering conditions"* for the conservation status of cetaceans occur, as indicated in Annex 2, para. 6. Research activities which may entail the 'taking' of cetaceans are only those aimed at maintaining their favourable conservation status. They must be 'non-lethal', that is not resulting in the killing of these animals, and '*in situ*', that is carried out in their natural habitat and not in other places (laboratories, dolphinaria, etc.).

Coming to the specific purpose of this study, it is to be considered that cetaceans use vast spaces and require specific environments for their natural needs and behaviors. Another main obligation of Parties to ACCOBAMS is to establish a network of marine protected areas that would contribute to achieve and maintain a favourable conservation status for cetaceans (Art. II, para. 1):

> Parties (…) shall co-operate to create and maintain a network of specially protected areas to conserve cetaceans.

In this regard, para. 3 of Annex 2 to ACCOBAMS makes a specific reference to the Barcelona Convention and its Areas Protocol, as the appropriate framework within which specially protected areas can be established that serve as habitats for cetacean or provide important food resources for them. In addition to this explicit reference, para. 3 of Annex 2 to ACCOBAMS leaves open the possibility to use for this purpose *"other appropriate instruments".*

The ACCOBAMS parties still have to achieve the objective of creating and maintaining a network of specially protected areas to conserve cetaceans. Resolutions 3.22, 4.15 and 6.24 have dealt so far with the topic. Those areas should coincide with those sites recognized as Cetaceans Critical Habitats (CCHs). Their identification is based on the overlapping of areas of interest for marine mammals (IMMAs) and the mapping of anthropogenic threats.

Resolution 3.22, adopted in 2007 and entitled entitled 'Marine Protected Areas for Cetaceans', includes the first list of marine protected areas recommended by the Scientific Committee of ACCOBAMS. At the time of its adoption, the list comprised 18 sites. The instrument contains a number of criteria for the selection of protected areas, together with a format for the related proposal (Annex 1), as well as a set of guidelines for the establishment and management of marine protected areas for cetaceans (Annex 2).

Resolution 4.15, adopted in 2010 and entitled 'Marine Protected Areas of Importance for Cetaceans Conservation', added new sites to the previous list (which reached 22 sites) and encouraged the States concerned to promote the institution of the areas of special importance for cetaceans to ensure their effective management. It is

worth mentioning that the ACCOBAMS parties noted with satisfaction, *inter alia*, the progress towards the inclusion in the Natura 2000 network of the Cres-Lošinj marine protected area in Croatia for the protection of some small cetacean species.

Resolution 6.24, adopted in 2016 and entitled 'New Areas of Conservation of Cetaceans Habitats', took note, *inter alia*, of the revised guidelines for the establishment and management of marine protected areas for cetaceans; encouraged MPA managers of areas within CCHs to implement relevant management actions; encouraged the parties to update regularly the list of areas containing CCHs in collaboration with the Scientific Committee; and requested the Task Manager on CCH, the regional representatives and the coordinators of conservation plans to revise the existing CCHs taking into account the proposed IMMAs and the threat-based management approach, evaluate the effectiveness of management within CCHs and revise and update the relevant tools.

The ACCOBAMS parties are still working on the identification of CCHs in the ACCOBAMS area, with the view of proposing spatial management measures.

A detailed identification of the proposed CCHs within the framework of ACCOBAMS is available in Figure 20 below. The map is currently being updated through a threat management approach that combines both the inventory of human activities and the distribution of the populations of cetaceans. In the Adriatic and Ionian region, four CCHs are proposed. The *Waters along east coast of the Cres-Lošinj archipelago* (No. 15 on the map) is identified as an area of special importance for the bottlenose dolphin; the *Sazani Island – Karaburuni Peninsula (Adriatic and Ionian Sea, Albania)* (No. 6 on the map) and the *eastern Ionian Sea and the Gulf of Corinth (Greece)* (No. 5 on the map) are identified as areas of special importance for the common dolphin and other cetaceans; the *Southwest Crete and the Hellenic Trench (Greece)* (No. 19 on the map) is identified as an area of special importance for the sperm whale. The map pictures the Pelagos Sanctuary (in blue) and the proposed CCHs (in red).

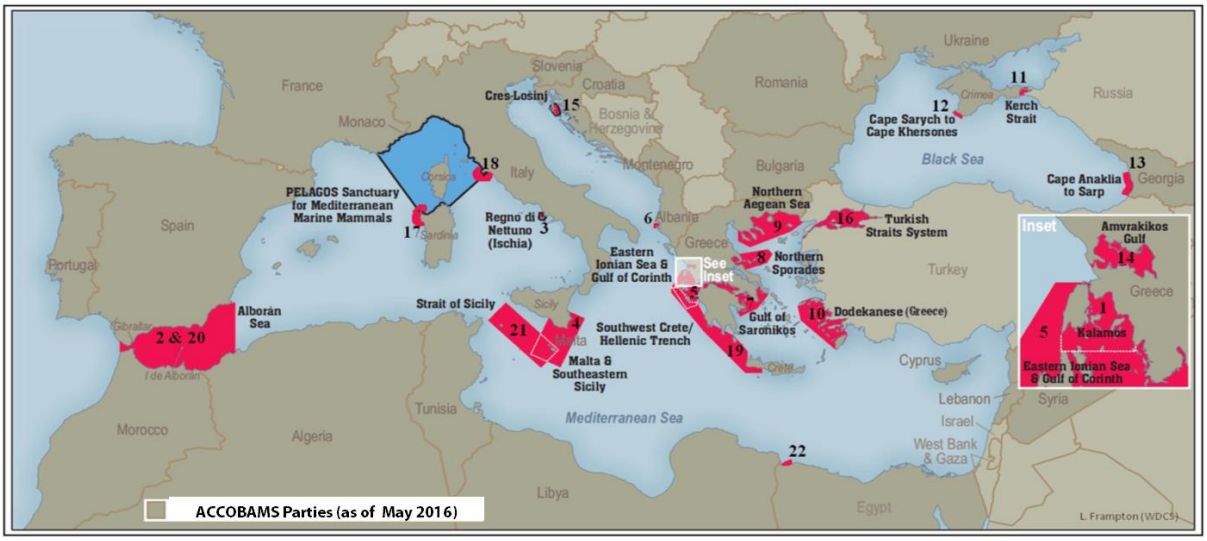

Figure 20 – Proposed Cetacean Critical Habitats (CCHs). Source: ACCOBAMS.

Figure 21 below indicates the overlapping of CCHs identified by ACCOBAMS, EBSAs identified within the framework of the CBD (which include cetacean habitats among the elements for their justification), nationally designated marine protected areas, and NATURA 2000 sites.

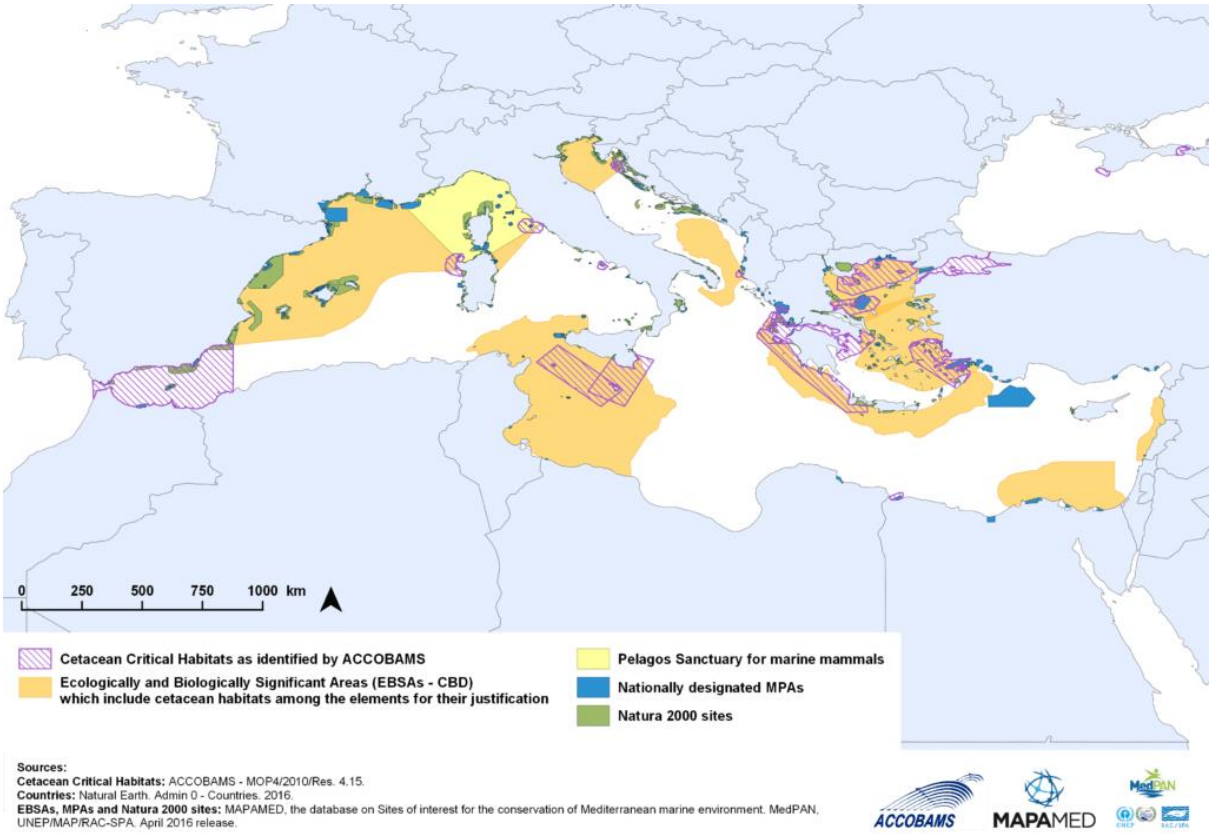

Figure 21 – Overlapping of area-based management tools for cetacean conservation in the Mediterranean Sea. Source: ACCOBAMS.

In addition to the identification and establishment of specially protected areas for cetaceans, at least two other issues relating to cetacean conservation are worth mentioning, as they prove particularly relevant to the Adriatic region. New research in the area of interest for this study – in particular, the northern Adriatic – shows that local dolphins contain high levels of PCBs, highly toxic chemicals, and that females pass on their pollutant burden to their young[331]. The study is noted by the Secretariat of ACCOBAMS, which publicized extensively the results on its website. Another issue of concern for the area of this study relates to the noise produced by offshore exploration activities in the Adriatic Sea and their impact on cetaceans[332].

[331] The study was led by Morigenos – Slovenian Marine Mammal Society from Piran (Slovenia): GENOV et al., *Linking Organochlorine Contaminants with Demographic Parameters in Free-ranging Common Bottlenose Dolphins from the Northern Adriatic Sea*, in *Science of the Total Environment*, 2019, pp. 200-212.

[332] The issue of anthropogenic noise as a threat to cetaceans and marine life in general is attentively followed within the framework of ACCOBAMS, and several initiatives are led in order to gather more accurate information, which is more abundant for the northern Adriatic and still poor as regards the waters of Albania and Montenegro.

In the Mediterranean regional context, three protocols to the Barcelona Convention are of particular relevance for the establishment of marine protected areas, which may also be given a transboundary character. The Areas Protocol is the most appropriate tool to protect highly migratory marine species, by creating 'blue corridors'. The instrument does not prejudice any question concerning maritime delimitations. It regulates the establishment of SPAs or SPAMIs – the latter being included in a List that ensures them an *erga omnes partes* effect. So far, 39 SPAMIs have been listed, 6 of which are located in the Adriatic and Ionian Seas, namely: *Miramare Marine Protected Area* (Italy); *Plemmirio Marine Protected Area* (Italy); *Torre Guaceto Marine Protected Area and Natural Reserve* (Italy); *Porto Cesareo Marine Protected Area* (Italy); *Karaburun Sazan National Marine Park* (Albania); and *Landscape Park Strunjan* (Slovenia). No area in the central portion of the region of concern has yet been included under the special protection regime of the SPAMI List. Three proposals identify potential SPAMIs in the *Northeastern Ionian*, which would encompass the Jabuka/Pomo Pit; in *Santa Maria di Leuca*, which would encompass waters falling only under Italian jurisdiction; and in the *Northern and Central Adriatic*, which, however, would necessitate the prior ratification of the Areas Protocol by Greece. The Offshore Protocol envisages 'precautions' in particular for SPAs that have been identified under the Areas Protocol or established by a party. Improving participation in the Offshore Protocol by the States in the region of concern is critical, furthermore when considering that seabed activities are intensively carried out on the Adriatic continental shelf. The Coastal Zone Protocol provides Mediterranean States with a legal and technical tool to ensure sustainable development throughout the shores of this regional sea. This instrument certainly opens up to the opportunity of building transboundary integrated coastal management based on spatial planning. As of today, 22 proposals for marine protected areas for cetaceans have been identified within the framework of the ACCOBAMS, 4 of which would be located in the Adriatic and Ionian Seas, namely: the *Waters along east coast of the Cres-Lošinj archipelago*; the *Sazani Island – Karaburuni Peninsula (Adriatic and Ionian Sea, Albania)*; the *Eastern Ionian Sea and the Gulf of Corinth (Greece)*; and the *Southwest Crete and the Hellenic Trench (Greece)*. The parties still have to achieve the objective of creating and maintaining a network of marine protected areas for cetaceans, which should coincide with those sites recognized as CCHs. The identification of CCHs is, in turn, based on the overlapping of IMMAs and the mapping of anthropogenic threats. Other effective area-based conservation measures, in the form of FRAs, are in place within the framework of the GFCM and aim at protecting vulnerable species and ecosystems of deep-sea habitats. In the context of the Barcelona System, noteworthy is that the MAP Programme of work for the biennium 2020-2021 includes the recourse to the tool of coastal and marine protected areas among its 'strategic objectives'.

CHAPTER 6

THE ESTABLISHMENT OF MARINE PROTECTED AREAS WITHIN AREAS OF NATIONAL SOVEREIGNTY AND JURISDICTION

6.1. Legal frameworks within Adriatic and Ionian States

Not being the focus of the present study, which aims at identifying the available means for transboundary cooperation in the field of marine spatial protection, the national legal frameworks relevant for the establishment of national marine protected areas are only briefly recalled hereafter. For each country, the analysis is limited to the main national instrument providing the framework for the establishment of national parks, possibly including marine protected areas, and does not include other national laws and regulations that, although relevant for the marine environment (e.g., fisheries), do not specifically provide for the establishment of spatial measures.

A. Existing national legal frameworks

Albania. The Protected Areas Act No. 81 of 2017[333] aims at the designation, preservation, administration, management and sustainable use of protected areas and biological and natural resources based on the principle of sustainable development, in order to guarantee their environmental, economic, social and cultural benefits to the entire society (Art. 1). The law lays down the institutional framework, including both public and private entities and their tasks and responsibilities, for the conservation and sustainable management of protected areas. The latter are divided into different categories (Arts. 14-21), based on those elaborated by the IUCN. Albanian law specifies that protected areas may pursue a *"national interest"* or an *"international interest"* (Art. 6). In the second case, they may belong to different networks, namely as Ramsar sites; Special Areas of Conservation; areas of the Emerald network; Biosphere reserves; and natural heritage areas. Art. 22 specifically concerns the establishment of marine protected areas, described as any protected portions of marine waters, including coastal areas and the seabed, together with their flora and fauna, as well as their historical, cultural and archeological features. Art 22, para. 3, contains a list of activities that are prohibited within a marine protected area. These include, *inter alia*, the taking of marine samples and dumping. The different IUCN categories of protected areas and their respective regime or protection also apply to marine protected areas (Art. 22, para. 2). It is also envisaged that zoning measures shall be set forth in a management plan for each marine protected area, which shall specify those activities that are prohibited and those that can be undertaken only after having received the relevant authorization by the competent national authority (Art. 22, para. 4). Art. 34 regulates fishing activities in marine and coastal areas. Remarkable, among the objectives of a marine protected area, is the reference made by

[333] Text available at http://extwprlegs1.fao.org/docs/pdf/alb176095.pdf.

the recent Albanian law to the goal of restoring ecosystems that have resulted negatively impacted by climate change (Art. 22, para. 1, let. dh).

Bosnia and Herzegovina. The Nature Protection Act of 2013[334] regulates the competencies of bodies that deal, *inter alia*, with the identification of habitat types and ecologically significant areas, species and subspecies, and the protection and conservation of biodiversity, the protection of marine and coastal natural values, and the establishment of a European ecological network of specially protected areas (NATURA 2000) (Art. 1). The same law describes a 'protected area' as *"a clearly defined geographical area, recognized and intended to reach long-term conservation of nature, public benefit functions of nature, and cultural values, and which it is governed by legal and other effective mechanisms"* (Art. 8). The same provision defines '*in situ* conservation (in nature)' as the *"conservation of ecological systems in natural habitats and maintenance and restoration of species capable of survival in their natural environment, (…); preservation parts of geological heritage at the place of their origin, i.e., mineral / rock deposits and fossils"*. Moreover, an 'ecological network' is envisaged as *"a system of interconnected or spatially close ecologically significant areas that balance biogeographical distribution significantly contributing to the preservation of natural balance and biodiversity"* (Art. 8). The Bosnian law of 2013 operates a distinction among different categories of protected areas: strict nature reserve (Art. 135), wilderness area (Art. 136), national park (Art. 137), nature park (Art. 138), habitat/species management area (Art. 139), protected landscape (Art. 140), protected area with sustainable use of natural resources (Art. 141).

According to Art. 144, the establishment of protected areas, at the federal or cantonal level, can be carried out with the consent of the municipal councils in whose areas the area is protected according to the spatial plan. The relevant instrument shall contain: name and category of protected natural value; precise description of the boundaries of the spatial scope of the protected area; name of the category; name of the scale of the cartographic representation; cartographic presentation with precisely described boundaries of spatial coverage, which is an integral part of the act on the proclamation. The adoption of a new Nature Protection Act is ongoing in Bosnia and Herzegovina and not yet finalized[335].

Croatia. The Nature Protection Act of 24 June 2013[336] recognizes protection to nature, intended s "the overall biological, landscape and geological diversity" (Art. 3)[337]. Art. 6 provides that nature protection shall be implemented, *inter alia*, through *"designation of protected parts of nature"* and by *"establishing a system for management of nature and protected parts of nature".* Art. 111 identifies nine categories of protected areas, namely: strict reserve, national park, special reserve, nature reserve (classified as of national importance) and regional park, nature monument, significant landscape, park forest and park architecture monument (classified as of local importance). Arts. 112 and

[334] Text available at http://extwprlegs1.fao.org/docs/pdf/bih143206.pdf.
[335] Presentation by Mr Josip Njavro, representative of Bosnia and Herzegovina at the Workshop organized by TSG 3 EUSAIR, *What can EUSAIR do to enable the blue and green sustainable growth in EUSAIR: MSP in EUSAIR state of the art*, held online on 9 November 2021.
[336] Text available at http://extwprlegs1.fao.org/docs/pdf/cro143039.pdf.
[337] Unofficial translation from Croatian.

following regulate each category of protected area. Of particular relevance to this study is Art. 122, which explicitly provides that *"protected areas may be connected across borders with protected areas of another country".*

Arts. 123 and following regulate the designation of a protected area. Art. 126, in particular, establishes that the relevant designation shall indicate: the name and category of the protected area, a description of the borders of the protected area, a cartographic representation of the protected area in analogue and digital format, which constitutes an integral part of the act on designation, an indication of the scale of the cartographic representation, the special geodetic background document for entry of the legal regime into the cadastre and the land registry. The act on the designation of the protected area is published in the official gazette (Art. 127) or in the official journal of the regional self-government unit and in the official gazette, depending whether the area is of national or local importance.

All protected areas shall be recorded in a Register of protected areas (Art. 129), which is kept by the Ministry of Environment and Energy, and all relevant data shall be public. Protected areas shall be managed by public institutions (Art. 130), which *"shall carry out activities of protection, maintenance and promotion of the protected area with the aim of protecting and conserving the original state of nature, ensuring the unimpeded natural processes and sustainable use of natural resources, monitoring implementation of nature protection requirements and measures in the territory they manage, and participating in collection of data for the purpose of monitoring the state of conservation of nature"* (Art. 131). A specific provision refers to the funds of the operation of public institutions, which shall be ensured from State budget and budgets of local and regional self-government units, income from the use of protected areas, income from fees, and other sources established by the law and special regulations (Art. 132).

Specific provisions (Arts. 137-150) regulate the implementation of protective measures in the areas, by providing rules concerning the management plan, prohibited actions, forest protection programme, military exercises[338], general acts on protection and conservation of a protected area, projects, actions and exploration, visiting, rights of the owners to remuneration, and care for protected areas. Further, general provisions of the Croatian law regulate access to information and public participation (Arts. 198-200), financing (Art. 204), supervision in protected areas (Arts. 206-209) and inspectional supervision (Arts. 210-225). In this regard, with particular reference to the marine and coastal environment, "authorised persons with the Coast Guard shall carry out inspectional supervision in the area of the ecological and fisheries protection zone or the exclusive economic zone of Croatia in accordance with a special regulation" (Art. 211, para. 2). Authorised persons with the Coast Guard may carry out inspectional supervision in the internal waters and territorial sea of Croatia, if there exists reasonable doubt with

[338] *"(1) Performance of military exercises and other activities for defence purposes which could impair the features for which it was designated as such shall be prohibited in the protected area. (2) By way of derogation from paragraph 1 of this Article, performance of military exercises and other activities for defence purposes shall be allowed in areas in which at the moment of designation special (military) purpose was in place, in the scope and in a manner that does not endanger protected natural values"* (Art. 141).

regard to violation of the Act and connected regulations and civil servants with the inspectional service of the Ministry are not present or are unable to intervene (Art. 211, para. 3). Part XIV of the Act lists the amounts of fines established for different types of infringements of the Act.

Greece. The Law for the Management Agencies of Protected Areas in Greece (No. 4519 of 8 February 2018) regulates all issues concerning the organization and operation of protected areas management bodies. This act follows the revised national list of the NATURA 2000 Network in Greece. Presidential Decrees and management plans should gradually be adopted for all areas of the NATURA 2000 Network. With regard to the management of fisheries and marine sites, Law No. 4519/2018 implies new responsibilities for management agencies that should be compatible with both the general fisheries legislation and the environmental legislation, especially with regard to the Habitat Directive, the MSFD and marine spatial planning. Main challenges relate to governance, needed material and human resources and the planning and implementation of effective management measures.

Italy. The Framework Law on Protected Areas (No. 394 of 6 December 1991) sets forth the general category of protected natural areas (*aree naturali protette*), which include national parks (*parchi nazionali*), regional natural parks (*parchi naturali regionali*) and nature reserves (*riserve naturali*)[339]. Both national parks and nature reserves can be composed of marine areas, while regional natural parks can only include marine areas adjoining the coast[340]. Marine specially protected areas are specifically regulated by the previous Law No. 979 of 31 December 1982 (Provisions for the Defence of the Sea) which envisages the category of marine reserves (*riserve marine)*. Law No. 979/1982 is still applicable to all matters which are not explicitly regulated by Law No. 394/1991.

The definition of 'marine reserve', as envisaged by Art. 25 of Law No. 979/1982, is the following: *"marine nature reserves are composed of marine components, including by the waters, the seabed and the adjoining coasts, and showing remarkable interest because of their natural, geomorphological, physical and biochemical characteristics, with special regard to the coastal and marine flora and fauna, as well as the scientific, ecological, cultural, educational and economic importance".*

Within marine protected areas, all activities which risk compromising the protection of the environmental characteristics and the objectives to be achieved by the protection regime are prohibited. In particular the following activities are forbidden: hunting, collecting and damaging fauna and flora species and the removal of minerals and archaeological findings; the alteration of the geophysical environment and the biochemical and hydrobiological characteristics of the water; advertising activities; the introduction of arms, explosives and any destructive or catching equipment; navigation by motor vessels; any kind of disposal of either liquid or solid waste. All the prohibitions

[339] Nature reserves can be established either by the State or by the regions.

[340] Other kinds of marine specially protected areas are envisaged by Decree No. 1639 of 2 October 1968, implementing the Italian framework law on fisheries. The decree provides for the creation of zones of biological protection (*zone di protezione biologica*), where fishing activities may be prohibited or restricted.

and any exceptions that may be made are specified in the regulations for each marine protected area.

The regime of parks, including marine parks, is more complex than that of reserves. In particular, the body in charge of the management of a national park, called the Park Institution (*Ente parco*), is entrusted with the adoption of a plan which, *inter alia*, may subdivide the area of the park on the basis of different degrees of protection, providing for the following:

- integral reserves (*riserve integrali*) where the natural environment is conserved in its integrity.

- oriented general reserves (*riserve generali orientate*) where new buildings, widening of existing constructions and activities for the transformation of the territory are forbidden. Traditional productive uses, the implementation of strictly necessary infrastructures, interventions for the management of the natural resources performed by the Park Institution, as well as maintenance activities of the existing structures, may be authorized.

- areas of protection (*aree di protezione*) where, with reference to the aims to be achieved by the establishment of the park and the general criteria fixed by the Park Institution, the agricultural-silvicultural, sheep-rearing and fishing activities and the collecting of natural products can continue, according to the local customs and the methods of biological agriculture, while the production of quality handicrafts is promoted.

- areas of economic and social promotion (*aree di promozione economica e sociale*), which make up part of the same ecosystem and are most widely modified by the impact of human processes, where all the activities aimed at the improvement of both the socio-cultural life of the local populations and the enjoyment of the park by visitors are allowed if compatible with the aims of the protection regime.

The rules applying to marine reserves are simpler than those relating to parks. All activities for the protection, research and promotion of a marine reserve are entrusted to the Minister of the Environment, relying on the Central Inspectorate for the Defence of the Sea. The competent harbour-master's office (*Capitaneria di Porto*) is in charge of the surveillance and management of the reserve. Proposals and advice for the appropriate management of the reserve are made by the Commission of the Reserve (*Commissione di Riserva*), appointed by the Minister of the Environment.

All Italian marine protected areas are divided into three types of zones (A, B, C), corresponding to three different levels of protection. The marine reserve established as part of the trilateral Pelagos Sanctuary is a special case, due to its international character.

Montenegro. The Nature Protection Act of 2016[341] represents the latest piece of Montenegrin legislation prescribing general measures for nature protection, which include the establishment of protected areas. As a general instrument, it includes further provisions on the protection of endangered species, pollution control, environmental planning, data collection and reporting, access to information and financing.

[341] Text available at http://extwprlegs1.fao.org/docs/pdf/mne178833.pdf.

Slovenia. The Nature Conservation Act of 1999, as amended several times[342], prescribes biodiversity conservation measures and a system for the protection of valuable natural features. The general goals of this law have been implemented through specific decrees. For what concerns the scope of this study, noteworthy are the Decree on Ecologically Important Areas of 29 April 2004 (as amended on 19 April 2013) [343], with an Annex containing the number and name of the relevant areas, which forms an integral part of the instrument; and the Decree on Special Protection Areas (Natura 2000) of 29 April 2004 (also amended on 19 April 2013)[344].

B. Indicators for effective national legal frameworks

As regards the effectiveness of the legislative instruments establishing marine protected areas, some indicators may be identified that could be used as helpful references against which to measure both the drafting and the implementation of national laws and regulations[345].

a. Coordinated implementation of international and regional commitments. In the Adriatic and Ionian Seas, as with any other regional sea, the regime for marine protected areas established under the domestic legislation of coastal States should fully comply with general obligations under international law and specific obligations laid down by relevant global and regional instruments[346]. While there are no contradictions between the provisions of different treaties applicable to marine protected areas, there may be differences in the standards and degree of details of instruments adopted at different levels. Regional and sub-regional instruments usually ensure stronger and more targeted protection. Even greater precision can be delivered within national instruments, which should include provisions that harmonize the approaches pursued at global and regional scales. This can be pursued through: consultation between the various focal points for different treaties and regional organizations, in advance of international negotiations and when developing domestic implementation arrangements; the adoption or strengthening of protected areas legislation that is specifically applicable to coastal and marine protected areas and corresponds to the more specific obligations laid down by regional treaties; the prompt enactment of implementing regulations necessary to actually establish marine protected areas, as modern and comprehensive framework legislation is of little use if it is not followed up by concrete implementation instruments.

b. Institutional coordination. A critical issue is the sharing of competencies between State authorities. International instruments say nothing about how their Parties should organize the distribution of powers among their respective national entities when setting

[342] The latest amendments were effected in 2020. A consolidated version of the original act and its subsequent amendments is available at http://extwprlegs1.fao.org/docs/pdf/slv61725.pdf.
[343] Original text of the decree available at http://extwprlegs1.fao.org/docs/html/slv113406.htm. The amendments of 2013 are available at http://extwprlegs1.fao.org/docs/html/slv130560.htm.
[344] Original text of the decree available at http://extwprlegs1.fao.org/docs/html/slv113405.htm. The amendments of 2013 are available at http://extwprlegs1.fao.org/docs/html/slv130559.htm.
[345] Based on *Mediterranean Countries' Needs for Legal, Policy and Institutional Reforms to Strengthen the Management of Existing Marine Protected Areas*, 27 March 2007, UNEP(DEPI)/MED WG.309/Inf.5 rev.1.
[346] All the relevant instruments at global and regional scale have been addressed above in this study.

up and managing marine protected areas. In fact, this would be an unwarranted invasion of the sphere of domestic jurisdiction. Each Party is therefore free to determine whether the obligation to establish and manage marine protected areas can be better fulfilled at the national or subnational level, or jointly through cooperation between both levels. As a consequence, competencies can overlap in a horizontal way between different authorities (e.g., Minister of the Environment, Minister of Shipping, Minister of Fisheries) or in a vertical way between national and subnational authorities (provinces, regions, autonomous communities). An efficient coordination should be ensured where local and national authorities each have different functions and responsibilities. Fragmented distribution of competencies, whether at the regulatory or the management level, does not help the management of marine protected areas. Although, ideally speaking, a sharing of competencies should mean recourse to additional experience and expertise, in practice it may deteriorate into a situation of confusion and overlapping of powers, delay in the adoption of the appropriate measures and potential disputes. For these reasons, where more than one administration is involved in a marine protected area, special measures to ensure cooperation, coordination and accountability should be envisaged. There are many options for this purpose, ranging from integrated management committees to regular meetings between the competent authorities. The relationship between a marine protected area's managing body and other authorities also needs attention. Regulations should therefore support coordination between all agencies with responsibilities for activities affecting the area and establish a procedure for resolution of any conflicts.

c. Specific legal provisions for marine protected areas establishment and management. In the Adriatic and Ionian Seas, specific legislations on protected areas are in place. Nature protection acts of more general scope, however, include within the same instrument rules concerning terrestrial and marine protected areas. This approach may entail the risk to underestimate the fact that marine protected areas are fundamentally different from terrestrial protected areas, even if it is debatable whether these differences are in kind or degree. An important factor underlying these differences is the nebulous nature of boundaries in the fluid marine environment and the presence of many species that do not respect paper boundaries (highly migratory species; anadromous and catadromous species; shared and straddling stocks) and other natural features. These aspects have been highlighted since 1991, in the first Guidelines for the Establishment of Marine Protected Areas elaborated by the IUCN:

> In the sea, habitats are rarely precisely or critically restricted. Survival of species cannot usually be linked to a specific site. Many free swimming species have huge ranges and water currents carry the genetic materials of sedentary or territorial species over large distances, often hundreds of kilometres. The same genetic community is likely to be represented throughout a large geographic range, occurring wherever substrate and water quality are suitable. As a consequence, endemism is rare and is usually confined to species which brood or care for their young rather than have them dispersed by currents. There is no authenticated record of recent extinction of a completely marine species with planktonic larvae. The concept of critical habitats of endangered species is thus restricted in application to areas critical to marine mammals, sea turtles and sea birds and to the habitats of the occasional endemic species. Therefore, in the sea, the ecological case for protection of an area can less often be based on concepts of critical habitat of endangered

> species or threat of extinction but it may more probably be based on protection of critical or important habitat for commercially or recreationally important species, or for protection of a particularly good example of a habitat type with its associated genetic diversity of its communities[347].

A special regime for marine protected areas is appropriate because of legal differences specific to the marine environment. Rules of international law are fundamentally different depending on the terrestrial or marine nature of the area involved. In addition, long-established rules and concessions may apply in the "public maritime domain", depending on each country's legal system, even though conventional property rights cannot be exercised in marine areas.

Whatever the enabling legislation, scientific information is needed to determine the size, shape, conservation objectives and management prescriptions for each area. The legal instrument for establishment of a marine protected area must clearly define the conservation and management objectives of the area concerned and delimit its boundaries, together with a zoning system and buffer zones where appropriate.

d. Adoption of protection measures. The Areas Protocol provides, in this regard, a useful guidance. In any event, protection measures must be selected on a case-by-case basis, taking into account the characteristics of each marine protected area. For instance, any decision to regulate the passage of ships, if needed, must comply with the right of innocent passage provided for by international law (Art. 17 UNCLOS) and cannot totally prohibit navigation in an extended area where main maritime routes occur. The coastal State has a margin of discretion as regards the nature of the control measures to be adopted: the activity may be either prohibited, under certain conditions, or regulated (i.e., where the activity is authorized subject to certain general conditions or special permits). For the same reasons, within the limits of its exclusive economic zone a coastal State should not undertake measures that contravene the objective of "optimum utilization" of the living resources of the zone (Art. 62 UNCLOS), e.g. through the establishment of "no-take" zones. Moreover, national legislation (whether generic or specific to marine protected areas) must provide for use of environmental impact assessment procedures, in order to ensure that sectoral activities and programmes take account of the special status and objectives of the area.

e. Management planning and zoning for marine protected areas. Each marine protected area should be covered by a specific and sufficiently detailed management plan, which should always be envisaged in national legislations. Protection, planning and management measures must be based on an adequate knowledge of the elements of the natural environment and of socio-economic and cultural factors that characterize the area. Management plans should prescribe appropriate regulatory and management measures for different zones within the MPA. The plan should also include contingency measures to respond to incidents. Moreover, with a view to ensuring policy consistency, it should be specified that the regulatory provisions of zoning and management plans override any inconsistent provisions in local land-use and sectoral plans.

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[347] IUCN, *Guidelines for Establishing Marine Protected Areas*, Gland, 1991, p. 13.

f. Integration of marine protected areas into coastal and marine spatial planning policies. Also within national jurisdiction, marine protected areas should not be established in a vacuum and in isolation, but as part of a logical and coherent network, which should take place at both the national and regional levels. The fluid nature of the marine environment makes it particularly important to integrate marine protected areas within a comprehensive long-term approach to planning and management of activities that affect fragile coastal and marine ecosystems. Effective solutions should consider all sectors simultaneously, so that changes in policies or practices in one area are consistent with and complementary to those adopted in another. Each coastal State should adopt national strategy and programmes applying to the coastal and marine areas under its jurisdiction, including a list of areas suitable for designation and protection as coastal and marine protected areas. This can be done as part of an integrated coastal zone management process or linked to planning for large marine ecosystem management, in cooperation with neighboring countries. In all cases, consideration should be given to establishing larger mixed protected areas covering both coastal and marine components.

g. Stakeholder involvement. Far from being a mere formality, public participation is a vital element in environmental decision-making generally and in matters related to marine protected areas in particular. It enables the decision-making authority to understand how the project is seen by local inhabitants, economic concerns and non-governmental organizations. Local knowledge may be just as important as scientific knowledge in the design and management of marine protected areas. In fact, local communities often have an in-depth understanding of their ecosystems, based on generations of interaction with the resources.

Constructive working relationships with fisheries and tourism operators, local authorities, communities, scientists, nature conservation interests and other interested parties can facilitate both the establishment and planning of marine protected areas. They are conducive to better-informed adoption of collective goals and more efficient and clear decision-making and may reduce instances of noncompliance. Relevant stakeholders should thus be identified and efforts made, preferably through the adoption of specific regulations, to encourage public participation in the relevant procedures.

Ecological measures are often perceived to be in competition with economic activities, even though economic development opportunities may actually depend upon the conservation of the environment, as is the case of tourism. As part of coastal and marine protected areas planning, all efforts should therefore be made to evaluate and enhance with the public the significance of those benefits that, while not directly quantifiable in precise monetary terms, can be achieved through the protective measures. National legislations should also include provisions on access to information. States should recognize the positive contribution that civil society active in the field of the environment can make through educational, campaigning and monitoring activities. Where feasible, there should be close cooperation between responsible agencies and competent non-governmental organizations close to the ground, including the possibility to entrust such organizations with the management of some marine protected areas under appropriate contracts.

h. Financing mechanisms. Inadequate or insecure funding may determine delay in the recruitment of sufficient staff, the purchase of equipment for performing basic tasks (which can be particularly costly in the case of marine areas) and the promotion of research. Appropriate funding should be granted, wherever possible, by the State or the public institutions involved to meet the needs of existing protected areas. Fundraising mechanisms involving visitors or the private sector may also be put into effect as an alternative source of financing, provided that they do not conflict with the basic objectives of the protected area. Also donors may be encouraged to support projects.

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 sustained management efforts. Economic expectations should be addressed through compensation mechanisms, where necessary, and by adjusting the timeframe of expected benefits against the timeframe of any losses that may occur as a consequence of the creation of a marine protected area.

i. Monitoring, compliance and enforcement. Once established, marine protected areas require continuous monitoring of ecological processes, habitats, population dynamics, landscapes and the impact of human activities. This information is essential for periodic updating of applicable regulations and management plans.

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 harder than on land. Such approaches are likely to work best within a context that encourages informed public participation, education and awareness-building.

National legislation should ensure that the management body of each marine protected area has the authority to delegate and enforce the rules and regulations it promulgates. Relevant legislation should therefore provide adequate powers for personnel to take enforcement action, backed by meaningful penalties. This implies that, under appropriate circumstances, coastal or marine conservation officers should have the authority to impose on-the-spot fines for minor resource and environmental 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.

6.2. National marine protected areas

The first challenge faced in the effort of assessing the number and the status of national marine protected areas is the lack of an accurate inventory, which is coupled with the lack of compilation of new potential sites with the highest biodiversity value[348]. Moreover, the geographical scope of the present study influences the assessment of the implementation of the national legal frameworks for the establishment of marine protected areas within areas under national sovereignty and jurisdiction. In fact, among the States concerned, Albania, Bosnia and Herzegovina (although the latter only as

[348] SOVINC (*op.cit*. in footnote 294), p. 14.

regards a limited portion of marine waters), Croatia, Montenegro and Slovenia rely on legal frameworks that extend and exhaust their effects within the marine areas encompassed by this study. This is due to the fact that all the maritime zones of such States fall entirely within the scope of the analysis. On the contrary, the legal frameworks in place in Greece and in Italy apply also to areas falling outside the coverage of this study, as such frameworks partially extend their effects to both coastal and sea areas not included in the Adriatic and Ionian Seas: the eastern coasts and maritime zones of Greece and the western coasts and maritime zones of Italy. It derives that, in complying with the scope of the present analysis, a comprehensive overview of the actual implementation of the relevant legal frameworks and existence of national marine protected areas would only be possible for the first group of States. In any case, the lack of a comprehensive inventory of existing national marine protected areas makes it impossible to provide reliable numbers.

Despite the efforts undertaken at various levels for the compilation of lists of marine protected areas and GIS databases, the lack of reliable inventories on existing national marine protected areas has been noted also by the competent regional bodies. Notably, the 21st Conference of the Parties to the Barcelona Convention, held in 2019, adopted Decision IG.24/6, on the 'Identification and Conservation of Sites of Particular Ecological Interest in the Mediterranean, including Specially Protected Areas of Mediterranean Importance', whereby it requested the Secretariat to establish a directory of Mediterranean specially protected areas and requested the Specially Protected Areas Regional Activity Centre (SPA/RAC) to elaborate criteria for inclusion of specially protected areas in the directory, for consideration at the 22nd Conference of the Parties[349].

Notwithstanding the lack of comprehensive inventories, as regards the four pilot areas identified for the purpose of this study it is noteworthy that the designation by Bosnia and Herzegovina of a national marine protected area in the Neum Bay seems imminent[350]. For a country with such a short coastline, transboundary cooperation and coordination of coastal and marine management will always be critical, particularly with Croatia. The joint construction around forty years ago of the Neum-Pelješac Peninsula wastewater system has made a significant contribution to conserving the Bay's ecosystem. If declared, the spatial measure would lead to the protection of 100% of the maritime waters of Bosnia and Herzegovina.

[349] For the subsequent developments, see doc. SPA/RAC/AGEM/2/2 of 20 May 2021, *Report of the Ad Hoc Group of Experts for Marine Protected Areas in the Mediterranean (AGEM)*.

[350] Presentation by Mr Josip Njavro, representative of Bosnia and Herzegovina at the Workshop organized by TSG 3 EUSAIR, *What can EUSAIR do to enable the blue and green sustainable growth in EUSAIR: MSP in EUSAIR state of the art*, held online on 9 November 2021.

Existing national frameworks for the establishment of marine protected areas within areas of national sovereignty and jurisdiction include the Protected Areas Act No. 81 of 2017 of Albania; the Nature Protection Act of 2013 of Bosnia and Herzegovina; the Nature Protection Act of 2013 of Croatia; Law No. 4519 of 2018 for the Management Agencies of Protected Areas of Greece; the Framework Law on Protected Areas No. 394 of 1991 and Law No. 972 of 1982, with subsequent amendments, of Italy; the Nature Protection Act of 2016 of Montenegro; and the Nature Conservation Act of 1999, as amended several times, of Slovenia. It may be noted that almost all the coastal States of the Adriatic and Ionian Seas have enacted recent legislation concerning the establishment, management and monitoring of protected areas, which in all cases explicitly refer also to marine protected areas. Other States, such as Italy and Slovenia, have preferred to progressively update previous legislation. As regards the effectiveness of national instruments, some indicators may be identified that could be used as helpful references against which to measure both the drafting and implementation of relevant legislations, namely: the achievement under the relevant legislation of a coordinated implementation of international and regional commitments; an efficient institutional coordination; the adoption of specific legal provisions for the establishment and management of marine protected areas, as they imply differences from terrestrial protected areas; the adoption of effective protection measures; the implementation of management planning and zoning; the integration of marine protected areas into coastal and marine spatial planning policies; the involvement of all relevant stakeholders; the provision of adequate financing mechanisms; and effective schemes and measures for monitoring, compliance and enforcement. In addition, national legislations should provide for an appropriate registering mechanism and public access to the relevant data, because the first challenge faced in the effort of assessing the number and the status of national marine protected areas is the lack of an accurate inventory, which is coupled with the lack of compilation of new potential sites with the highest biodiversity value. Steps are being taken in this regard under the auspices of SPA/RAC, with a view to elaborating criteria for inclusion of specially protected areas in a Mediterranean directory.

CHAPTER 7

TRANSBOUNDARY AND MARINE PROTECTED AREAS LOCATED BEYOND THE TERRITORIAL SEA WITHIN THE MEDITERRANEAN AND ADRIATIC AND IONIAN SEAS

7.1. The Pelagos Sanctuary

One of the two SPAMIs that present a transboundary character is the Pelagos Sanctuary for marine mammals[351], established under an Agreement signed in Rome in 1999 by France, Italy and Monaco. This is the first treaty ever concluded with the specific objective of establishing a protected area for marine mammals. It entered into force on 21 February 2002 and is also believed to be the first example of high seas marine protected area in the world.

The sanctuary extends for about 96,000 km^2 of waters located between the continental coasts of the three States parties 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 (in the case of Italy)[352], exclusive economic zone (in the case of France) and high seas[353]. Such waters are inhabited by the eight cetacean species regularly found in the Mediterranean.

[351] The other SPAMI being the Cetacean Migration Corridor off the coasts of Spain. See *supra*, sub-para. 5.1, A.

[352] As already remarked, Italy has proclaimed an exclusive economic zone by Law No. 91 of 14 June 2021. The zone is awaiting implementation through Presidential Decree.

[353] The high seas within the Pelagos Sanctuary will disappear, however, if Monaco establishes an exclusive economic zone.

Figure 22 – Map of the Pelagos Sanctuary. Source: website of the Permanent Secretariat.

The initial catalyst for the establishment of the Pelagos Sanctuary was the awareness that many whales were becoming accidentally entangled in the nets of tuna driftnet fishermen, leading to an international outcry from non-governmental organizations and other bodies to end the fishing. Following some judicial decisions by Italian courts, Italy agreed by 1990 to the dismissal of this type of fishing.

The same year, the French Ministry of Merchant Marine proclaimed a triangle of water from the tip of Corsica that was declared off limits to driftnet fishing. *Tethys Research Institute*, an Italian non-governmental organization with scientific purposes, proposed a project called Project Pelagos for the establishment of a marine protected area in the high seas encompassing the most important habitat for cetaceans in the region.

At the basis of the proposal of the marine protected area there was the recognition of its ecological richness and representativeness, its high species diversity, its intense biological activity, the presence of critical habitat for a number of diverse pelagic species including cetaceans and its opportunities for baseline research, education and development. The proposal challenged – with success – the mainstream legal notion of the time that establishing a protected area on the high seas was impossible, and generated awareness that new mechanisms were required to deal with high seas conservation.

Project Pelagos gained the support of the Rotary Clubs of Milan, Monaco and Saint Tropez. In 1991, Prince Rainier III of Monaco granted the support of the Principality for the project and recommended that a sanctuary for cetaceans should be eventually created

in the Ligurian-Corsican-Provençal basin through a trilateral agreement between France, Italy and Monaco. In 1993, the ministers of the environment of France, Italy and Monaco signed a joint declaration with the intention of setting up an institution for a Mediterranean sanctuary for the protection and conservation of marine mammals. At this point, however, the political will began to wane and a number of difficulties arose. Eventually, in 1999 the idea was revitalized and the final agreement was signed. By that time, the original catalyst for the creation of the area, the driftnetting for tuna, had already been banned in the region.

The term 'sanctuary' has been used following the precedent set by the National Oceanic and Atmospheric Administration (NOAA) of the United States. It reflects the fact that whales are ultimately part of a migratory population that cannot be entirely protected through the establishment a single area, but by necessarily taking into account at least a sufficient part of their life history and migratory range. In 2007, the GFCM considered that the Pelagos Sanctuary was *"an experiment in the ecosystem approach to management".*

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 (Art. 4). Moreover, the parties undertake to monitor the area and intensify their fight against all sources of pollution, both sea- and land-based. In particular, Art. 6, para. 2, provides for the adoption of national strategies with the aim of progressively suppressing discards of toxic components within the Sanctuary, by recognizing priority to those substances enumerated in Annex I to the Land-Based Protocol to the Barcelona Convention.

The parties 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 (Art. 7a).

As regards the still crucial question of driftnet fishing, the parties undertake to comply with the relevant international and European Union regimes (Art. 7b). This is an implicit reference to European Council Regulation No. 1239/98 of 8 June 1998, which prohibited as from 1 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 forums 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 (Art. 7c).

The parties also undertake to exchange their views with the objective of regulating and, if appropriate, prohibiting high-speed offshore races in the Sanctuary (Art. 9).

The parties are bound to hold regular meetings to ensure the application of and follow up of the Agreement (Art. 12, para. 1). 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

organizations, 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 mammals (Art. 12, para. 2).

A management body of the Pelagos Sanctuary is, however, lacking.

Prior to 2004, each party determined its own priorities and management projects at a national level. Cooperation with the other parties was informal and occurred only occasionally, in order to establish shared aims as part of the development of the management plan, which was adopted by the three parties in 2004. With the creation of a Permanent Secretariat in 2006, the parties began to routinely work together to implement the provisions of the management plan. The latter takes into account also actions implemented as part of other agreements and international programmes, such as ACCOBAMS, RAMOGE, and UNEP/MAP. Moreover, in 2007, three Working Groups were established in the framework of the Pelagos Sanctuary, with the view to pursuing the following goals: knowledge and means of management; communication and prevention; and governance. Among the aims of the Working Groups, there is the proposal of concrete measures that meet shared objectives and respond to practical management issues for the different scenarios, as well as the setting out of recommendations that include a summary of the aims, the forecast cost, financing, schedule and evaluation criteria. In the lack of a specific management body for the area, cooperation between the parties, also through the Working Groups, remains crucial.

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. It is important not to underestimate the fact that, also in those portions of water declared as exclusive economic zones, third States enjoy a number of freedoms, including the freedom of navigation, which causes certain impacts to cetaceans, such as those driving from collisions and underwater noise.

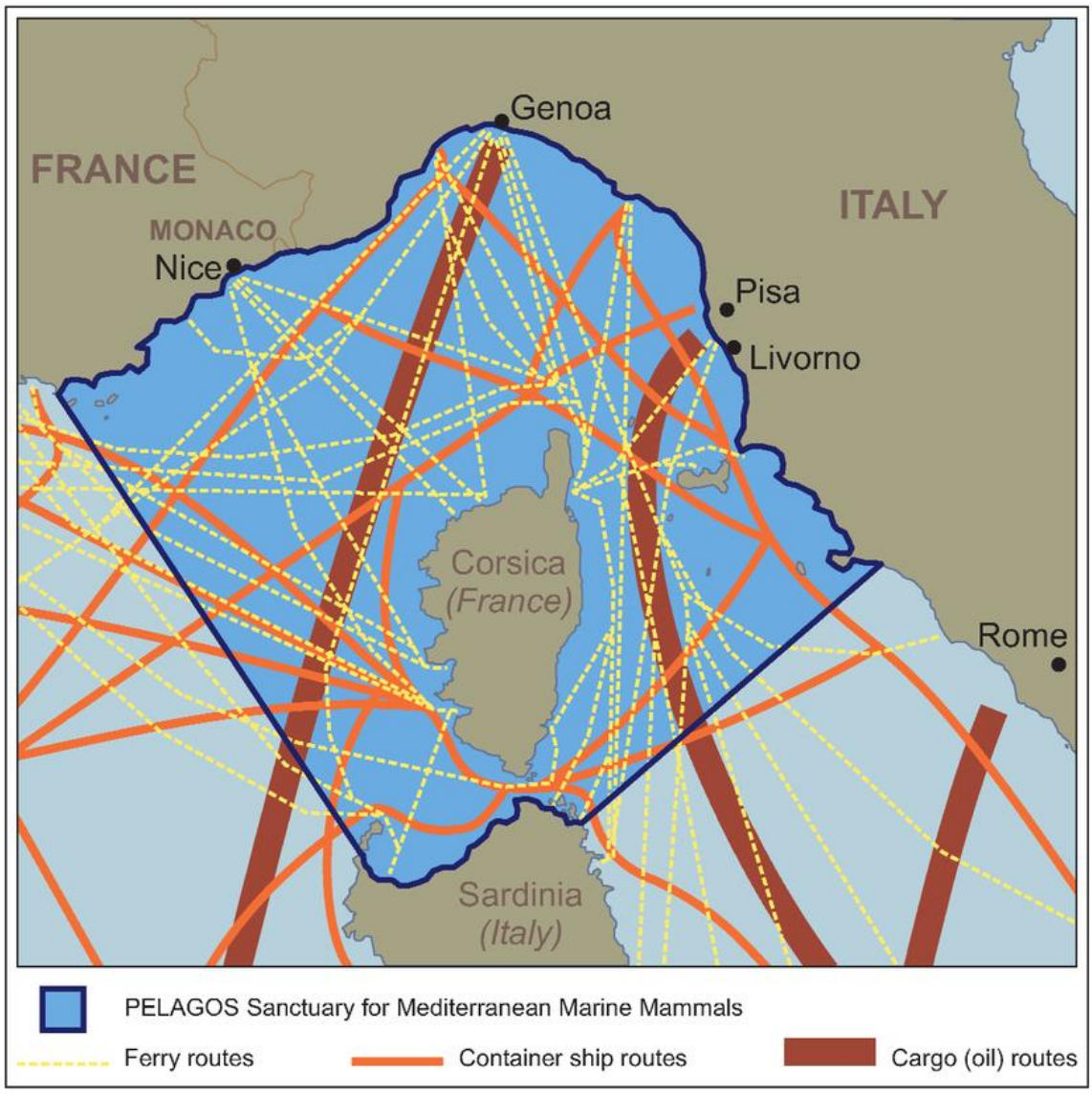

Figure 23 – Shipping lanes within the Pelagos Sanctuary. Source: *A Global Scientific Workshop on Spatio-Temporal Management of Noise*, conference held in January 2007 (map by Gianni Pavan).

Art. 14 of the Agreement 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[354].

[354] *"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).

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 eventually fall within the exclusive economic zones of the three parties, if also Monaco decided to establish such a zone. This seems sufficient to reach the conclusion that the parties are already entitled to enforce the rules that apply within the Pelagos Sanctuary in respect of all foreign ships to be found within its boundaries. This, at least, is certainly true when the clear aim of those measures is protecting and preserving the natural habitat of cetaceans (Art. 56, *b*, iii, UNCLOS specifically recognizes the relevant jurisdiction of coastal States within their exclusive economic zone). Particular attention, however, must be devoted to the navigational rights of third States, as no measure may encroach the freedom of navigation that applies not only on the high seas, but also in the exclusive economic zone.

In this regard, it is of evident relevance that the inclusion of the Pelagos Sanctuary in the SPAMI List has secured recognition to the area by all the parties to the Barcelona Convention, so enlarging the number of States that are bound by the relevant measures. Moreover, the Pelagos Sanctuary is recognized also in the framework of ACCOBAMS as an important area for achieving the objectives of the relevant agreement. The two Permanent Secretariats of the ACCOBAMS and the Pelagos Agreement have signed a Memorandum of Understanding to formalize their partnership and harmonize efforts in the protection of those species of cetaceans that are protected under ACCOBAMS and are found within the Pelagos Sanctuary. These sorts of initiatives may prompt the parties to undertake further measures. For instance, France has recently enacted a legislation that prohibits, starting from 1° January 2021, the intentional approach to certain species of cetaceans within less than 100 meters in all marine protected areas, including the Pelagos Sanctuary[355].

The Pelagos Sanctuary, therefore, is an area that is subject, at the same time, to a tripartite agreement, two international legal instruments specifically devoted to the protection of species (ACCOBAMS) and habitats (Areas Protocol) as well as the national legislations of the relevant States.

As a general consideration, it is worth mentioning that the creation of a transboundary SPAMI could be a more cost-effective way for achieving a marine protected area, rather than through a formal bilateral or multilateral agreement, as it was done in the case under review. A countervailing view is that negotiations would be needed

[355] Arrêté du 3 septembre 2020 portant modification de l'arrêté du 1er juillet 2011 fixant la liste des mammifères marins protégés sur le territoire national et les modalités de leur protection (Official Journal No. 0240 of 2 October 2020). Art. 8 of the Pelagos Sanctuary Agreement provides that the parties regulate whale-watching for tourism. Art. 10 requires the parties to engage in mutual exchanges with the view of harmonizing as much as possible the measures adopted in this regard.

in any case to achieve a transboundary SPAMI, as this would entail an agreement between all States concerned[356].

7.2. Transboundary cooperation in the Strait of Bonifacio

The Strait of Bonifacio form an international strait between Sardinia and Corsica (two Mediterranean islands belonging to Italy and France, respectively)[357]. The strait enables communication between the Sea of Sardinia and the Tyrrhenian Sea. Its least width is 3.23 n.m. and its maximum depth is about 90 m. Navigation in the strait is very difficult due to intense and persistent winds, strong currents (3-4 knots) and the presence of several insular formations (islands, reefs, rocks and low-tide elevations).

About 3,000 ships per year pass through the strait, navigating in an east-west direction and viceversa and ships connecting Corsica and Sardinia cross it in a north-south direction and viceversa. The latter traffic is intense and growing in summer, when also many pleasure craft navigate in the area. Inside the strait, mariners are called to exercise great care to avoid the risk of collisions and ship groundings that could cause destruction or degradation of a unique, diverse and significant ecosystem[358].

Navigation in the Strait of Bonifacio is regulated by the regime of transit passage, as set forth in Arts. 37 to 44 UNCLOS. This regime applies to straits which are used for international navigation between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone[359]. Under Art. 38 UNCLOS, 'transit passage' means navigation and overflight for the purpose of continuous and expeditious transit of the strait. Unlike the regime of innocent passage through the territorial sea, the transit passage through straits extends to aircraft; submarines are permitted to navigate in their 'normal mode' (i.e. under water); and suspension of the passage by bordering states is prohibited. In addition to merchant vessels and civil aircraft, also foreign warships and military aircraft enjoy the right of transit passage through international straits.

Although the regulatory authority of a State bordering a strait over transit passage is more limited than a coastal state's regulatory authority over innocent passage through its territorial sea, it is nevertheless provided by Art. 42 UNCLOS that a State bordering a strait may put into effect international standards and regulations regarding pollution and may regulate fishing activities, including the stowage of fishing gear by vessels. In addition, under Art. 41 UNCLOS, designation of sea lanes and traffic separation schemes

[356] On the recourse to SPAMIs as a means for transboundary cooperation in the Adriatic and Ionian Seas, see *infra*, chapter 8.

[357] On 28 November 1986, France and Italy signed a Convention relating to the Delimitation of the Maritime Boundaries in the Areas of the Mouths of Bonifacio, which entered into force on 15 May 1989. The delimitation line relates to the territorial seas of the two States and extends for a distance of about 40 n.m. between the two coastlines, connecting six points through five straight segments.

[358] The ecological, socio-economic and scientific attributes of the strait, as well as its vulnerability to damage by international shipping, are described in detail in Annexes 2 and 3 to Resolution MEPC.204(62).

[359] The regime of passage through straits used for international navigation does not affect the legal status of the waters forming such straits, nor the exercise by the states bordering the straits of their sovereignty or jurisdiction over such waters and their space, seabed and subsoil.

through the strait is possible, provided that it results from the concurrent action by all States bordering the strait and is followed by formal adoption by the IMO[360].

As the Strait of Bonifacio represents one of the most outstanding areas in the Mediterranean Sea in terms of marine biodiversity, France and Italy have long since decided to adopt in the strait a restrictive approach to navigation, insofar as ships flying their respective flags are concerned. As illustrated below, the measures adopted at the national and international level have reduced the risk of casualties in the Strait of Bonifacio. It is, however, to be regretted that the international measures are only 'recommended' by the IMO, while national measures adopted by France and Italy are mandatory only for the ships flying the flag of the two said States. Such an incongruous situation can only cast doubts on the effectiveness of the present protection regime as a whole and could be seen as an incentive for the re-flagging of French and Italian ships.

In 1979, IMO Resolution A.430(XI) endorsed the decision of France and Italy to establish a system of surveillance and information for ships passing through the strait. Navigation is possible only along a narrow 3-n.m. wide stretch and ships are asked to take a recommended route just about 1-n.m. wide. Navigation is prohibited to ships transporting oil, dangerous chemicals or other substances (listed in the Annexes to the MARPOL) and displaying French or Italian flag. In particular, the Italian Decree of the Ministry of Merchant Marine of 26 February 1993, applicable to Italian ships only, forbids tankers carrying petroleum products or ships carrying dangerous or toxic substances to navigate the Strait of Bonifacio. Ordinance No. 1 of 15 February 1993, issued by the French Maritime Prefect for the Mediterranean, bans the transit of tankers displaying the French flag that carry hydrocarbons and other hazardous and noxious substances[361].

On the same year, the IMO adopted Resolution A.766(18) on navigation in the Strait of Bonifacio, urging ships carrying hazardous materials to avoid the seaway in question. The IMO instrument has been complemented in 1998 by circulars SN/ Circ. 198 and 201, concerning routeing measures other than traffic separation schemes and mandatory ship reporting systems in the Strait of Bonifacio. The two States also established at the entrances of the strait two 'precautionary areas' where ships must stop to be boarded before entering into the recommended routes of navigation[362] (see Figure 24 below).

[360] In the territorial sea, the coastal state may unilaterally establish sea lanes and traffic separation schemes, so long as it takes into account the recommendations of the IMO.
[361] For France, Ordonnance No. 1 of 15 February 1993 of the *Préfet maritime de la Méditerranée* of Toulon; for Italy, Decree of 26 February 1993 of the Minister of Merchant Marine.
[362] For France, Decree No. 84/98 of 3 November 1998 of the *Préfet maritime de la Méditerranée* of Toulon, as amended by Decree No. 56 of 24 November 2003; for Italy, Decree of 27 November 1998 of the Minister of Merchant Marine.

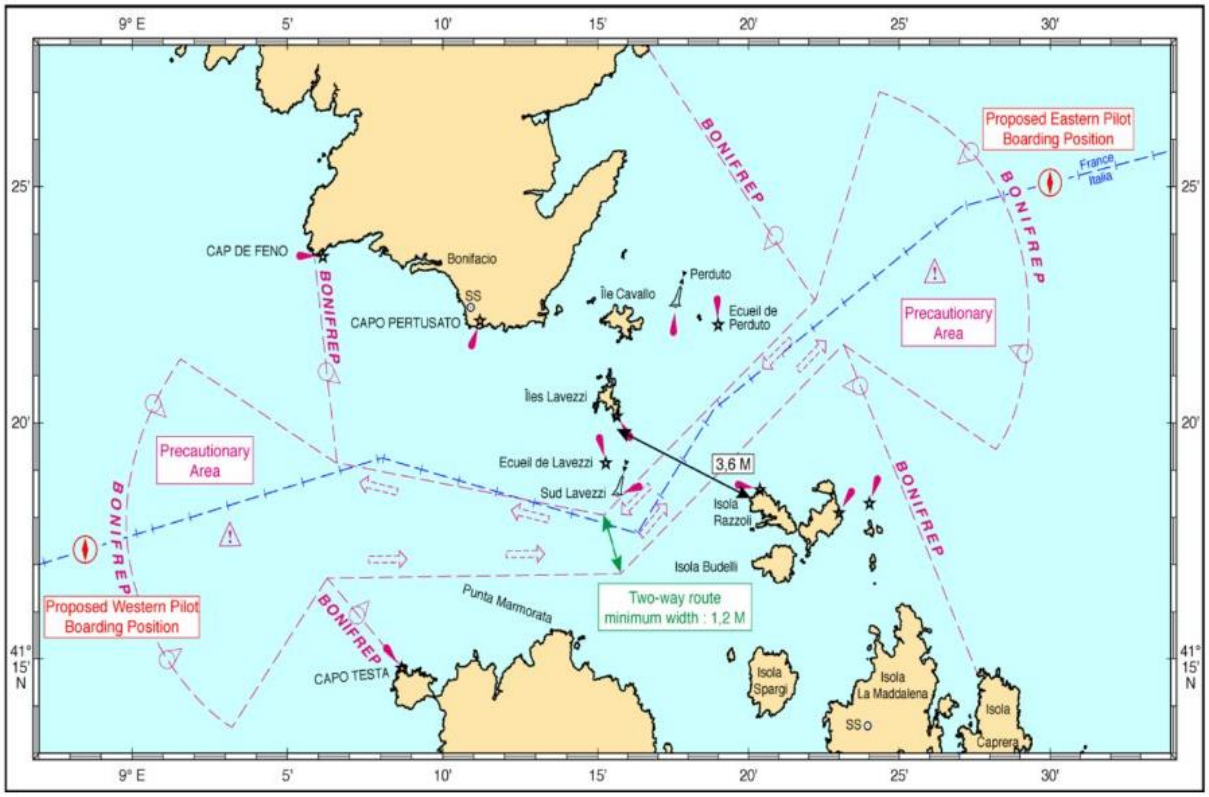

Figure 24 – Recommended navigation through the Strait of Bonifacio. Source: Report of the IMO Maritime Safety Committee (MSC 90/28).

An international agreement for the operational procedures aimed at implementing the mandatory reporting system of the ships in the Strait of Bonifacio (*Bonifacio Traffic*) was signed by France and Italy in Rome on 3 June 1999. Lastly, in order to further restrict dangerous maritime traffic through the strait, a Voluntary Agreement to Carry out a Series of Interventions Aimed at the Achievement of Higher Security Standards concerning the Maritime Transport of Dangerous Substances was signed in Rome on 1 June 2001 by the Italian Ministry of the Environment, Land and Sea, the Italian Ministry of Transportation and Navigation, Confindustria[363], Assoporti[364] and some environmental organizations and unions. Art. 6 of this voluntary instrument commits the signatory companies to navigate ships carrying dangerous substances listed in Annexes I and II to MARPOL solely based on charter party contracts that explicitly exclude the transit in the Strait of Bonifacio.

Several dozen merchant ships per day, however, keep crossing the strait from east to west[365]. This is due to the fact that, on the basis of the provisions just mentioned, the prohibition of navigation in the strait does not apply to merchant ships flying flags of third States, nor to Italian and French ships that are empty or not carrying prohibited cargoes, which, even when properly ballasted, represent an environmental risk factor of accident due to the presence of fuel in their tanks. Still, in 2011, the Marine Environment Protection

[363] The Italian Employers' Federation.
[364] The Italian Association of Ports, an organism that brings together port authorities, other special bodies in ports, chambers of commerce of city-harbours and the Italian Organization of Chambers of Commerce.
[365] Traffic along the north-south direction mainly concerns passenger ships and ferries connecting the two islands. With approximately ten daily connections, it is very intense and growing during the summer.

Committee (MEPC) of the IMO reported that, notwithstanding the legal restrictions put in place by the two bordering states, the Strait of Bonifacio is an area in which coastal authorities are yet *"confined to the role of spectator, waiting for a maritime accident to happen"*[366].

In 2010, France and Italy proposed to MEPC that the Strait of Bonifacio be designated a PSSA[367]. The PSSA was finally adopted under Resolution MEPC.204(62) of 15 July 2011. The Strait of Bonifacio is the first PSSA established in the Mediterranean Sea and the second in the world for an international strait[368]. In the same year, the IMO Sub-Committee on Safety and Navigation adopted a Recommendation on navigation through the Strait of Bonifacio. This instrument, addressed to loaded oil tankers and ships carrying dangerous chemicals or substances in bulk[369], recommends the following measures.

Use of ships' routeing

Vessels shall exercise full diligence and regard for the requirements of the existing recommended two-way route in the Strait of Bonifacio. Due to the narrowness of the strait, masters of vessels shall ensure that an appropriate monitoring of the ship's route is done on board in order to avoid groundings and collisions.

Ship reporting and navigation information

Ships of 300 gross tonnage and over entering the strait shall participate in the mandatory ship reporting system (BONIFREP) established by the competent authorities as described in IMO's publication on Ships' Routeing (Section G I/8).

Pilotage

Masters of vessels passing through the strait are recommended to avail themselves of the services of a qualified pilot[370].

The designation of Strait of Bonifacio as a PSSA must have contributed to facilitating joint initiatives between the two bordering States, which have ultimately led to the establishment of a transboundary marine protected area, building upon the protection measures that had previously been adopted by the two States concerned.

[366] Resolution MEPC.204(62), adopted on 15 July 2011, Annex 3, para. 2.4.
[367] On the concept of PSSA, see *supra*, sub-para. 3.4, A.
[368] In 2005, the IMO declared the extension of the already existing Great Barrier Reef PSSA in order to include the Torres Strait, based on a proposal by Australia and Papua New Guinea.
[369] As listed in the Annex to Resolution MEPC.49(31) adopted on 4 July 1991.
[370] 24 hours prior to arrival, vessels should inform or confirm their estimated time of arrival (ETA) to the head office of the Bonifacio strait pilotage service. Once on Bonifacio strait road, vessels should confirm their ETA 2 hours prior to arrival calling 'Bonifacio Traffic' on VHF 10.

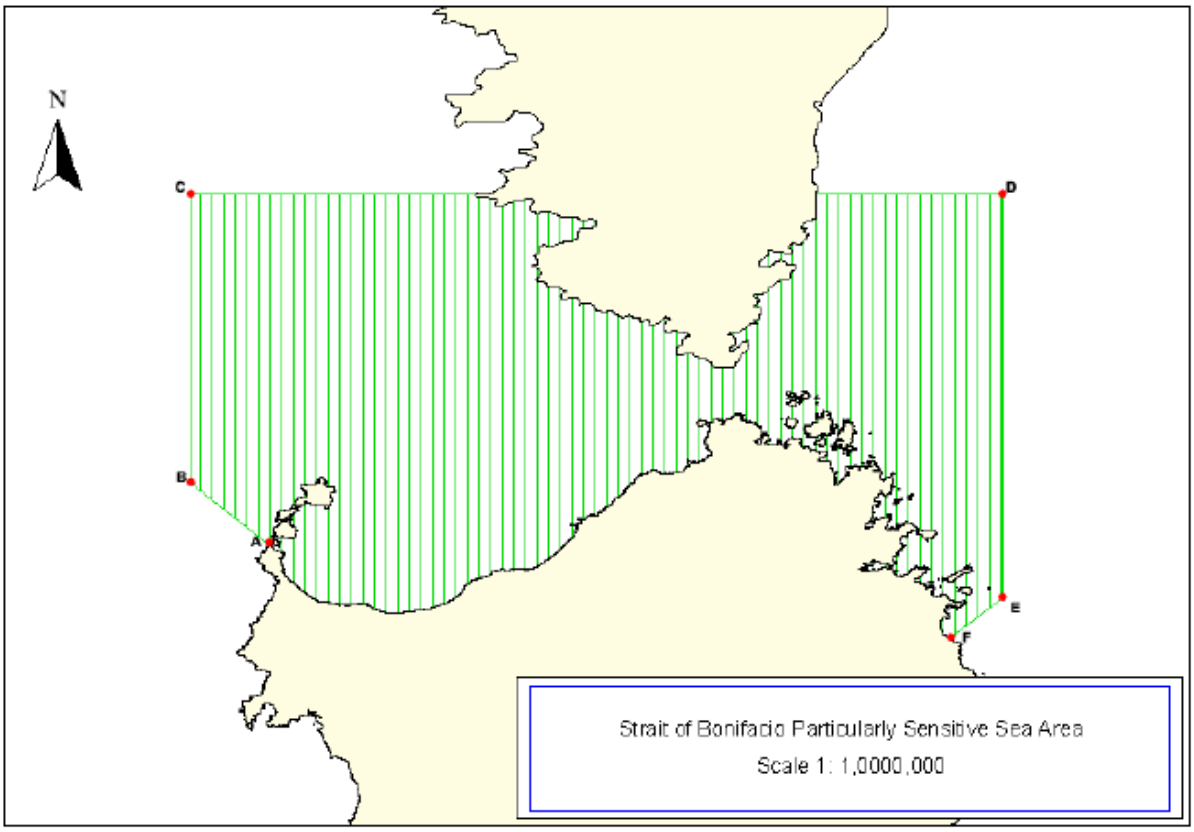

Figure 25 – The Strait of Bonifacio 'Particularly Sensitive Sea Area'PSSA. Source: Annex 22, Resolution MEPC.204(62) of 15 July 2011, Designation of the Strait of Bonifacio as a PSSA.

Two marine protected areas have been established respectively by France and Italy inside the strait, which is also totally included within the area of the Pelagos Sanctuary. On the south-eastern side of the strait, Italy created in 1996 the La Maddalena Archipelago National Park[371] and, on the other side, France established in 1999 the Natural Reserve of the Strait of Bonifacio[372].

On the Italian part, the ecological significance of the waters of northern Sardinia is recognized by several other designations: some of them belong to a national network, such as the *Asinara National Park*[373], the *Isola Asinara Marine Protected Area*[374], the *Tavolara – Punta di Coda Cavallo Marine Protected Area*[375]; others are included in a network of international designation, such as the listings of NATURA 2000 sites[376]. In particular, Italy inscribed six special protection areas under the Birds Directive[377] and

[371] Decree of the President of the Italian Republic of 17 May 1996.
[372] Ministerial Decree of 23 September 1999.
[373] Decree of the President of the Republic of 13 October 2002.
[374] Ministerial Decree of 12 August 2002.
[375] Ministerial Decree of 12 December 1997, amended by Ministerial Decree of 28 November 2001.
[376] On the NATURA 2000 Network, see *supra*, sub-para. 4.4, C.
[377] *Asinara Island*; *Piana Island – Asinara Gulf*; *Pond of Pilo, Casaraccio and Stintino Salt Marshs*; *La Maddalena Archipelago*; *North-Eastern Islands between Ceraso Cape and Pond of San Teodoro*; *Figari Cape, Cala Sabina, Punta Canigione and Figarolo Island*.

twelve sites of community significance under the Habitats Directive[378]. On the French part, official listings in the area in question include – besides the above-mentioned national reserve – a special protection area under the Birds Directive[379] and three sites of community importance under the Habitats Directive[380].

The ecological significance of the Strait of Bonifacio was further recognized at the international level in 2009, when they were granted the status of SPAMI[381]. Moreover, the Strait of Bonifacio is covered by the Pelagos Sanctuary.

Eventually, the two bordering States, thanks to diplomatic efforts which lasted more than two decades[382], were able to make use of an innovative legal mechanism of cooperation which could be taken today by other States as an example to create transboundary marine protected areas. This example of cooperation is even more significant in view of the particular difficulties faced by the two States in question, as they border a strait used for international navigation, with all the legal implications that follow. The opportunity to move beyond unilateral legal initiatives or the simple inscription of a site in an already existing list of protected areas was offered to France and Italy in 2006, when the Parliament and the Council of the European Union adopted Regulation 1082/2006 on a European Grouping of Territorial Cooperation (EGTC)[383]. In the light of the difficulties encountered by States that are members of the European Union in the field of cross-border cooperation, Regulation 1082/2006 introduced a new cooperation instrument at the European Union level as part of the reform of regional policy for the period 2007–2013.

EGTCs are legal entities that European Union member States, regional authorities, local authorities or bodies governed by public law – as the case may be – have been encouraged to set up from 1 January 2007. The competencies of the EGTC are laid down in a binding cooperation convention established on the initiative of its members. The EGTC members also decide whether their EGTC should be a separate legal entity or whether its tasks should be delegated to one of the members. Within the bounds of its mandate, an EGTC acts on behalf of its members. EGTCs thus enjoy the legal capacity accorded to legal entities by national law.

After negotiating a text for the first EGTC to be established in the Mediterranean Sea, the two local entities concerned acted unilaterally. The Executive Board of *La Maddalena Archipelago National Park* (Italy) approved the Convention for the

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[378] *North-Western Sardinian Islets and Coasts*; *Asinara Island*; *Piana Island*; *Pond of Pilo and Casaraccio*; *Pond and Juniper Forest of Platamona*; *Coghinas Mouths*; *Rossa Island – Paradiso Coast*; *Russu Mount*; *Testa Cape*; *La Maddalena Archipelago*; *Tavolara Island, Molara and Molarotto*; *Figari Cape and Figarolo Island*.

[379] *Lavezzi Islands*, *Strait of Bonifacio*.

[380] *Strait of Bonifacio, Monk Islands*; *Cerbical Islands and coastal strip*; *Pertusato/Bonifacio plateau and Lavezzi Islands*.

[381] The Mouths of Bonifacio area contains 37 per cent of species of Mediterranean importance. The loggerhead sea turtle (*Caretta caretta*) may be spotted in the area. The flora includes some 15 endemic species, with one endemic to the island of Lavezzi.

[382] A protocol between the two bordering States and the local authorities on the modalities for implementing the project of an international marine park in the Mouths of Bonifacio dates back to 19 January 1993.

[383] On the EGTC instrument as a means for transboundary cooperation in the Adriatic and Ionian Seas, see *infra*, chapter 9.

Establishment of the International Marine Park of the Strait of Bonifacio (*Parc Marin International des Bouches de Bonifacio* – PMIBB) on 20 December 2010[384]. The Corsican Assembly (France), on behalf of the Corsican Environment Office, approved the same instrument on 27 January 2011[385].The PMIBB and the EGTC statute were signed by representatives of the two states on 7 December 2012. The PMIBB was registered with the European Committee of the Regions on 11 March 2013. According to the PMIBB, the denomination of the EGTC in question, together with the related marine area under protection, is the 'International Marine Park of the Strait of Bonifacio'.

As an autonomous legal entity, the EGTC is responsible, *inter alia*, for: adopting the management plan for the area and for it to be periodically revised on the basis of scientific findings; proposing to the relevant authorities appropriate measures towards the strengthening of maritime safety in the Strait, also through a legal and institutional representation within the IMO; implementing joint actions of maintenance and restoration of sensitive marine and terrestrial habitats; convening an annual meeting for the assessment of all different management and protective actions within the common strategy; and examining ways to obtain regional, national or European funding for the implementation of its projects.

7.3. The GFCM fisheries restricted areas

Three fisheries restricted areas (FRAs) established within the GFCM framework are of particular relevance to this study and represent opportunities for transboundary cooperation in the Adriatic and Ionian Seas[386]. A further FRA could be soon established in the region of concern, on the basis of a recent proposal[387].

With a view to providing a database for all FRAs, the GFCM has recently elaborated an interactive map that shows the limits of the areas and their characteristics: https://www.fao.org/gfcm/data/maps/fras.

In addition to the identification of FRAs, representing clear examples of other effective area-based conservation tools, since 2005 the GFCM has prohibited the use of towed dredges and trawl nets at depths beyond 1000 m. This can be considered as an example of 'vertical' protection of a specified area, extending only to the seabed together with a selected portion of the water column. Both the South Adriatic and Ionian Seas comprise areas covered by such measure, as the depth of 1000 m is reached in the orange parts of the following map:

[384] Deliberation of the Executive Board of *La Maddalena Archipelago National Park* No. 31 of 20 December 2010.
[385] Délibération de l'Assemblée de Corse N. 11/004 du 27 janvier 2011 décidant de valider la Convention portant création du 'Parc Marin International des Bouches de Bonifacio' – Groupement Européen de coopération territoriale – 'Parcu Marinu Internaziunale di i Bocchi di Bunifaziu' (PMIBB–GECT) et ses statuts.
[386] See *infra* in this chapter, in sub-paras. A, B and C.
[387] See *infra* in this chapter, in sub-para. D.

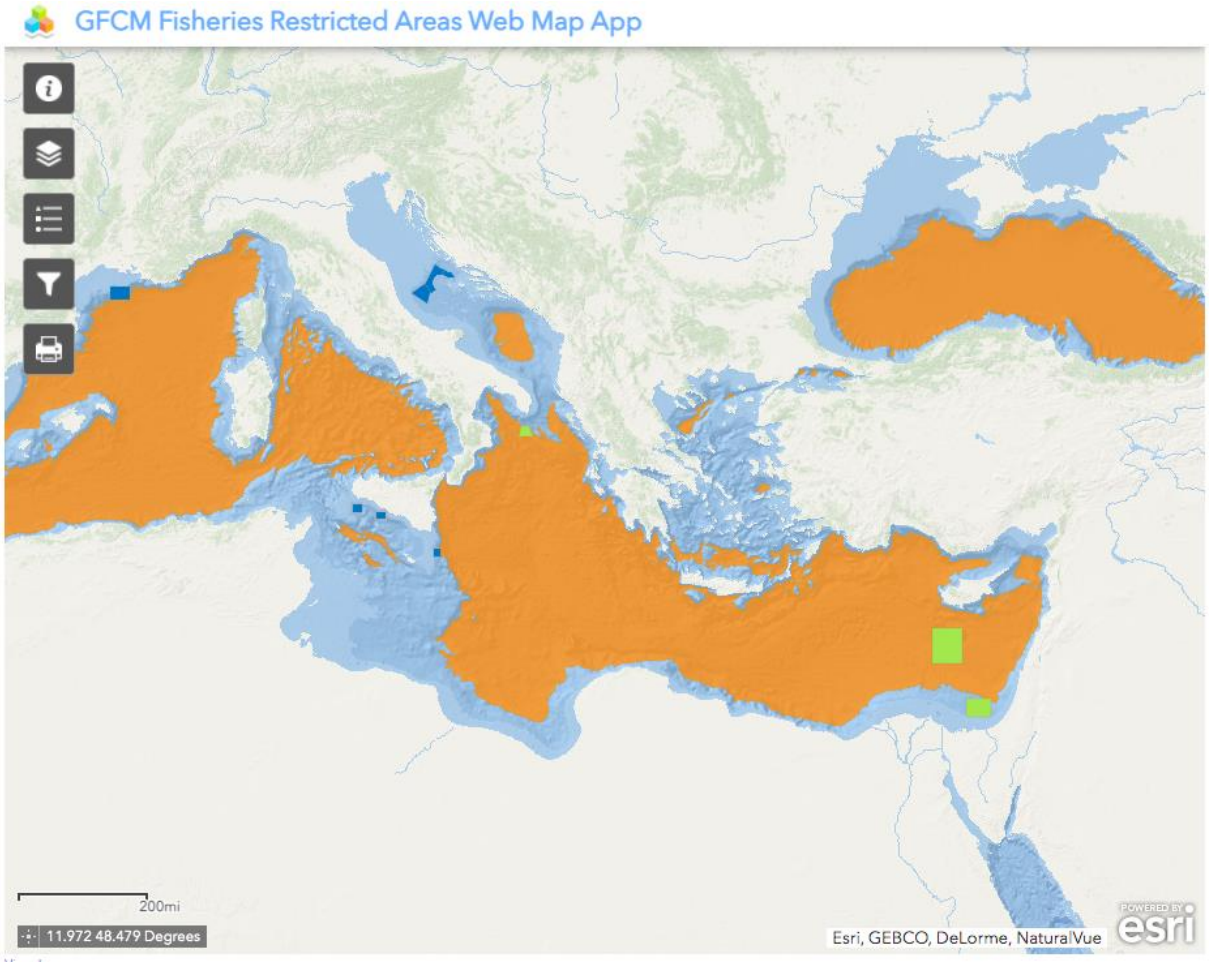

Figure 26 – Areas of the Mediterranean and Black Seas regulated by GFCM Recommendations. Source: https://www.fao.org/gfcm/data/maps/fras.

A. The Lophelia reef off Capo Santa Maria di Leuca

On the basis of, *inter alia*, Recommendation REC.CM-GFCM/29/2005/1 on the management of certain fisheries exploiting demersal and deep-water species, as well as the recommendation of the GFCM Scientific Advisory Committee (SAC) to ban bottom trawling activity in the deepwater coral reefs located in international waters (referred to as Lophelia reef off Capo Santa Maria di Leuca) in order the protect the coral, since 2006 the GFCM has prohibited fishing with towed dredges and bottom trawl nets in the area bounded by lines joining the following coordinates, identified as deep-sea FRA *Lophelia reef off Capo Santa Maria di Leuca* (see also Figure 27):

39° 27' 72" N, 18° 10' 74" E
39° 27' 80" N, 18° 26' 68" E
39° 11' 16" N, 18° 04' 28" E
39° 11' 16" N, 18° 32' 58" E

The same constitutive instrument (Recommendation REC.CM-GFCM/30/2006/3) provides that GFCM members call the attention of the appropriate authorities in order to

protect the area from the impact of any other activity jeopardizing the conservation of the features that characterize these particular habitats.

The FRA in question has a permanent character and is located in GSA19, corresponding to the Western Ionian Sea, according to the division into 'geographical subareas' (GSA) of the GFCM. It presently lies beyond the territorial sea of Italy, but on its continental shelf. The water column above the corals located on the site is destined to become part of the exclusive economic zone of Italy, as soon as the relevant law (2021) is implemented by presidential decree.

Depth ranges in the Lophelia reef FRA are between 500 and 1500 m. The reef is considered to be the largest occurrence of living white coral community in the Mediterranean. It hosts *Lophelia pertusa* and *Madrepora oculata*, which are both listed as endangered in the IUCN Red List of Threatened Species. These two species can support high levels of biodiversity and, by releasing organic matter, contribute to the biogeochemical cycles and support both planktonic and benthic organisms. As showed below (Figure 28), the coral mounds are concentrated between the northern border of the FRA and up until the 500-m bathymetrical line.

Figure 27 - The Lophelia Reef off Capo Santa Maria di Leuca (in red). Source: Global Fishing Watch (2021).

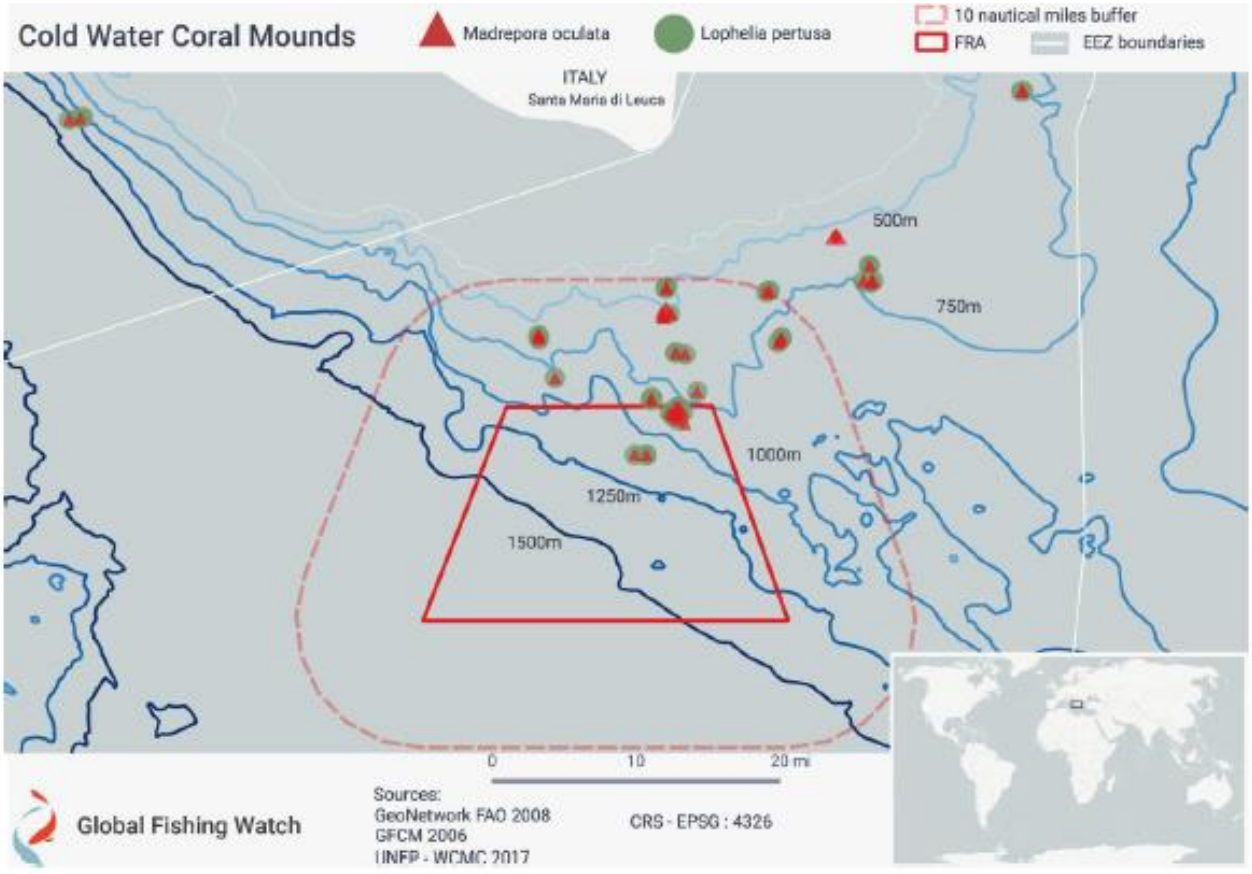

Figure 28 – The location of cold-water coral mounds in the FRA 'Lophelia Reef off Capo santa Maria di Leuca' and its surroundings. The green dots indicated the presence of *Lophelia pertusa*; the red triangles indicate the presence of *Madrepora oculata*. Source: Global Fishing Watch (2021).

It is to be highlighted that the 10-n.m. buffer zone that surrounds the FRA in Figure 28 above (in light red) is not a measure established by the GFCM: it only served the purpose of Global Fishing Watch to analyze the level of fishing activity immediately outside the FRA's boundaries. It is to be noted that trawler activity was observed within such zone, close to some of the cold-water coral mounds found just outside the northern limits of the FRA (see Figure 29).

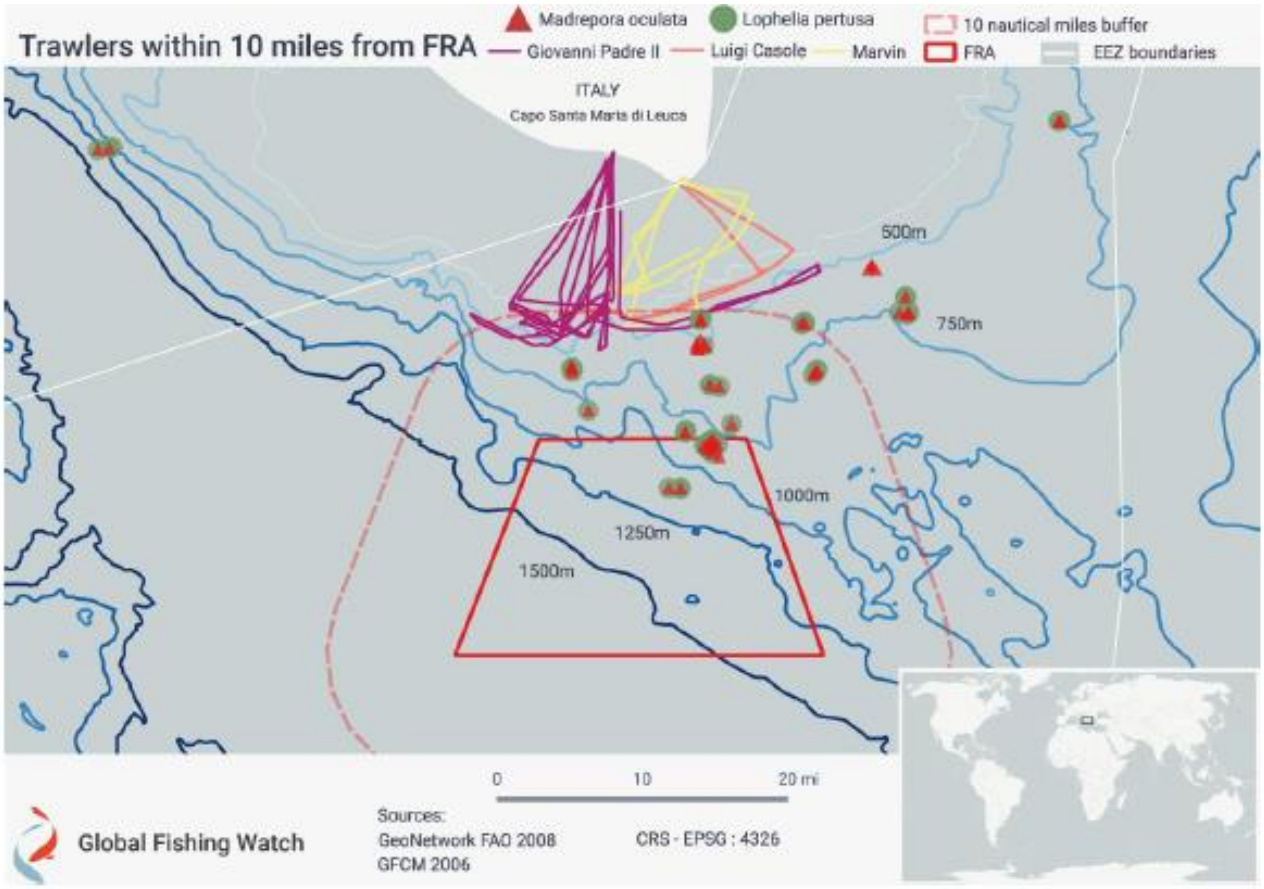

Figure 29 – Tracks of three European Union fleet registered trawlers flying Italian flag that were recorded fishing within 10 n.m. of the FRA 'Lophelia Reef off Capo Santa Maria di Leuca' for a total of 70 fishing hours between January 2018 and October 2020 and to depths of around 500 m. Source: Global Fishing Watch (2021).

On the basis of these findings, it would be appropriate for the Scientific Advisory Committee of the GFCM to consider the extension of the protective measures to at least 10 nautical miles beyond the current limits of the FRA, in order to cover also those cold-water corals that remain outside the limits identified by Recommendation 2006/03 (particularly in the north and north-west of the FRA boundary). The same objective could be pursued through the establishment of the proposed new SPAMI off Capo Santa Maria di Leuca[388], provided that all sites hosting biodiversity relevant to the Areas Protocol are covered.

B. The Jabuka/Pomo Pit

The *Jabuka/Pomo Pit* FRA in the Adriatic Sea was established in 2017 through Recommendation GFCM/41/2017/3. As a basis of the measure, this instrument explicitly refers to the precautionary approach, in accordance with the 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

[388] As regards proposals for new SPAMIs, including in the waters off Capo Santa Maria di Leuca, see *supra*, sub-para. 5.1, A.

Stocks and Highly Migratory Fish Stocks of 4 August 1995 and the Code of Conduct for Responsible Fisheries of the Food and Agriculture Organization of the United Nations.

The establishment of the FRA followed Resolution GFCM/40/2016/2 for a mid-term strategy (2017-2020) towards the sustainability of Mediterranean and Black Sea fisheries, particularly Target 4, Output.2 a) on *"the promotion of the identification and establishment of new FRAs to protect priority areas within ecologically or biologically significant marine areas (EBSAs), [vulnerable marine ecosystems] VMEs, etc. from harmful fishing activities, and the implementation of monitoring and control systems to ensure the efficiency of these spatial measures, also in relation to Target 3".* In fact, the Jabuka/Pomo Pit is also an EBSA under the CBD.

The species that the FRA in question aims at protecting from the impact of harmful fishing activities are the demersal fish stocks of European hake (*Merluccius merluccius*) and Norway lobster (*Nephrops norvegicus*). The first is a long-lived species, and short-term fishing closures cannot be expected to produce substantial effects; the second is a relatively long-lived species that, during the first year of its life, remains hidden in the burrows and cannot be taken by trawlers. Scientists recommended an experimental three-year closure, to be reviewed on the basis of results from annual monitoring. Several area sizes were presented as possible options to protect a larger or smaller portion of the nursery grounds.

In 2002[389], the GFCM had already recommended an increase in the mesh-size of nets in order to protect these demersal species or even the closure of certain areas. In 2016, the GFCM discussed the ways to ensure the collection of the necessary data on the distribution of VMEs, with a view to identifying priority areas. There were also extensive national efforts to monitor and ban fishing from the Jabuka/Pomo Pit. An area was identified (so-called 'Scalata del Fondaletto'), corresponding to the north-eastern slope of the Jabuka/Pomo Pit, where a series of temporal bans and monitoring rules were introduced for Italian fishing vessels:

[389] GFCM Working Group on Demersal Species, Rome, Italy, 20-22 March 2002.

Punto	Lat (WGS84)	Lon (WGS84)
1	43° 32' 03'' N	015° 16' 30'' E
2	43° 05' 27'' N	014° 58' 39'' E
3	42° 49' 49'' N	014° 29' 33'' E
4	42° 47' 38'' N	014° 34' 19'' E
5	43° 02' 50'' N	015° 02' 14'' E
6	43° 29' 52'' N	015° 20' 42'' E

Figure 30 – The area with the red boundaries represents the 'Scalata del Fondaletto', where fishing activities were banned in 2016. The table reports the coordinates of geographical points corresponding to the vertex of the 'Scalata del Fondaletto' protected area. Source: European MSP Platform.

Based on the work of the MedReAct and the Adriatic Recovery Project, the Subregional Committee for the Adriatic Sea (SRC-AS) examined the proposal to establish a FRA in the Jabuka/Pomo Pit and agreed to present it to the Scientific Advisory Committee of the GFCM for its final evaluation and potential submission to the GFCM. At the Our Ocean Conference in Malta, held in October 2017, one of the commitments expressed by the European Union was to support the GFCM in establishing a FRA of at least 2,700 km^2 in the Jabuka/Pomo Pit.

The means through which the demersal-species protection goal is today pursued in the area entails today the protection of the corresponding VMEs and essential habitats, through an innovative area-based protection tool divided into different zones.

In Zone A, any professional fishing activity with bottom-set nets, bottom trawls, set longlines and traps is prohibited. In Zone B, since 2017, such fishing activities have been prohibited from 1 September to 31 October each year. Professional activities may be allowed in this zone only whether the vessel or its master is in possession of a specific authorization and that historical fishing activities are demonstrated. States – either GFCM members or cooperating non-members – are required to keep a register of the fishing

vessels authorized to fish in this zone. In any case, such vessels cannot fish for more than two fishing days per week; and those using otter twin trawl gear are not entitled to fish for more than one fishing day per week. In Zone C, both the above fishing activities and recreational fisheries are prohibited from 1 September to 31 October each year. It is worth noting that the relevant recommendation does not prohibit the second type of activity neither within Zone A or Zone B. Only professional activities may be allowed in Zone C, provided that the vessel or its master is in possession of a specific authorization and that historical fishing activities in the zone are demonstrated. Also in this case, vessels must be registered in order to be allowed in the zone. Those fishing with bottom trawls are entitled to do so only Saturdays and Sundays, from 05.00 till 22.00 hours. Those fishing with bottom-set nets, set longlines and traps are allowed to fish only from Monday at 05.00 till Thursday at 22.00 hours. Fishing gear on board or in use must be duly identified, numbered and marked before starting any fishing operation or navigation within the FRA.

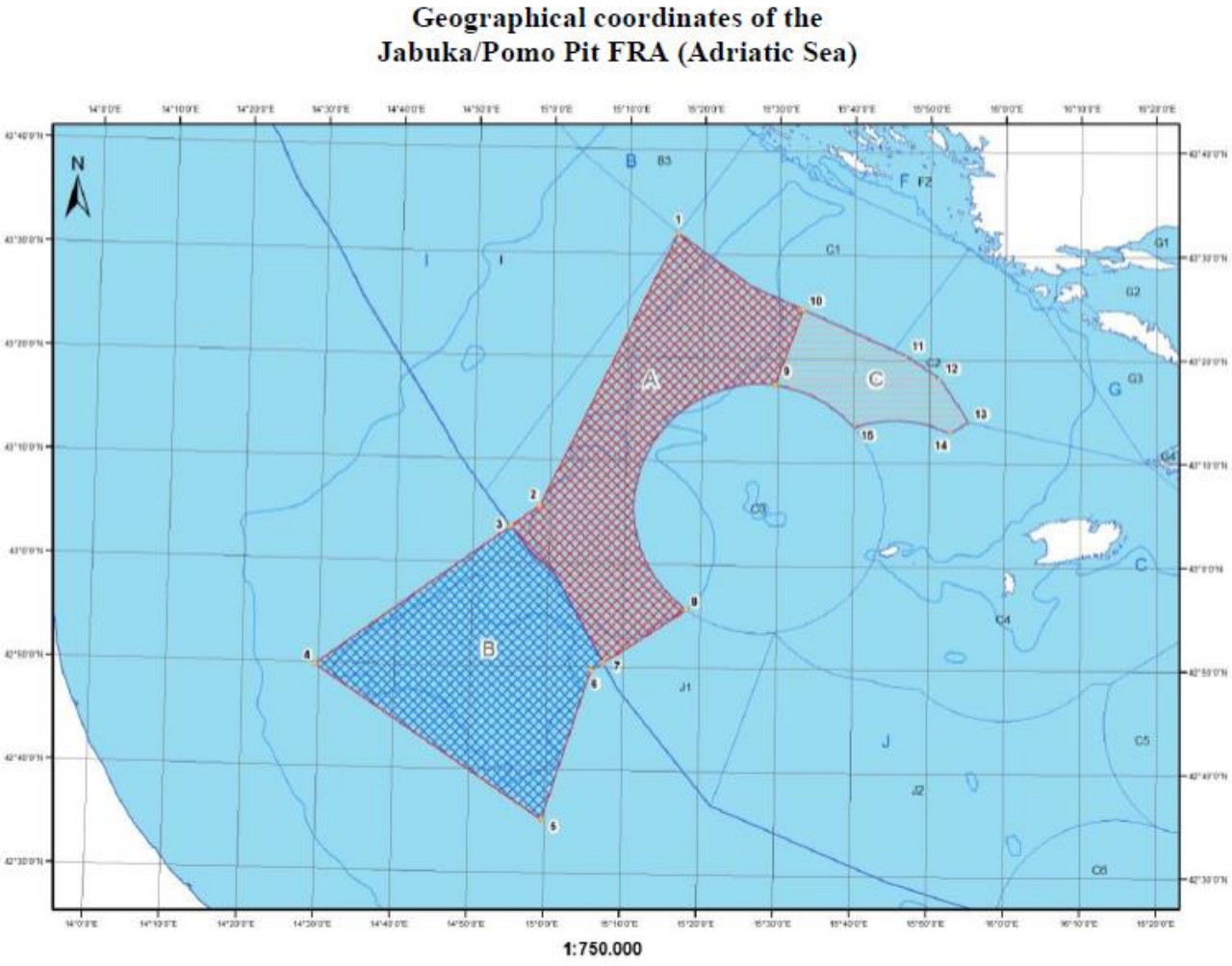

Figure 31 – The 'Jabuka/Pomo Pit' FRA and its zoning. Source: Recommendation GFCM/41/2017/3.

All catches of demersal stocks can be landed only in designated landing points: to this aim, GFCM members and cooperating non-members designate landing points in which landings of demersal stocks from the *Jabuka/Pomo Pit* FRA are authorized. The list

of all landing points and the list of all authorized vessels must be communicated to the GFCM by 30 April each year.

Besides the area-based measures and time closures, the instrument establishing the *Jabuka Pomo/Pit* FRA includes certain provisions addressing navigation. In particular, fishing vessels authorized to fish in Zone B or C must be equipped with vessel monitoring systems (VMS) or automated identification systems (AIS). Those vessels that are not authorized for fishing in such zones are allowed to transit through the FRA only if they follow a direct course at a constant speed of no less than 7 knots and are equipped with VMS or AIS active on board.

It is also provided that GFCM members and cooperating non-members call the attention of the relevant national and international authorities in order to protect the *Jabuka/Pomo Pit* FRA from the impact of any activity that may jeopardize the conservation of the characteristic features of the particular habitats. These States may decide to adopt stricter measures for the vessels flying their flag.

At the time of its adoption, it was decided that the recommendation establishing the *Jabuka/Pomo Pit* FRA would produce effects until 31 December 2020. Direct information collected by the consultants of the present study with the GFCM confirms that the *Jabuka/Pomo Pit* FRA is considered one of the best examples of management for the conservation of demersal species in a transboundary area (involving Croatia and Italy). Accordingly, the *Jabuka/Pomo Pit* FRA has been confirmed as a 'permanent' FRA, together with all the associated management measures, at the 44th session of the GFCM (2-6 November 2021).

C. The Bari Canyon

On the basis of a proposal elaborated in 2018 by ISMAR-CNR, IUCN Center for Mediterranean Cooperation, University of Bari and Coispa Bari, the 44th session of the GFCM has also established a FRA in the so-called 'Bari Canyon', in the Southern Adriatic.

The *Bari Canyon* FRA is located in GSA18 – which is already identified as EBSA by the CBD[390], together with the northern Ionian Sea – at around 20 n.m. off the city of Bari and 50 n.m. south of the Gargano National Park, in the Apulia Region (Figure 32).

[390] https://chm.cbd.int/database/record?documentID=204126.

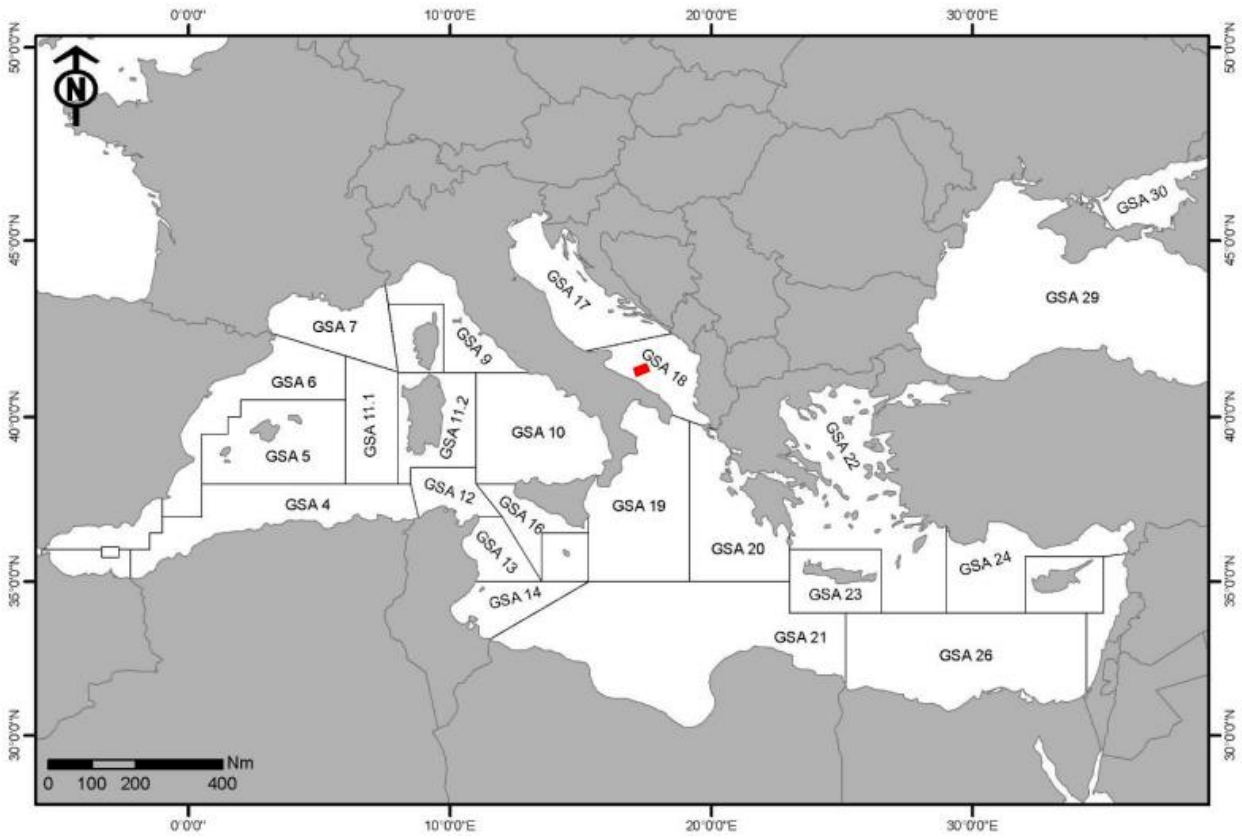

Figure 32 – In red, the location of the 'Bari Canyon' FRA (GSA18, Southern Adriatic). Source: Standard form with the proposal submitted to the GFCM in April 2018. Source: 2018 Proposal.

The text of the relevant recommendation is not yet available. In the proposal, the area was identified as: i) area of unique physical features and hydrological processes (deep-water circulation influencing the entire Mediterranean Sea); ii) a vulnerable marine ecosystem hosting numerous endangered mega- and macro-benthic organisms such as cnidarians; iii) a nursery for some deep-cartilaginous species impacted by fisheries; and iv) an area of important essential fish habitats for different commercial species such as anchovy, sardine, European hake, red mullet and deep-rose shrimp, among others.

The *Bari Canyon* FRA is composed of two main branches, almost parallel, indenting the shelf at depths of around 200 m. Depth range is between 200 and 700 m in the core area and between 200 and 1200 m in the buffer area. The core area is 326 km^2 and the buffer area is 675 km^2. According to the proposal, while the FRA core area includes the most valuable benthic habitats recorded in the Bari Canyon, such as the cold-water coral communities, the buffer area extends the protection of complex and heterogeneous habitats (Figure 33).

The core area and the buffer area are defined by the following coordinates.

Core area:

41° 23' 49" N – 17° 03' 24" E

41° 15' 27" N – 17° 19' 16" E

41° 16' 13" N – 17° 02' 42" E

41° 23' 03" N – 17° 19' 49" E

Buffer area:
41° 25’ 11” N – 17° 02’ 09” E
41° 24’ 04” N – 17° 27’ 31” E
41° 13’ 50” N – 17° 27’ 01” E
41° 14’ 57” N – 17° 01’ 26” E

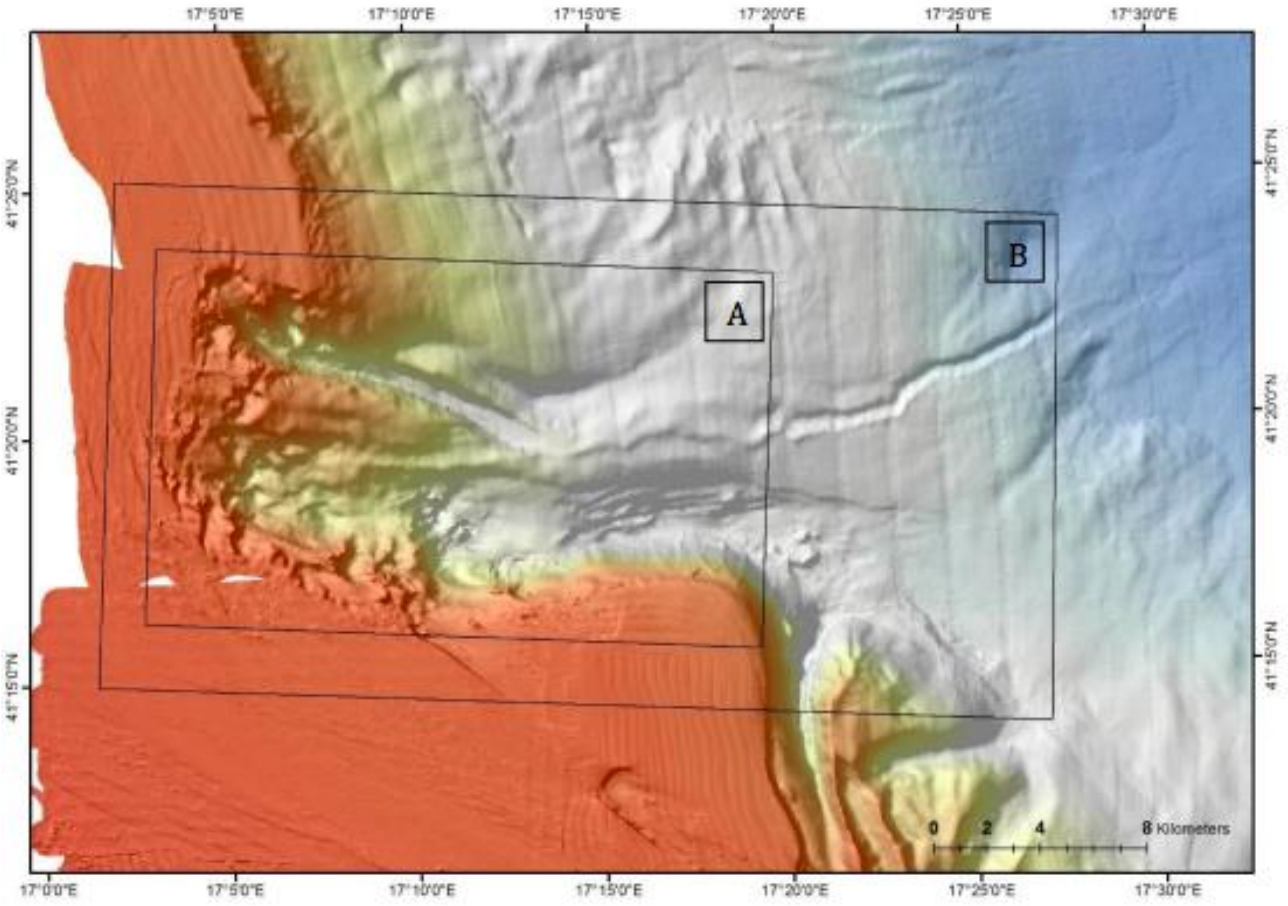

Figure 33 – The ‘Bari Canyon’ FRA and its proposed zoning: A) Core area; B) Buffer area. Source: 2018 Proposal.

In the core area, the proposed protection measures consist of a permanent closure of the area to any professional or recreational fishing activity. As for the buffer area, fishing activities with set longlines and traps could be allowed provided that the vessel has a specific authorization and that historical fishing activities in the buffer zone is demonstrated. It is envisaged a permanent closure to towed nets and bottom set nets and any recreational fishing activity. Exploratory fishing for towed nets and bottom set nets could be allowed to fish for a specific period of time, previous demonstration of no adverse impact on VMEs and essential fish habitats (EFHs). To this aim, a dossier specifying the technical characteristics of the vessels, gear used and proposal for the technical parameters of the campaign (e.g., length, gear) should be provided to the competent authorities. This technical dossier would be used to evaluate the impact on VMEs and EFHs before approval of the exploratory fishing by the competent authorities. Observers on board should be considered to identify the footprint of the fishery.

The proposal mentions the measures suggested to effectively enforce the protection pf the FRA. In particular, monitoring, control and surveillance measures under the umbrella of the MSFD could include the following:

- an access regime, with a closed list of authorized vessels, which should also meet a number of requirements, namely: be equipped with a VMS or AIS in correct working order, as well as registration obligations, including those for the fishing gear on board;

- a control regime, with the designation of landing points, obligations of notice of arrival in port and control of landings. To this end, the relevant fisheries authority should designate landing points in which landings from captures in the FRA is authorized. The control of landings should cover a minimum of 20% of the landings;

- a monitoring regime: in line with Recommendation MCS-GFCM/33/2009/7 and European Union Regulation 1224/2009 for fishing vessels operating or transiting in a FRA, the VMS should give positions in the FRA every 30 minutes, communicate the entry into the FRA area with the declaration of catches on the ship's hold before the entry;

- a reporting regime for fishing catches, with a VME indicator of taxa capture and vulnerable species as bycatch. Measures should include a logbook filled in for each haul and the reporting of the total catch for any commercial species obtained partially or totally in the FRA core or buffer zones. It is suggested that catches of VME indicator taxa are photographed in order to be identifiable, in addition to indicating their estimated amount in kg that should be consistently recorded in the logbook. Catches of vulnerable species as bycatch should be reported following the GFCM Protocols for self-reporting. This information should be sent to the Fisheries Management Authority and be available for port inspectors and observers on board. The GFCM Compliance Committee would regularly review and assess the level of enforcement and compliance in the FRA and provide relevant recommendations. GFCM Working Group on Vulnerable Marine Ecosystems could revise the management measures applied in the area and provide advice on the technical measures to decrease any adverse impact on VMEs and EFHs, as well as on the means to undertake impact assessment prior exploratory fishing.

The spatial closures to fishing in the Bari Canyon would have a certain socio-economic impact in the short term, due to the fact that local long-liners often fish in the canyon for large specimens of valuable species (Figure 34). An adequate programme to mitigate these impacts, including through the involvement of stakeholders and local fishermen, should be, therefore, part of the FRA implementation strategy.

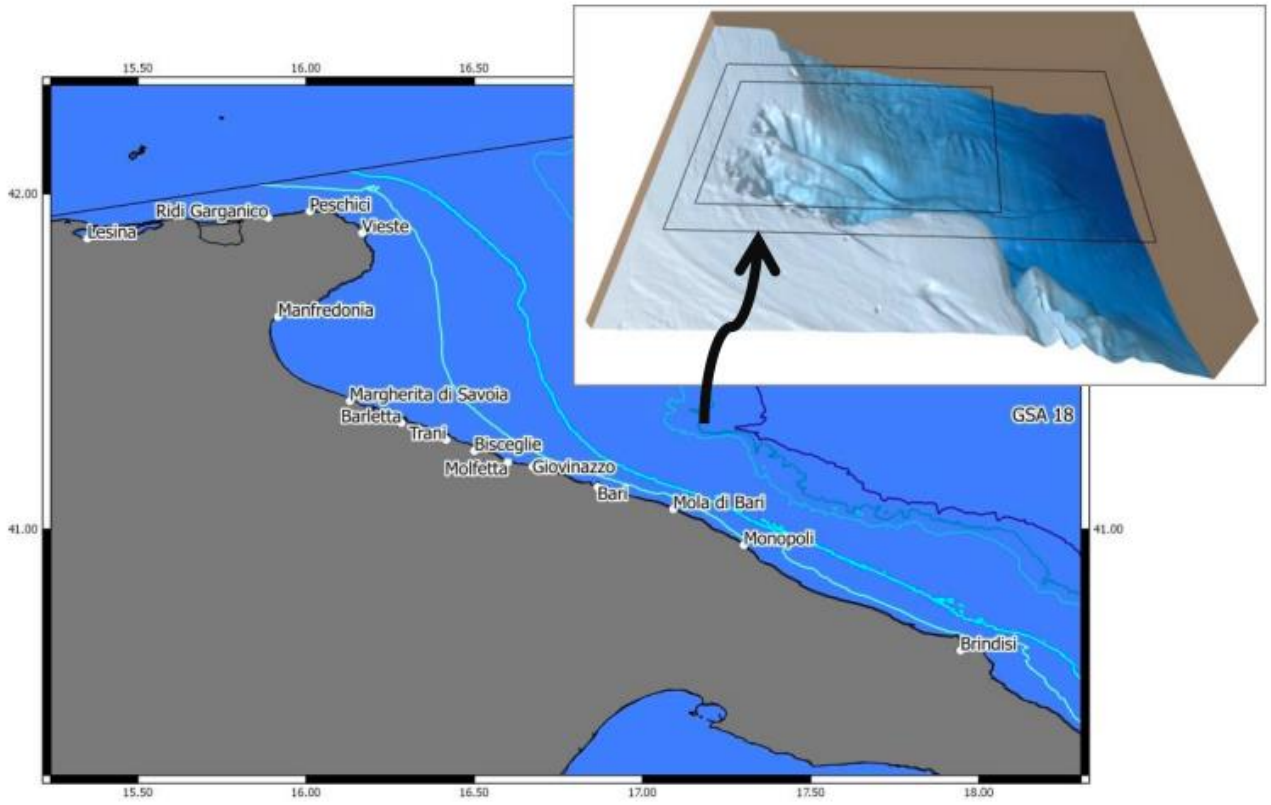

Figure 34 – 3D view of the 'Bari Canyon' FRA (core and buffer areas) and the coastline with the localization of some relevant fishing ports. Source: 2018 Proposal.

D. The Deep Water Essential Fish Habitats and Sensitive Habitats in the South Adriatic

Noteworthy is the proposal submitted to the GFCM by MedReAct on behalf of the Adriatic Recovery Project on 31 March 2018, with a view to protecting from the impacts of fishing the *Deep Water Essential Fish Habitats and Sensitive Habitats in the South Adriatic*. The proposed FRA is located in the Southern Adriatic area (GSA18). The area has been identified as: (1) a site of unique physical features influencing the dynamics of waters circulation and water exchange with the whole Mediterranean basin; (2) an important essential fish habitat for valuable species such as deep water shrimps (e.g., *Aristeomorpha foliacea*), deepwater rose shrimp (*Parapeneus longirostris*), European hake (*Merluccius merluccius*) and blackmouth catshark (*Galeus melastomus*); (3) a key area for sea turtles, tuna, swordfish, sharks and an important migratory corridor for megafauna like cetaceans; and (4) an area containing vulnerable marine ecosystems that could be significantly impacted by bottom trawling.

Fishing fleets operating in GSA18 are mainly from Albania and Italy. The Italian fleet is mainly composed of demersal trawlers[391]. The FRA proposal highlights that the South Adriatic Sea makes a substantial contribution to fish production. However, the

[391] *Standard Form for the Submission of Proposals for GFCM Fisheries Restricted Areas (FRAs) in the Mediterranean and the Black Sea*, Proposal revised by (SAC technical group/subregional committee), submitted by MedReAct and Adriatic Recovery Project, 31 March 2018, p. 15.

steep slopes, with a maximum depth of more than 900 m, together with the presence of hard bottoms (such as deep-water corals), oil and gas extraction, military and explosive sites located in the proposed FRA restrict trawling activities. According to the proposal, this circumstance would be indicative of the limited socio-economic impact of the proposed FRA.

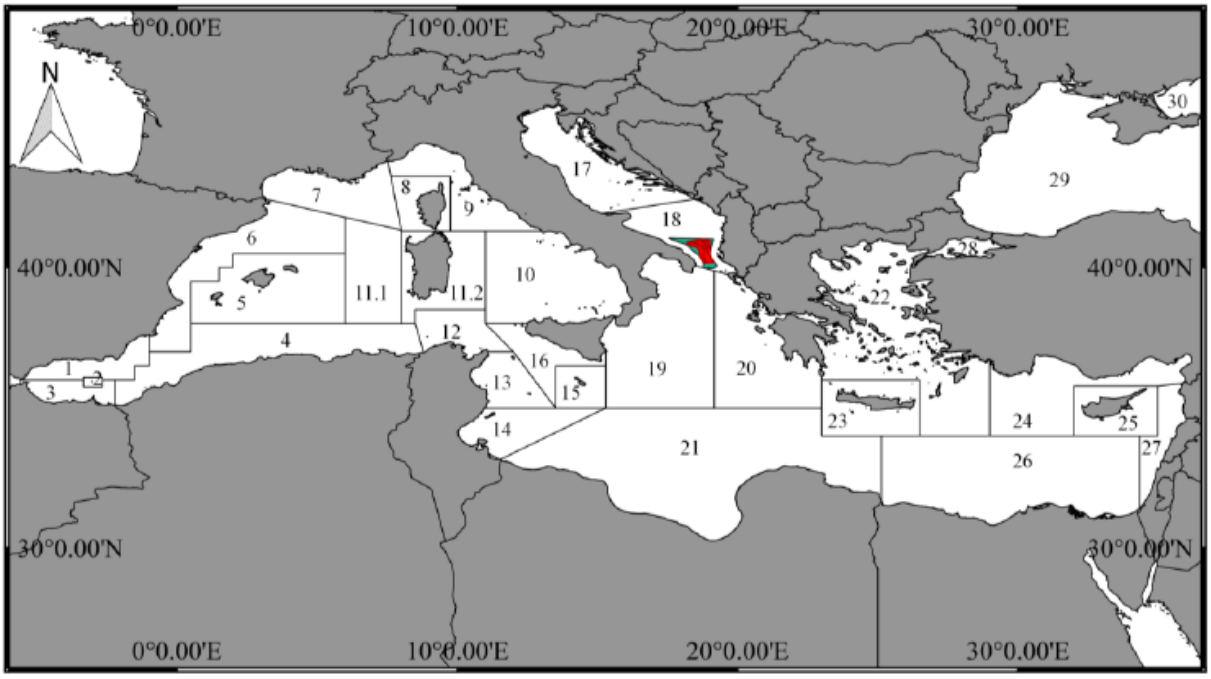

Figure 35 – Location of the proposed FRA in South Adriatic, zone GSA18. Source: 2018 Proposal.

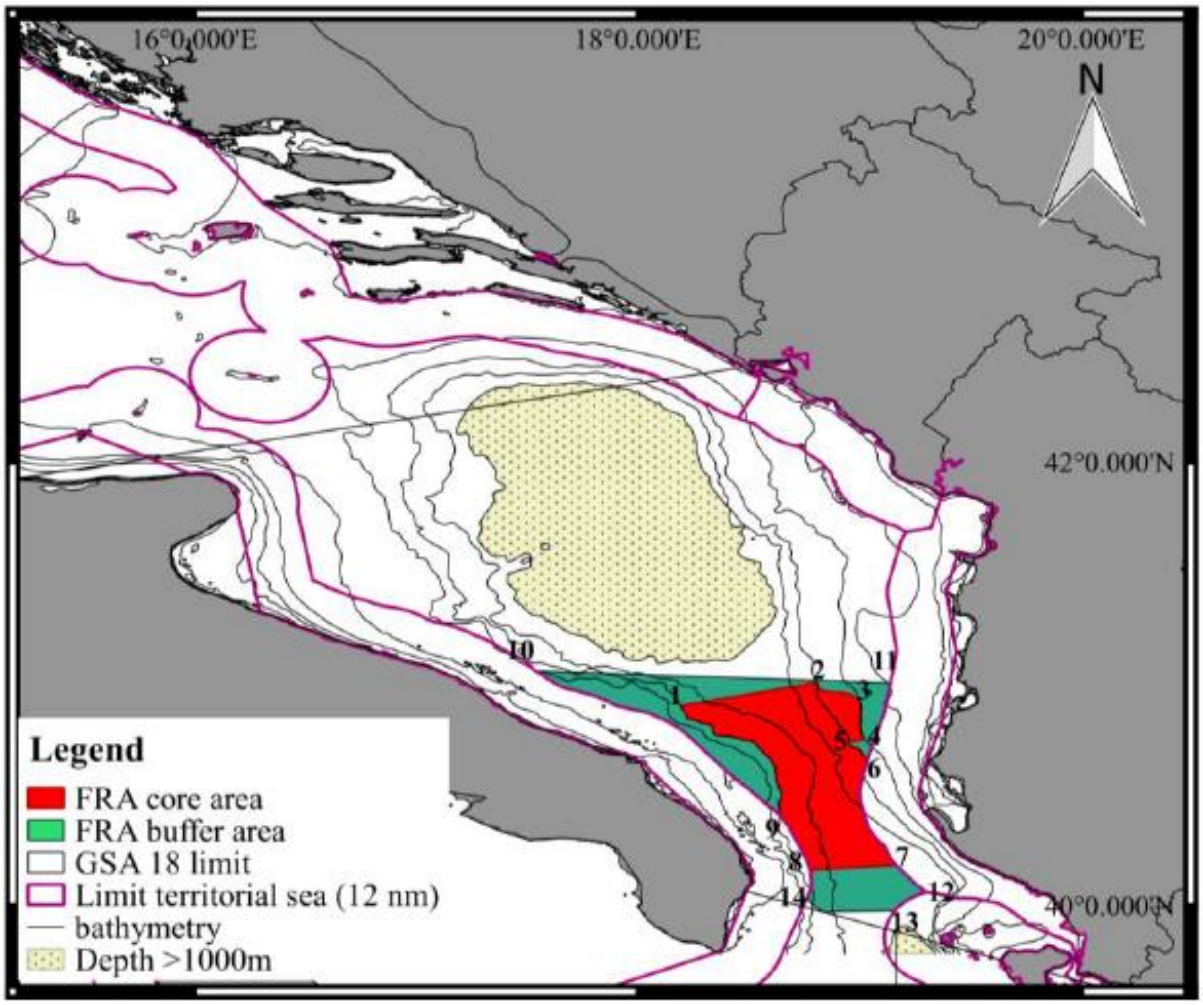

Figure 36 – Detailed position of the proposed FRA in South Adriatic. The numbers indicate the corresponding vertex of the core and buffer areas. Source: 2018 Proposal.

The proposal envisages a distinction between the core area, which covers important nursery and spawning grounds of valuable deep-water stocks and VMEs species, and a buffer zone, where other important nurseries and spawning grounds and complex and heterogeneous habitats are found. Both the core and buffer areas of the proposed FRA are inside the EBSA boundaries.

The core area covers a surface of 3545.22 km^2 and its depth ranges between 200 meters (minimum) to 968 meters (maximum). The core area is delimited by the vertices having the following coordinates, using the datum GCS WGS 1984:

Latitude	Longitude	Vertex
40°54'00" N	18°12'00" E	1
41°00'00" N	18°48'36" E	2
40°55'48" N	19°00'00" E	3
40°45'00" N	19°01'48" E	4
40°44'24" N	18°57'36" E	5
40°38'24" N	19°02'24" E	6
40°10'48" N	19°10'12" E	7
40°09'36" N	18°46'48" E	8
40°24'36" N	18°39'00" E	9

The buffer area, which covers a surface of 3095.6 km^2 and its depth ranges between 100 m (minimum) to 900 m (maximum). It is delimited by the vertices having the following coordinates, using the same datum GCS WGS 1984:

Latitude	Longitude	Vertex
41°03'28.8" N	17°32'20.4" E	10
41°00'13.32" N	19°08'23.28" E	11
40°03'36" N	19°18'10.8" E	12
39°58'35.4" N	19°09'37.68" E	13
39°59'45.6" N	18°44'52.8" E	14

Two military areas are present along the Italian side of the proposed FRA area (Figure 37, in blue). Moreover, two explosive sites are reported inside the proposed FRA area (dangerous circular area (r=5M) due to the presence of ordnance dropped from aircraft. There, navigation and fishing activities are banned for the presence of unexploded ordnance.

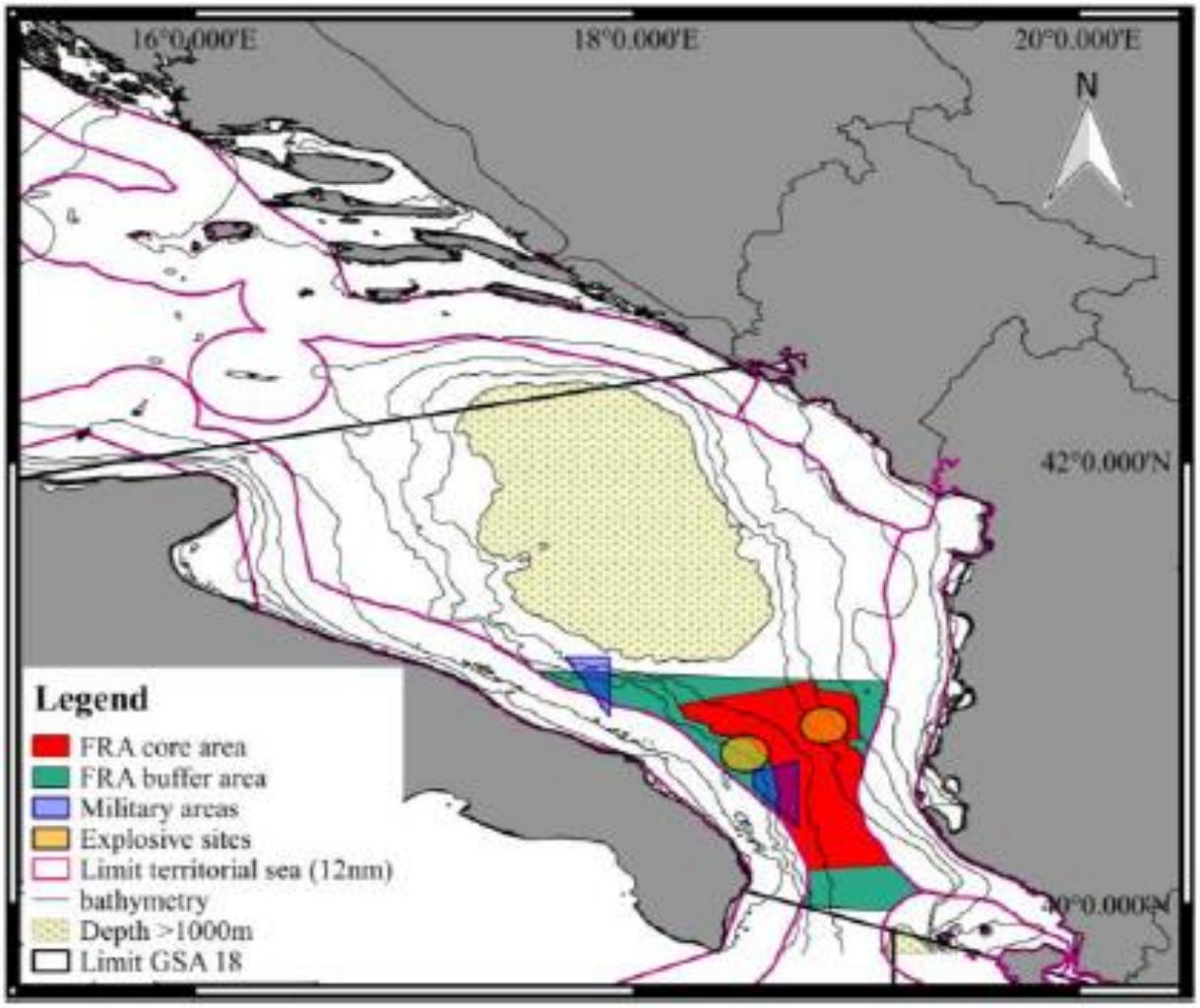

Figure 37 – Military sites inside the proposed FRA in South Adriatic (blue polygons) and the two explosive sites (orange circles representing the dangerous circular areas due to the presence on the bottom of ordnance dropped from aircraft). Source: 2018 Proposal.

From an environmental perspective, an element of concern for the deep-sea habitats of the Southern Adriatic Pit area is the development of the Trans Adriatic Pipeline (TAP) for the transportation of natural gas to Europe from Azerbaijan[392]. The pipeline connects with the Trans Anatolian Pipeline at the Greek-Turkish border, crossing the north of Greece, Albania and the Adriatic Sea before coming ashore in southern Italy to connect to the Italian natural gas network. The underwater tract of the TAP starts from the city of Fier (Albania) and ends in the proximity of San Foca (Italy) (Figure 38).

Figure 38 – The Trans Adriatic Pipeline (TAP) crossing the Adriatic Sea. Source: https://www.tap-ag.com/.

The FRA proposal suggests specific management measures, in accordance with the relevant zoning system. In the core area, the proposal includes the permanent closure to any professional fishing activity with towed nets, bottom set nets, and set longlines. Measures suggested in the buffer area include the subjection of any demersal fishing activity to a special fishing authorization, if the fishing unit can demonstrate to have carried out fishing activities in the area in the last five years. Members and cooperating non-members of the GFCM should be required to compile and transmit to the Executive Secretary of the GFCM the list of their authorized vessels. Vessels not complying with the GFCM conservation and management measures should not be authorized to fish in the FRA buffer area. In any case, the authorized vessels would be allowed to fish for a maximum of two days per week.

The proposal also suggests that members and cooperating non-members of the GFCM should ensure that the area is protected from the impact of any other human

[392] See https://www.tap-ag.com/.

activity jeopardizing the conservation of the EFHs, sensitive habitats and VMEs. The GFCM would conduct fishery independent assessments on the presence and status of EFHs, sensitive habitats and VMEs in the area and on the effects of the conservation measures introduced with the FRA.

The proposal highlights that the boundaries of the area and the conditions to fish therein as referred to in the suggested management measures above should be subject to change on the basis of the relevant advices of the GFCM Scientific Advisory Committee. Moreover, in consideration of the fact that the buffer area of the proposed FRA covers only marginally the European hake nurseries areas (a GFCM priority species for the Adriatic) and that the largest part of these nursery areas falls within the territorial waters of Italy and Albania, it would be desirable that these two States extend the proposed fishing restrictions in order to protect these important EFHs in their territorial waters.

As regards the measures to effectively enforce environmental and species protection within the FRA, the proposal suggests that authorized fishing vessels should be allowed to land catches of demersal stocks only in designated ports. Fishing vessels without a special fishing authorization and equipped with towed nets, bottom set nets, and set longlines should transit inside and through the FRA exclusively by keeping a direct course, at a constant speed exceeding 7 knots and with VMS and AIS active onboard. Transit in the core area should be prohibited to any vessel carrying on board set longlines. The GFCM should define mechanisms to ensure control and enforcement of the FRA, through VMS, AIS or remote-control systems, as well as identify criteria for the regular evaluation of the status of the FRA.

Monitoring, control and surveillance measures in the FRA could include the provision of VMS onboard and transmission of position data at regular intervals in line with Recommendation MCS-GFCM/33/2009/7 and European Union Regulation 1224/2009 for fishing vessels operating or transiting in a FRA; AIS onboard and transmission for fishing vessels operating or transiting in the FRA. The proposal further suggests at sea inspections and, possibly, aerial controls by the flag States of vessels operating in the area. The GFCM Compliance Committee would regularly review and assess the level of enforcement and compliance in the FRA and provide relevant recommendations.

The proposal remarks that the socio-economic impact of the proposed FRA should be sustainable for both Italian and Albanian fleets, considering the relatively low number of vessels currently fishing in deeper areas and the relative low fishing effort in the selected FRA area. As a matter of fact, in the proposed FRA, the presence of explosive sites, military areas and extraction concession already impose several fishing and navigational restrictions.

Examples of transboundary marine protected areas beyond the territorial waters of Mediterranean coastal States include the *Pelagos Sanctuary*, which is one of the two SPAMIs presenting a transboundary character (the other being the Cetacean Migration Corridor off the coasts of Spain). The sanctuary was established under an Agreement signed in Rome in 1999 by France, Italy and Monaco and is the first treaty ever concluded with the specific objective of establishing a protected area for marine mammals. 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. In fact, also in those portions of water eventually declared as exclusive economic zones, third States enjoy a number of freedoms, including the freedom of navigation, which causes certain impacts to cetaceans, such as those deriving from collisions and underwater noise. The sanctuary has been included in the SPAMI List and, accordingly, also enjoys the protection regime provided for under the Areas Protocol. Another example of transboundary cooperation concerns the Strait of Bonifacio, which is an international strait regulated by the regime of transit passage under Arts. 37 to 44 UNCLOS. It is located between Sardinia and Corsica (two Mediterranean islands belonging to Italy and France, respectively). As the strait represents one of the most outstanding areas in the Mediterranean Sea in terms of marine biodiversity, France and Italy have long since decided to adopt in the strait a restrictive approach to navigation, insofar as ships flying their respective flags are concerned. To this purpose, they necessarily acted through the IMO. In 2011, the strait was also designated as a PSSA – the first established in the Mediterranean Sea and the second in the world for an international strait. Noteworthy is the initiative of two French and Italian public local entities with competencies in the field of marine environment protection, which in 2013 registered with the Committee of the Regions of the EGTC Convention establishing the *International Marine Park of the Strait of Bonifacio*. Other effective area-based conservation measures of transboundary character include FRAs established within the framework of the GFCM, 2 of which lie in the Adriatic and Ionian Seas, namely: the *Lophelia reef off Capo Santa Maria di Leuca* and the *Jabuka/Pomo Pit*. Worth of mention is the *Bari Canyon*, which does not present a transboundary character, although being located in the South Adriatic Sea off the territorial waters of Italy. A proposed transboundary FRA within the region of concern (Albania, Italy) relates to the *Deep Water Essential Fish Habitats and Sensitive Habitats in the South Adriatic*, whose establishment under the GFCM seems imminent. Since 2005, the same organization has prohibited the use of towed dredges and trawl nets at depths beyond 1000 m in the Mediterranean and Black Seas: such other effective area-based conservation measure includes portions of the Southern Adriatic and Ionian Seas.

CHAPTER 8

THE CASE FOR ESTABLISHING TRANSBOUNDARY MEDITERRANEAN SPAMIs WITHIN THE ADRIATIC AND IONIAN SEAS

8.1. Challenges and opportunities

As already remarked[393], the Areas Protocol was envisaged with a view to give priority to the need to protect, preserve and manage in a sustainable and environmentally sound way areas of particular natural value in the whole Mediterranean Sea, irrespective of the present legal condition of the waters where they are located or of future changes in such legal condition. In particular, the Areas Protocol was drafted in order to be equally applicable in a scenario of waters falling either under a high seas or under an exclusive economic zone regime. According to Art. 9, para. 2, SPAMIs can be proposed and established:

(1) in a zone already delimited, over which a State party exercises sovereignty or jurisdiction, this wording being intended to include areas of undisputed marine internal waters, territorial sea, exclusive economic zone, fishing zone, ecological protection zone or continental shelf;

(2) in an area where the limits of national sovereignty or jurisdiction have not yet been defined, this wording being intended to mean areas belonging to the above-mentioned coastal zones where the boundaries between adjacent or opposite States parties have not yet been agreed upon; in this case the proposal must be made jointly by the two States parties concerned;

(3) in an area situated, partly or wholly, on the high seas; in this case the proposal must be made *"by the neighbouring Parties concerned"*[394].

Moreover, in order to overcome the difficulties due to different types Mediterranean coastal zones and unsettled maritime boundaries[395], the Areas Protocol includes two very elaborate disclaimer provisions (art. 2, paras. 2[396] and 3[397]). Apart from the legal technicalities, the idea behind them is that, on the one hand, the development of

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[393] See *supra*, sub-para. 5.1, A.

[394] There may be a margin of flexibility in the identification of the States that are 'neighbouring' to a high seas area, especially in the case of geographically disadvantaged States (such as, in the Adriatic Sea, Bosnia and Herzegovina and Slovenia).

[395] See *supra*, para. 1.2

[396] *"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".*

[397] *"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".*

international cooperation in the field of the marine environment should not prejudice unsettled political and legal questions that have a different nature, such as maritime boundaries; on the other hand, the existence of such legal questions should not prevent or delay the adoption of measures necessary for the preservation of the ecological balance in the Mediterranean Sea.

The message that can be drawn from the disclaimer provisions is that the establishment of marine protected areas, far from affecting in any way the position taken by any State party on pending legal and political questions, could, especially in the case of sensitive marine boundary issues, contribute to the cooling off of the tension and to the building of a climate of progressive confidence and cooperation between the States concerned.

In principle, the Areas Protocol is the ideal instrument to establish transboundary marine protected areas and to ensure their appropriate management. If such areas are intended as SPAMIs, they will be proposed by the neigbouring States concerned and will be included in the SPAMI List following a decision taken by consensus by the Meeting of the parties, which will also approve the management measures applicable to the area (Art. 9, para. 4). What is also important is that such measures have an *erga omnes partes* effect, in the sense that each party to the Areas Protocol agrees to comply with the measures applicable to the SPAMI and not to authorize nor undertake any activities that might be contrary to the objective for which the SPAMI was established (Art. 8, para. 3, *b*). Moreover, the parties *"undertake to adopt appropriate measures, consistent with international law, to ensure that no one engages in any activities contrary to the principles or purposes"* of the Areas Protocol (Art. 28, para. 2)[398].

In fact, today the reality does not completely correspond to what was envisaged by the drafters of the Areas Protocol. Out of the 39 SPAMIs so far established, 37 are located inside the marine internal waters or the territorial sea of the coastal State concerned. Only two SPAMIs can be found partially or totally in waters beyond the territorial sea – namely, the Pelagos Sanctuary, jointly proposed by France, Italy and Monaco in 2001, and the Cetacean Migration Corridor in the Mediterranean, proposed by Spain in 2019 – and only one has a transnational character (the above mentioned Pelagos sanctuary). In the case of the Adriatic Sea, all the four SPAMIs so far established – namely *Miramare Marine Protected Area* (Italy, 2008), *Landscape Park Strunjan* (Slovenia, 2019), *Torre Guaceto Marine Protected Area and Natural Reserve* (Italy, 2008) and *Karaburun Sazan National Marine Park* (Albania, 2016) – are located along the coast. The same situation occurs for the two SPAMIs created in the Ionian Sea, namely *Porto Cesareo Marine Protected Area* (Italy, 2012) and *Plemmirio Marine Protected Area* (Italy, 2008).

Already in 2010, an extraordinary meeting of the focal points of the Areas Protocol, held in Istanbul within the framework of a project funded by the European Commission, discussed the question of identification of areas of conservation interest with a view to promoting the establishment of a more representative ecological network of protected

[398] For example, if a third State were to authorize whaling activities inside the SPAMI Pelagos Sanctuary, all parties to the Areas Protocol could adopt economic sanctions against that State.

areas in the Mediterranean Sea. The project identified ten *"priority conservation areas lying in the open seas, including the deep sea, likely to contain sites that could be candidates for the SPAMI List"*[399]. Three of the areas are located in the Adriatic and Ionian Seas, namely:

> *Northern and Central Adriatic*: This portion of the Adriatic has a high natural productivity that supports an extensive food web, including sea birds, loggerhead sea turtles and several shark species. Considering the high level of degradation of the North-western Adriatic Sea, establishing a protected area in this site would require significant marine restoration effort.
>
> *Santa Maria di Leuca*: In addition to supporting a broad array of Mediterranean diversity, this northern extent of the Ionian has significant deep sea coral habitats.
>
> *Northeastern Ionian*: The northeastern Ionian Sea includes cetacean critical habitats and important nursery areas for several shark species.

However, concrete steps in this direction do not seem to have been taken so far by the States concerned[400]. The document on the 'Post-2020 Regional Strategy for Marine and Coastal Protected Areas (MCPAs) and Other Effective Area-based Conservation Measures (OECMs) in the Mediterranean', presented at the Areas Protocol focal points meeting held on 23-25 June 2021, remarks that

> MPCA coverage in the Mediterranean currently stands at 8.3%, there is a clear need therefore to establish new MCPAs and to expand existing networks if the region is to advance towards meeting this ambitious post-2020 target. It is further essential that this increase in coverage coincides with a more balanced representation across countries, sub-regions and depths and includes areas beyond national jurisdiction[401].

8.2. Potential areas

The establishment of a transboundary SPAMI is a measure that deserves careful consideration in the Northern and Central Adriatic, where the waters are bordered by Croatia, Italy and Slovenia. There are several elements that support such a measure, such as the following:

a) within the Gulf of Trieste, two small SPAMIs have already been created by Italy (*Miramare Marine Protected Area*) and Slovenia (*Landscape Park Strunjan*)[402]; moreover, according to the 2021 Slovenian Maritime Spatial Plan, two new marine protected areas have been envisaged, respectively at the border with Italy (Debeli Rtic / Punta Sottile) and at the border with Croatia (Figure 39 below).

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[399] See Annex III to doc. UNEP(DEPI)/MED WG.348/5 of 4 June 2010.

[400] Already at the Istanbul meeting, *"the representative of the European Commission expressed his disappointment regarding the low commitments by the Parties for further action to protect the areas identified through the first phase of the project"* (doc. quoted *supra*, footnote 399, para. 61).

[401] Doc. UNEP/MED WG 502/12 of 22 May 2021, p. 2. Notably, the sentences reproduced above refer to any kind of marine protected areas and not only to SPAMIs.

[402] Art. 10 of the Areas Protocol allows for changes in the delimitation or legal status of SPAMIs. In this case, *Miramare Marine Protected Area* and *Landscape Park Strunjan* could preserve their legal regime through appropriate zoning measures applicable within a much bigger SPAMI.

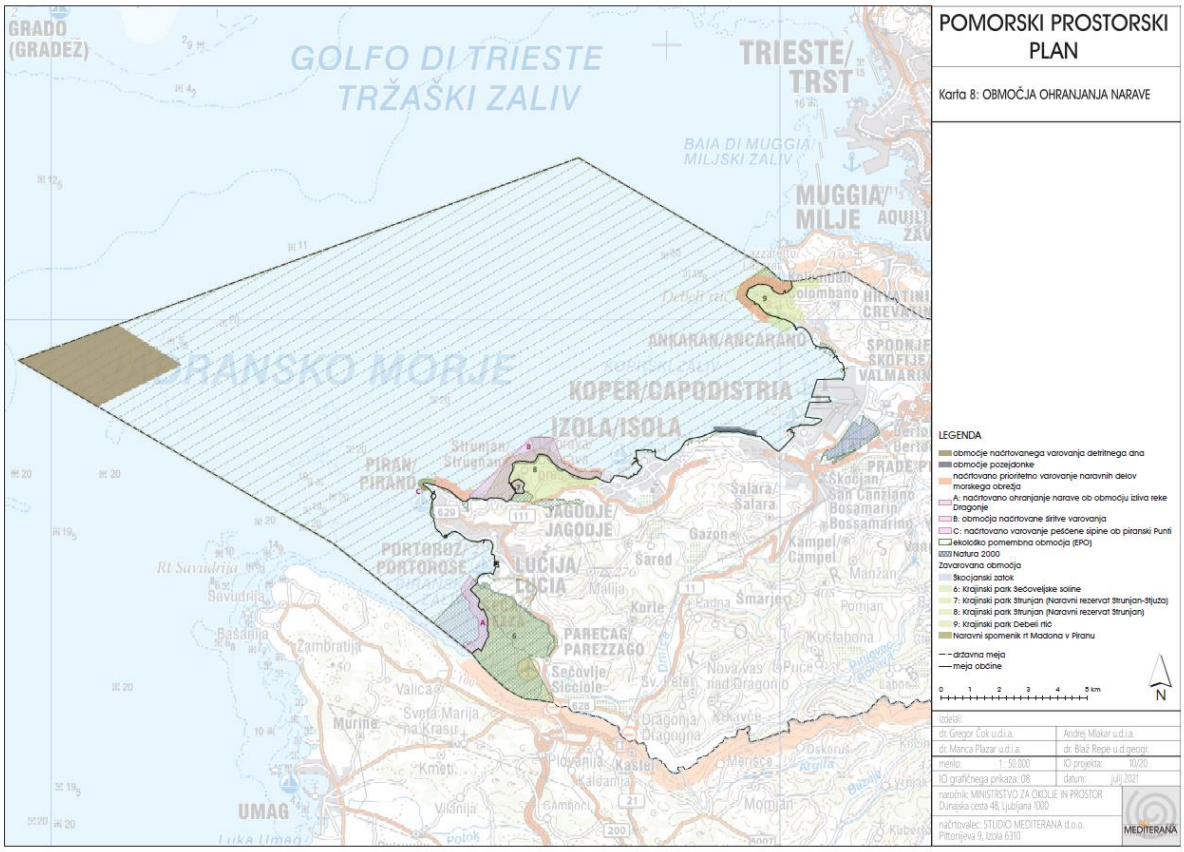

Figure 39 – Slovenian Maritime Spatial Planning related to Nature Conservation. Source: Decree on Maritime Spatial Planning, map no. 8 (Official Gazette of the Republic of Slovenia No. 116/2021).

b) in 2010, the report presented to the extraordinary meeting of the focal points for the Areas Protocol listed in general the Northern and Central Adriatic among the 'priority conservation areas'[403];

c) in 2014, the Conference of the Parties to the CBD identified the Northern Adriatic as an EBSA (Decision XII/22)[404];

d) EUSAIR has identified the Gulf of Trieste and the Pomo/Jabuka Pit among the four pilot areas to carry out a review of the implementation of integrated coastal zone management and marine spatial planning concepts[405].

e) measures for the establishment of a common routing system and traffic separation scheme and for a mandatory ship reporting system have been agreed by Croatia, Italy and Slovenia for the Northern Adriatic (Memoranda of Understanding of 19 May 2000) and measures for the establishment of a common VTS and a common routing system and traffic separation scheme have been agreed by Croatia and Italy for the Central Adriatic (Memoranda of Understanding of 19 May 2000);

f) In 2017, the GFCM established the *Jabuka/Pomo Pit* FRA (Recommendation 41/2017/3)[406];

[403] See *supra* in this chapter, para. 8.1.
[404] See *supra*, sub-para. 3.3, B.
[405] See *supra*, sub-para. 2.4, D.
[406] See *supra*, para. 5.2.

g) In 2010, the Meeting of the Parties to the ACCOBAMS recommended the creation of a marine protected area in the waters along the east coast of the Cres-Lošinj archipelago (Croatia), as a zone of special importance for cetaceans[407].

All these precedents could support a joint initiative by Croatia, Italy and Slovenia to establish one or two SPAMIs that would be intended to address three specific challenges:

- to build upon the existing or proposed instruments of restricted or sectoral protection, coordinating them within a larger and coherent framework of transboundary cooperation and sustainable development;

- to include marine protected areas with the framework of a broader marine spatial planning concept applying to the whole Adriatic Sea and potentially extending to the Ionian Sea;

- to integrate and balance in a sound manner economic activities (especially navigation and fishing) and environmental needs;

- to increase confidence among the Adriatic Sea bordering States, showing that pending issues of maritime boundaries[408] are not an unsurmountable obstacle against the strengthening of their environmental cooperation through the establishment of transboundary protected areas[409].

What could deserve further elaboration, on the basis of the relevant political, legal and environmental factors, is whether one single Adriatic SPAMI should cover the whole Northern and Central Adriatic area or, instead, two self-standing SPAMIs should be established, the first in the Northern Adriatic and the second in the Central Adriatic, around the Jabuka/Pomo Pit. If appropriate, buffer zones could be attached to the two SPAMIs and ecological corridors could be envisaged to join them.

As regards other SPAMIs in the Adriatic and Ionian Seas, it has already been remarked[410] that, given the lack of participation by Bosnia and Herzegovina and Greece to the Areas Protocol, the establishment of transboundary SPAMIs that would involve the two States is not a legally feasible option, however desirable it could be under an environmental perspective. For this reason, a possible transboundary SPAMI in the waters off Neum (Bosnia-Herzegovina and Croatia) should be disregarded for the time being. The same can be said of any possible transboundary SPAMIs in the Channel of Otranto, bordered by Albania, Greece and Italy, or in the northern Ionian Sea, bordered by Greece and Italy. However, for the time being, different forms of cooperation, such as international parks or other effective area-based conservation measures, could be envisaged for the areas in question.

8.3. Protection measures and management authorities

[407] See *supra*, para. 5.3.

[408] As already remarked (*supra*, chapter 1), the maritime boundary between Croatia and Slovenia is still disputed, according to the position taken by Croatia, and the existing maritime boundary between Croatia and Italy is limited to the continental shelf.

[409] As already remarked (*supra*, sub-para. 5.1, A), no action taken on the basis of the Areas Protocol can affect pending questions of delimitation of maritime boundaries (Art. 2, para. 2).

[410] See *supra*, sub-para. 5.1, A, and para. 8.1.

The Areas Protocol is sufficiently detailed in specifying what are the objectives of specially protected areas (Art. 4), what are the protection measures that can be taken therein (Art. 6) and what is the content of the planning, management, supervision and monitoring measures (Art. 7). In the case of the proposed SPAMI or SPAMIs in the Northern and Central Adriatic, the protection measures should include navigation and, as regards the waters off Jabuka/Pomo Pit, fishing, together with other measures, as appropriate, to integrate them into broader conservation objectives.

Annex I to the Areas Protocol provides for common criteria for the choice of protected marine and coastal areas that could be included in the SPAMI List. In particular, the sites included in the SPAMI List are to 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[411], a management plan[412] and a monitoring programme[413] (paras. from D.6 to D.8). In the case of transboundary marine protected areas, the legal status, the management plan, the applicable measures and the other elements required for the proposal *"will be provided by the neighbouring parties concerned"* (para. C.3). A requirement that deserves special attention in the case of transboundary protected areas that inevitably involve the authorities of more than one State is that *"the competence and responsibility with regard to administration and implementation of conservation measures (…) must be clearly defined in the texts governing the area"* (para. D.4).

In the elaboration of the proposal, particular attention should be devoted to what has been described in a recent report as main barriers to effective marine and coastal protected areas management:

> - Lack of political will or support for marine protected areas establishment and management;
> - Insufficient financing: not enough, not sustainable, heavy reliance on external fund;
> - Inadequate human resources: not enough marine protected area staff, where staff are occurring, many do not have the necessary technical skills for marine protected areas management;
> - Lack of sectoral and stakeholder involvement, cooperation and support: poor coherence and harmonization of policies, plans and actions;
> - Insufficient knowledge: knowledge gaps for effective decision-making; (…)

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411 *"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"* (para. D.6).

412 *"To be included in the SPAMI list an area will have to be endowed with a management plan. The main rules of this management plan are to be laid down as from the time of inclusion and implemented immediately. A detailed management plan must be presented within three years of the time of inclusion. Failure to respect this obligation entails the removal of the site from the list"* (para. D.7).

413 *"To be included in the SPAMI list, an area will have to be endowed with a monitoring programme. This programme should include the identification and monitoring of a certain number of significant parameters for the area in question, in order to allow the assessment of the state and evolution of the area, as well as the effectiveness of protection and management measures implemented, so that they may be adapted if need be. To this end further necessary studies are to be commissioned"* (para. D.8).

- Lack of management plans;
- Inadequate surveillance and enforcement: unclear procedure in legislation, lack of by-laws, poor cooperation with enforcement agencies, irregular routine patrols, unclear mandates and responsibilities for enforcement;
- Insufficient monitoring and evaluation: insufficient and inadequate monitoring of management effectiveness, insufficient biodiversity and biological monitoring[414].

A solid basis for the establishment of the proposed SPAMI or SPAMIs could be a treaty, which would include general principles and objectives, define the geographical limits of the area and set up an institutional body in charge for the adoption of more specific regulations. This course of action was followed by France, Italy and Monaco that, after having concluded a treaty for the establishment of the Pelagos Sanctuary (1999), submitted the area for inclusion in the SPAMI List (2001). The option of a treaty would require an extended period of time, as needed for the negotiations and the procedures of subsequent ratification according to the constitutional law of the States concerned.

However, the Areas Protocol does not necessarily require a previous treaty for proposing the inclusion of a transboundary area in the SPAMI List. What is needed is the submission by the neighbouring parties of a joint proposal, 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 (Art. 9, para. 3). It is also provided that that the neighbouring parties concerned consult each other with a view to ensuring the consistency of the proposed protection and management measures, as well as the means for their implementation (Art. 9, para. 3, *a*). If a treaty is not indispensable, the adoption of consistent national legislation and regulations, which implies a previous coordination at the intergovernmental level, is thus a specific requirement for any transboundary SPAMI proposal.

The establishment of a one or two transboundary SPAMIs in the Northern and Central Adriatic is supported by a number of elements, namely: a) within the Gulf of Trieste, two small SPAMIs have already been created by Italy (*Miramare Marine Protected Area*) and Slovenia (*Landscape Park Strunjan*); b) the report presented in 2010 to the extraordinary meeting of the focal points for the Specially Protected Areas Protocol listed in general the Northern and Central Adriatic among the 'priority conservation areas'; c) in 2014, the Conference of the Parties to the CBD identified the Northern Adriatic as an EBSA; d) EUSAIR has identified the Gulf of Trieste and the Pomo/Jabuka Pit among the four pilot areas to carry out a review of the implementation of integrated coastal zone management and marine spatial planning concepts; e) measures for the establishment of a common routing system, a traffic separation scheme and a mandatory ship reporting system have been agreed by the bordering countries; f) In 2017, the GFCM established the *Jabuka/Pomo Pit* FRA; g) In 2010 the Meeting of the Parties to the ACCOBAMS

[414] Doc. UNEP/MED WG.502/12 of 22 May 2021, 'Post-2020 Regional Strategy for Marine and Coastal Protected Areas (MCPAs) and Other Effective Area-Based Conservation Measures (OECMs) in the Mediterranean', para. 15.

recommended the creation of a marine protected area in the waters along the east coast of the Cres-Lošinj archipelago (Croatia), as a zone of special importance for cetaceans.
A joint initiative by Croatia, Italy and Slovenia to establish one or two SPAMIs in the Northern and Central Adriatic would be intended to address the following specific challenges:
- to build upon the existing or proposed instruments of restricted or sectoral protection, coordinating them within a larger and coherent framework of transboundary cooperation and sustainable development;
- to include marine protected areas with the framework of a broader marine spatial planning concept applying to the whole Adriatic Sea and potentially extending to the Ionian Sea;
- to integrate and balance in a sound manner economic activities (especially navigation and fishing) and environmental needs;
- to increase confidence among the Adriatic Sea bordering States, showing that pending issues of maritime boundaries are not an unsurmountable obstacle against the strengthening of their environmental cooperation through the establishment of transboundary protected areas.
A transboundary SPAMI would not be legally feasible in the Ionian Sea, as Greece is not yet a party to the Areas Protocol.

CHAPTER 9

THE CASE FOR ESTABLISHING TRANSBOUNDARY INTERNATIONAL MARINE PARKS THROUGH A EUROPEAN GROUPING OF TERRITORIAL COOPERATION WITHIN THE ADRIATIC AND IONIAN SEAS

The European Grouping of Territorial Cooperation (EGCT) is a tool consisting of an entity with legal personality under European Union law. It was introduced in 2006 with the adoption of Regulation (EC) 1082/2006 of 5 July 2006 (hereinafter: EGTC Regulation). This instrument aims at improving the implementation conditions for territorial cooperation with a view to strengthening cohesion in the European Union. In doing so, it complements funding instruments for European Territorial Cooperation (ETC), known as 'Interreg'. In particular, Art. 1 of the EGTC Regulation sets forth the following overall objective:

> to facilitate and promote, in particular, territorial cooperation, including one or more of the cross-border, transnational and interregional strands of cooperation, between its members … with the aim of strengthening Union economic, social and territorial cohesion.

Within this overall objective, an EGTC may formulate more specific objectives. These may definitely include transboundary cooperation between members in the field of marine environment protection, through the extension, beyond national borders, of national area-based conservation tools and other area-based effective conservation measures. In any case, the EGTC *"shall act within the confines of the tasks given to it"* (Art. 7, para. 1, of the EGTC Regulation).

Primarily, the tasks of an EGTC may concern the implementation of cooperation programmes, or parts thereof, or the implementation of operations supported by the European Union through the European Regional Development Fund, the European Social Fund or the Cohesion Fund[415]. However, European Union member States may limit the tasks that EGTCs may carry out without the financial support from the European Union (Art. 7 of the EGTC Regulation).

The decision to establish an EGTC is taken at the initiative of the prospective members. Entities that may become members of an EGTC include European Union member States, regional and local authorities of European Union member States, public undertakings and public bodies, as well as, under certain conditions, States that are not members of the European Union and their public entities. What is necessary is that the EGTC – which aims at promoting transboundary cooperation – is made up of members

[415] Member States may limit the tasks that EGTCs may carry out without financial support from the European Union (Art. 7, para. 3, of the EGTC Regulation).

that are located on the territory of at least two European Union member States. In addition, the EGTC may include as members one or more third States that are 'neighboring' at least one European Union member State that is a member of the same EGTC. This implies that Albania, Bosnia and Herzegovina and Montenegro – or public bodies of these States – could become members of an EGTC in the Adriatic and Ionian region with a view to protecting the marine environment. In fact, a State that is not a member of the European Union is considered as a 'neighboring State' by the EGTC Regulation when *"it shares a common land border or where both the third State and the EU Member State are eligible under a joint maritime cross-border programme under the European territorial cooperation goal, or are eligible under another cross-border, sea-crossing or sea-basin cooperation programme, including where they are separated by international waters"* (Art. 3a, para. 1, EGTC Regulation). The maritime borders between the countries concerned are included.

Each EGTC is governed by a convention (Art. 8 of the EGTC Regulation) concluded unanimously by its members, which specifies the founding elements of the entity, namely:

- the name of the EGTC and its registered office;
- the extent of the territory in which the EGTC may execute its tasks;
- the objective and the tasks of the EGTC;
- the duration of the EGTC and the conditions for its dissolution;
- the list of the EGTC members;
- the list of the EGTC organs and their respective competences;
- the applicable laws, rules, procedures and arrangements; and
- the procedures for adoption of the statutes and amendment of the convention.

Each EGTC is composed of at least an assembly, which is made up of the representatives of its members, and a director, who represents the EGTC and acts on its behalf (Art. 10 of the EGTC Regulation). Each EGTC also establishes an annual budget which shall be adopted by the assembly (Art. 11). The legal personality of the EGTC entails that the entity shall be liable for all its debts, and members shall be liable for such debts irrespective of the nature of them, each share being fixed in proportion to the member's financial contribution (Art. 12).

Among the characteristic elements of an EGTC, the possibility to create an individual legal person for activities to be carried out across national borders, including in the marine environment, is to be highlighted in the context of the present study. Of course, such characteristic element entails both opportunities and challenges.

9.1. Challenges and opportunities

Starting with the challenges, some of the shortcomings of the original framework for the establishment of EGTCs came to the surface during the first years after the adoption of Regulation (EC) 1082/2006, which, accordingly, was amended by Regulation (EU) 1302/2013 of 17 December 2013. Amendments of the original EGCT Regulation have facilitated the work of EGCTS. This was ensured through more clarity and some simplifications. The main amendments included a clarification concerning the participation of third countries and overseas countries and territories; a broadening of the nature of the

EGTC instrument regarding the management of cross-border public services; clarifications concerning the setting up and approval of EGTCs; a consistent structure for the EGTC founding documents; and adjustments concerning liability rules to address different member States legislations. Two very relevant amendments included the ability to incorporate a member from third (non-European Union) countries and the possibility to provide services. An aspect that could be further improved is access to funding.

It is essential to note that the EGTC limits the membership to primarily public authorities and institutions[416]. This limitation and the corresponding tasks of EGTCs characterize the legal form of this instrument. However, the EGTC Regulation does not specify such legal form, which ultimately depends on the applicable member State's law. In practice, the legal form of the EGTC will depend on the member State where the EGTC has its registered office[417] and, according to the relevant law, will be subject to public or private law. In some member States, implementing national legislation explicitly considers EGTCs as public legal entities – this being the case, among others, of Italy. In other member States, EGTCs may be considered private legal entities.

Before an EGTC may obtain a legal personality, public institutions, especially local and regional authorities, will have to go through the founding process. The roadmap towards this objective involves different steps. A first step entails a needs assessment, during which prospective EGTC members should assess whether the EGTC instrument is the most suitable option for the proposed objectives and activities. A second step involves the development of a common understanding of the respective tasks, the legal framework in force within the different member States participating in the EGTC, the identification of the location of registration of their office, as well as the means of the EGTC financing. The final step – prior to formal approval and registration – is the implementation phase, when prospective members develop the founding documents, i.e. the EGTC convention and statutes. Such documents describe the structures, the legal framework and the rules of procedure of the EGTC and are subject to the approval procedures of the corresponding national authorities. Eventually, EGTC approval and registration are finalized at the European Union level. The Committee of the Regions conducts these processes on the basis of the information provided.

Approval and registration procedures are not only needed when setting up an EGTC, but also for certain modifications of an existing EGTC. Particularly challenging are the implications stemming from a change of membership in an EGTC, therefore it is advisable that the differentiation of tasks and responsibilities between the EGTC members is not likely to change after the setting up of the body.

As of today, 54 authorities have been appointed within the European Union to approve and register EGTCs. Those relevant for the States bordering the Adriatic and Ionian Seas are recalled hereafter[418]. The variety of approval and registration procedures among the different States may raise difficulties. On the one hand, local and regional authorities wishing to set up an EGTC may find it challenging to contact the right authority and apply

[416] See *infra* in this chapter, para. 9.3.
[417] The registered office shall be located in a member State under whose law at least one of the EGTC's members is established (Art. 1, para. 5, of the EGTC Regulation).
[418] See *infra* in this chapter, paras. 9.2 and 9.3.

the appropriate procedures; on the other hand, authorities in charge of approving EGTC membership and registration may face difficulties in coordinating different member States.

Moreover, due to a lack of experience, some member States do not have procedures for approval and registration, but simply refer back to the EGTC Regulation. Therefore, in certain cases, procedures elaborated by more experienced member States could be used as examples to be followed by less experienced prospective EGTC members, provided that the national, regional and local legal frameworks allow for such comparison. Overall, the need to follow several steps to setting up an EGTC and the variety of approval and registration procedures show the potential complexity of processes to establish an EGTC. Such complexity often led to misconceptions of the EGTC instrument, which were partially summarized in a report edited by the Committee of the Regions[419]. Among such misconceptions, for example, there is the assumption that EGTCs must cover a continuous territory: on the contrary, the territory does not need to be continuous, as the EGTC instrument aims at transnational and interregional cooperation between member States (and neighbouring countries), although the instrument is not applicable for cooperation within only one member State. This means that a network of marine protected areas falling under the jurisdiction of different States may definitely be pursued through an EGTC.

Coming to the opportunities offered by the EGTC to its members, they truly depend on the context of the EGTC and are linked to its tasks and objectives. Since the adoption of the relevant regulation in 2006, the EGTC instrument has been widely implemented and, today, 21 member States either host an EGTC with a registered office or are members of an EGTC registered in another member State. EGTCs offer the opportunity to establish a stable, long-term commitment of their members, therefore strengthening cooperation, including for actions of macro-regional strategies. Their legal personality, entailing legal capacity, brings advantages compared to other forms of cooperation. Among others, it offers the possibility for EGTC members to jointly hire personnel, acquire properties and manage public services. The legal personality of EGTCs also allow them to be parties to legal proceedings. Through an EGTC, members may also build links to other programmes and funding sources, spreading the reach of territorial cooperation.

Noteworthy is that EGTCs are not necessarily connected to any financial programmes or funding source of the European Union, therefore they are not limited to any of the European Union financial periods. By fulfilling a wide range of purposes in crucial areas (from environmental protection to transport planning, from integrated tourism to economic cooperation, etc.), the EGTC tool establish a long-term territorial cooperation that goes beyond the project horizon. Although setting up an EGTC may take some time, running it is not an expensive solution to transboundary environmental protection. In fact, an EGTC can use the existing resources of the involved entities; its structure allows it to act across borders for the benefit of the whole region or its members; and, in this way, it can even contribute to a more efficient use of resources. In this regard, an EGTC offers indeed a framework with permanent structures that facilitates the

[419] EUROPEAN COMMITTEE OF THE REGIONS, *Guidebook on registering EGTCs*, 2021.

continuity of the relevant activities[420]. The joint decision-making across borders enhances participation in, and ownership of, cross-border activities: in this way, the EGTC identity-building may also contribute to combat nationalization tendencies.

More generally, EGTCs can act as strategic players that integrate different activities in a joint policy approach. Consequently, each EGTC becomes a means to deepen existing cooperation activities that may also receive further acknowledgement. The EGTC instrument may in fact contribute to visibility for cooperation activities, and its European nature contributes to the opportunity to promote local and regional interests at European Union level. Last but not least, with members from different member States, an EGTC may be in a favourable position when it comes to participate in tendering under European Union programmes, as its peculiar membership improves the capability to benefit as a single beneficiary in Interreg programmes. Among such programmes, in the context of this study, recalling the ADRION Programme is unavoidable, as it funds the EUSAIR Facility Point.

9.2. Potential areas and protective measures

Since one of the main characteristics of EGTC Regulation is its focus on public bodies, the details of rules to implement the relevant objectives in national contexts varies greatly between EU member States and implies different legal and liability regimes for EGTCs. Accordingly, when identifying potential areas to be subjected to an EGTC, a need arises also to shed light on the different approval and registration procedures applied by each member State.

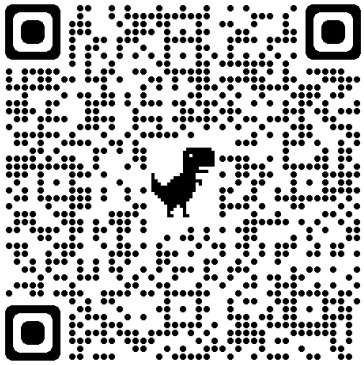
In the context of this study, the choice has been made to focus on the potential recourse to the EGTC tool in four transboundary pilot areas within the Gulf of Trieste, the Jabuka/Pomo Pit, the Bay of Neum-Klek and the Otranto Channel. All four areas lie within the same region and, as such, they could benefit from the establishment of either one EGTC encompassing a network including of all of them or different EGTCs focusing on the specific management of each area. In any event, of paramount necessity is the identification of the applicable EGTC approval and registration procedures in accordance with the legal framework of the relevant Adriatic and Ionian coastal States. In fact, the EGTC acquires legal personality with its registration or the publication of the founding documents (the EGTC convention and statutes) on the official gazette of the State that hosts the EGTC registered office. A final step implies that the members inform the EU Member States concerned and the Committee of the Regions of the registration. Within 10 working days of the registration or publication, the EGTC ensures that a request is sent to the Committee of the Regions for the publication of a notice on the Official Journal of the European Union, which announces the establishment of the EGTC.

As regards Albania, Bosnia and Herzegovina and Montenegro, potentially acting as 'neighbouring' States, the EGTC Regulation remains the only general reference, while the legislation of Croatia, Greece, Italy and Slovenia regulates in detail the national procedures for EGTC approval and registration. Both in the case of an EGTC encompassing a network

[420] This benefit is closely linked to legally binding decisions due to the long-term commitment of members.

of marine protected areas in the Adriatic and Ionian Seas and in the case of separate EGTCs focusing on the conservation of one or more areas, the relevant cooperating member States should register the office in one of the members' territory.

The possibility to resort to the EGTC instrument with a view to protecting the marine environment in a transboundary context has been already affirmed through the establishment of the PMIBB[421]. The most recent list of EGTCs, which actually does not include many marine features, is available through the following QR code[422]:



The relevant legislations concerning the approval and registration procedures for EGTCs within the Adriatic and Ionian coastal States are recalled hereafter.

Croatia. According to Croatian law[423], the competent authority in charge of EGTC registration is the Ministry of Justice and Public Administration (*Ministarstvo pravosuđa i uprave*). It follows that, if an entity registered in Croatia intends to join an EGTC, the notice of intent to participate in the EGTC and a copy of the proposal of the EGTC convention and statutes is to be sent to this administration. Once it has received the founding documents, the Ministry consults those State administration bodies in charge of regional development and European Union funds, foreign and European affairs, as well as those bodies whose scope include tasks covered by the purpose of the EGTC in question. When it receives the results of this consultation process, the Ministry assesses the coherence of the EGTC convention and statutes with European Union regulations and Croatian law and, where necessary, formulates requests to the prospective member for modifications and amendments. The suggested modification should be considered by the prospective member and, once the founding documents have been modified accordingly, the competent Ministry proposes to the Croatian government the adoption of a decision approving participation in the EGTC and the founding convention. The government adopts the formal approval decision on the basis of the proposal approved by the Ministry of Justice and Public Administration. So far, no EGTCs have been registered in Croatia. An EGTC with the registered office in Croatia would be established as a public entity and, as such, subject to the Institutions Act (Official Gazette No. 76/93, 29/97, 47/99, 35/08 and 127/19) of Croatian law. For any subsequent modification of the EGTC, the Ministry of Justice and Public Administration would receive the notice of amendments to the

[421] See *supra*, para. 7.2.

[422] The list of EGTCs, updated as of 15 July 2021, is also available at the following link: https://portal.cor.europa.eu/egtc/CoRActivities/Documents/Official_List_of_the_EGTCs.pdf?Web=0.

[423] Law No. 74/14 of 13 June 2014.

convention. The same Ministry would consult the State administration bodies in charge of the consultation process mentioned above and would eventually obtain a formal decision by the government.

Greece. According to the Greek legislation on EGTC[424], municipalities, regions, associations and their networks, the Greek public sector, including the decentralized administrations, universities, public undertakings, bodies governed by public law and enterprises that were assigned the task of providing services of general economic interest, in compliance with Union and national law, may participate in an EGTC. Their participation is approved by the Minister of the Interior after receipt of the agreement of the Committee referred to in Art. 4, para. 2, *b*, of Greek Law No. 3345/2005. The Committee includes among its members a representative of the Ministry of Economy and Development. The entity that intends to participate in an EGTC, therefore, shall notify the Committee in writing of its intention, sending copies of the proposed EGTC founding documents. The participation of entities in EGTCs which have their registered offices abroad is approved upon agreement of the Committee and a decision is issued by the Minister of Interior within 6 months from the submission of an admissible application to the Committee together with the texts of the EGTC founding documents[425]. For EGTCs which have their registered offices in Greece, the application is to be submitted to the Committee together with the texts of the EGTC founding documents. The Minister of Interior, following an agreement of the Committee, approves the participation of the interested entities and the text of the convention[426]. Existing associations of entities, networks of cities and other undertakings of various legal personalities seeking to fulfill purposes similar to those of an EGTC, which have their registered offices in Greece, may be transformed into an EGTC, upon decision of their administrative bodies and the approval of the Minister of Interior, following the same procedures. It is provided that the Committee keep an EGTC Register. This includes data on EGTCs having their registered offices in Greece, as well as data on entities participating in an EGTC having its registered office in another member State. In particular, the EGTC Register includes the name of the EGTC and the registered office, the purposes and the duties, the statutes and convention, the personnel, the participation in national or European programmes, the projects undertaken, the implementation process of the projects undertaken, as well as any activity assumed by the EGTCs.

Italy. Italian law[427] provides that EGTCs registered in Italy have legal personality of public law. The EGTC acquires legal personality through its inscription in the EGTC Register, deposited with the Presidency of the Council of Ministers (General Secretariat). All entities listed in Art. 3, para. 1, of the EGTC Regulation may become members of an EGTC. In the Italian legal context, such entities include the regions and the autonomous provinces of Trento and Bolzano, as well as the local entities. The founding documents of the EGTC are approved unanimously by the members and signed in public form. It is to be

[424] Law No. 4483/2017 of 28 July 2017.
[425] This deadline is interrupted if the Committee decides to request additional information.
[426] The deadline provided for participation in EGTCs registered abroad is not applicable to these cases.
[427] Law No. 88 of 7 July 2009.

noted that, without prejudice to Art. 7, paras. 1, 2, 4 and 5, of the EGTC Regulation, Italian law explicitly states that members may entrust the EGTC with, *inter alia*, "the role of management Authority, the exercise of tasks of joint technical secretariat, the promotion and implementation of operations in the context of operational programmes co-financed with structural [European Union] funds and linked to the objective of 'European territorial cooperation', as well as the promotion and implementation of actions of interregional cooperation within other operational programmes co-financed by [European Union] structural funds. … In addition to [the above tasks], the EGTC may be entrusted with the implementation of further actions of territorial cooperation, provided that they are coherent with the goal of strengthening economic and social cohesion, as well as in compliance with the international obligations of the State" (Art. 46 of Law No. 88 of 7 July 2009). A first phase provides that the prospective members notify their intent to establish an EGTC to the Presidency of the Council of Ministers (Department for Regional Affairs and Autonomies) together with the founding documents. The Department verifies the compliance of the transmitted documentation with the EGTC Regulation, as well as with Law No. 88 of 7 July 2009, Arts. 46, 47 and 48. After this verification of compliance, the preliminary phase formally starts and the documentation is transmitted to the competent Ministries for approval and acquisition of the relevant opinions. In case of amendments, any remarks made by the Ministries or by the relevant Department of the Presidency of the Council of Ministers must be taken into account and the documentation must be modified accordingly and shared with the foreign counterparts. Should any foreign member also propose modifications, the same Department shall be informed and proceed with verification. Once the preliminary phase has been positively concluded, the Department communicates to the prospective members the authorization to set up the EGTC. Within a maximum period of 6 months from the date of such authorization – after whose expiration the authorization becomes ineffective – each prospective member, or the relevant management organ if already in place, shall request the entry in the EGTC Register. For an EGTC registered in a foreign country, the EGTC is registered in the special section "EGTC Based abroad". The EGTC convention and statutes are then published on the national Official Gazette (where all modifications of the EGTC shall also be published). Within 10 days of the registration or publication, the EGTC shall send a request for registration to the European Committee of the Regions, on the basis of the model annexed to the EGTC Regulation. The European Committee of the Regions transmits this request to the relevant offices for publication in the Official Journal of the European Union. The provisions above apply also to the participation of an Italian entity in an EGTC that is already established.

Slovenia. The EGTC approval and registration process regulated by Slovenian law[428] is almost the same for an EGTC registered in Slovenia or in a foreign country. The prospective members notify their intention to the competent administration, which is identified in the Ministry of Public Administration (*Ministrstvo za javno upravo*), both in the case the members wish to establish a new EGTC and in the case they wish to adhere

[428] Decree No. 1062 of 9 April 2015.

to an already existing EGTC. Art. 3 of Decree No. 1062 of 9 April 2015 lists the possible prospective co-founders and members of an EGTC under Slovenian law. These entities may become members of an EGTC established in Slovenia and participate in the establishment of, or join, an EGTC established in another member State. The competent administration shall receive the complete application, including the EGTC founding documents. Once the Ministry of Public Administration receives the application, in accordance with Art. 8 of the Slovenian decree, it prepares a proposal for the government decision referred to in Art. 7 of the same instrument. The government shall adopt the decision within 6 months of receiving the application for approval (Art. 9, para. 1). If the government does not issue a decision within such time limit, the approval shall be deemed to have been given (Art. 9, para. 3). The EGTC shall acquire legal personality with the status of public institution. The status of legal entity under public law is subject upon the entry of the EGTC in the court register (Art. 4). Once it becomes operational, the EGTC may perform tasks in the territory of Slovenia with or without a financial contribution from the European Union (Art. 5, para. 1) and its members are limitedly liable for the obligations of the public legal entity, if the latter has insured risks related to its activities under Slovenian law. The ministries in whose field of work the tasks determined by the EGTC convention and the government are competent to supervise the legality of the work of the EGTC bodies. The operations and rational use of public funds managed by an EGTC established in Slovenia shall be verified by the Slovenian Court of Audit (Art. 12).

Although the procedures for approval and registration of EGTCs vary among the Adriatic and Ionian coastal States, both in terms of identification of the competent administrations and the setting of time limits for the finalization of the process, it is a matter of fact that the EGTC instrument is flexible enough[429] and offers an appropriate institutional structure for territorial cooperation in the Adriatic and Ionian Seas, also with a view to pursuing, among the wide range of its possible objectives of cooperation, the goals of marine environment protection through the use of area-based management tools and other effective area-based conservation measures. In fact, once it has been set up and registered at the European Union level, the legal entity may autonomously undertake all the actions necessary to the implementation of its tasks, including the identification of the most appropriate protective measures for the areas of concern. As an autonomous legal entity, such EGTC would be in the position to identify, and propose to the appropriate authorities, also those measures that, although envisaged by international and regional instruments not in force for all Adriatic and Ionian coastal States (such as the Areas Protocol), are nevertheless deemed appropriate for the areas of concern. This is an evident advantage of the EGTC tool, as its founding convention could allow the pursue of environmental objectives that, on the basis of the international and regional instruments discussed above in this study, do not always bind all Adriatic and Ionian coastal States.

[429] The benefits implied in the flexibility of EGTC legal texts was recalled by Mr. Andrej Čokert, Ministry of Public Administration of Slovenia, in his presentation on 'Cross-Border Cooperation in Slovenia', delivered at the international conference on 'Cross-Border Cooperation in Europe', held on 25 May 2018 in Dubrovnik, Croatia.

9.3. Management authority

As specified above, primarily public bodies may become members of an EGTC. The EGTC Regulation regulates both the number of member States and countries involved and the type of bodies permitted as members. Art. 3 specifies the EGTC membership composition as including member States or authorities at national, regional or local level; public undertakings or bodies governed by public law; and associations consisting of bodies of any of these groups. The list implicitly excludes private undertakings and bodies that are not dominated by public influence.

As of today, the EGTC instrument has been hardly used for the original intent of functioning as a management authority. Its implementation for the managing of transboundary marine protected areas in the Adriatic and Ionian Seas would therefore represent an example of best practice in the field of marine conservation through the use of an instrument that enhances cooperation between European Union member and non-member States, facilitates decision-making across borders, promotes jointly-developed objectives and strategies and ensures high European visibility. The *2018 Assessment of the Application of EGTC Regulation* (Final Report,), issued under the auspices of the European Commission, highlighted that the EGTC supports multi-level governance structures enhancing cross-border bottom-up approaches that allow for more intensified and higher levels of cross-border cooperation. Border regions can enhance joint planning and implementation of strategies putting their joint interests above national interests. Through the acknowledged legal entity, EGTCs obtain better visibility and improved acceptance by other public and management authorities: they are acknowledged as intermediaries that may initiate new cross-border actions and in some cases obtain more power in decision-making processes. EGCTs also act as a reliable and sustainable communication channel and support the harmonization of the legal framework across countries.

As an autonomous legal entity, an EGTC set up by the Adriatic and Ionian coastal States could be responsible for the management of a protected transboundary area, or network of areas, in the Adriatic and Ionian Seas and the identification of the relevant protection measures on the basis of scientific findings. Its legal personality based on public law, with tasks specified in the constitutive instruments, would ensure that the EGTC may participate through its legal and institutional representations in the most appropriate fora where marine environment protection tools are discussed and approved. For example, the PMIBB EGTC, recalled in Chapter 7 of this study, is in charge of proposing the appropriate protective measures within the strait of Bonifacio also through a legal and institutional representation within the IMO. In addition, an EGTC would be in the position to examine ways to obtain funding for the implementation of its tasks at national, regional or European level. The potential efficacy of a management authority of this kind can be substantively appreciated in comparison with other situations – such as in the case of the Pelagos Sanctuary – where the institutional settings (secretariat) and the means of management implementation (management plan) show evident limitations. The potential of having an autonomous representation within the IMO could be of utmost interest for an EGTC in charge of pursuing the objectives of

environment cooperation, also through economic and social cohesion, in areas that, while hosting important biodiversity sites, are crucial for navigational purposes, such as the Gulf of Trieste and the Otranto Channel.

The EGTC is an entity with legal personality under European Union law (EGTC Regulation 1082/2006, as amended in 2013). It aims at improving the implementation conditions for territorial cooperation with a view to strengthening cohesion in the European Union. In doing so, it complements funding instruments for ETC, known as 'Interreg'. Each EGTC is governed by a convention concluded unanimously by its members. These may be European Union member States, regional and local authorities of European Union member States, public undertakings and public bodies under certain conditions, also belonging to States that are not members of the European Union. What is necessary is that the EGTC is made up of members that are located on the territory of at least two European Union member States. In addition, the EGTC may include one or more States that are neighboring at least one European Union member State that is a member of the same EGTC. A State that is not a member of the European Union is considered as a 'neighboring State' under the EGTC Regulation when *"it shares a common land border or where both the third State and the EU Member State are eligible under a joint maritime cross-border programme under the European territorial cooperation goal, or are eligible under another cross-border, sea-crossing or sea-basin cooperation programme, including where they are separated by international waters"* (Art. 3a, para. 1). The maritime borders between the countries concerned are included. Accordingly, also Albania, Bosnia and Herzegovina and Montenegro – or public bodies of these States – could become members of an EGTC in the Adriatic and Ionian Seas. The possibility to resort to the EGTC instrument with a view to protecting the marine environment in a transboundary context, as a possible form of territorial cooperation, has been already affirmed through the establishment of the EGTC for the *International Marine Park of the Mouths of Bonifacio*, in the Tyrrhenian Sea. As an autonomous legal entity, an EGTC set up by the Adriatic and Ionian coastal States could be responsible for the management of a protected transboundary area, or network of areas, in the Adriatic and Ionian Seas and the identification of the relevant protection measures. Its legal personality based on public law, with tasks specified in the constitutive instruments, would ensure that such management authority participate through its legal and institutional representations in the most appropriate fora where marine environment protection tools are discussed and approved.

CHAPTER 10

THE CASE FOR ESTABLISHING A PSSA IN THE ADRIATIC AND IONIAN[430]

10.1. Challenges and opportunities

As already pointed out in this study[431], a PSSA is defined as an area that needs special protection through action by IMO because of its significance for recognized ecological or socio-economic or scientific reasons and which may be vulnerable to damage by international shipping activities. Reference was made to the fact that the PSSA is intended to function as *"a comprehensive management tool at the international level that provides a mechanism for reviewing an area that is vulnerable to damage by international shipping and determining the most appropriate way to address that vulnerability"*[432].

The legal nature of the PSSA and the diplomatic and technical process for its designation within the IMO imply important opportunities and substantial challenges. Reference should be made to the fact that the identification and designation of a PSSA and the adoption of its 'associate protective measures' require consideration of three integral components: 1) the particular attributes of the proposed area; 2) the vulnerability of such an area to damage by international shipping activities; and 3) the availability of associated protective measures within the competences of the IMO to prevent, reduce or eliminate risks from such shipping activities.

Some of the most important environmental hazards associated with (international) shipping include: 1) operational discharges; 2) accidental or intentional pollution; and 3) physical damage to marine habitats or organisms[433]. As explained by the 2005 Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas (hereafter: 2005 PSSA Guidelines) [434], ships either in the course of their routine operation or due to accidents or even through willful acts of pollution *"may release a wide variety of substances either directly into the marine environment or indirectly through the atmosphere. Such release 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, ships may cause harm to marine organisms and their habitats through physical impact. These impacts may include the smothering of habitats, contamination by anti-fouling systems or other substances through grounding, and ship strikes of marine mammals"*[435].

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[430] This chapter is partially based on GRBEC (*op.cit.* in footnote 1), chapter 5.5.
[431] See *supra*, sub-para. 3.4, A.
[432] Guidance Document for Submitting PSSA Proposals to IMO (MEPC Cir/398).
[433] *Ibid*., Art. 2.1.
[434] IMO, Resolution A.982(24) adopted on 1 December 2005, *Revised Guidelines for the Identification and Designation of Particularly Sensitive Sea Areas,* A 247res.982, 6 February 2006.
[435] *Ibid*., Art. 2.2.

Noteworthy is the fact that associated protective measures within a PSSA are limited to actions that are to be, or have been, approved or adopted by the IMO and include the following options: 1) designation of an area as a Special Area under MARPOL Annexes I, IV or V, or a SOx or NOx emission control area under MARPOL Annex VI, or application of a special discharge restrictions to vessels operating in a PSSA; 2) adoption of ships' routeing and reporting systems near or in the area, under the International Convention for the Safety of Life at Sea (SOLAS) and in accordance with the General provisions on Ships' Routeing and the Guidelines and Criteria for Ship Reporting Systems; 3) development and adoption of other measures aimed at protecting specific sea areas against environmental damage from ships, provided they have an identified legal basis[436].

Reference should be made to the fact that, notwithstanding the Adriatic and Ionian Seas 'Special Area' status under Annex I of MARPOL as part of the wider Mediterranean, where all operational discharges of oily waters from ships are prohibited[437], one of the problems in both seas is still operational pollution – in other words, 'illegal discharges' from ships[438]. Additionally, an increasingly important problem in the Adriatic Sea is the occurrence of discharges of ballast waters, particularly from ships having their port of departure outside the Mediterranean[439]. With the expected increase of the maritime traffic in the Adriatic Sea, particularly in the light of the actual or planned completion of new oil and liquified natural gas terminals in the Adriatic ports of Omišalj, Vlore, Ploče and Trieste, which may in the future open also new 'export routes' of (Caspian) oil and gas[440], it would seem that maritime traffic and related quantity of discharged ballast water in the Adriatic Sea, including that originating outside the Mediterranean, may increase substantially.

A logical consolidation of the already existing measures in the field of safety of navigation and prevention of ship-source pollution could be the designation by the IMO of the entire Adriatic Sea – including part of the Ionian Sea nearby the Channel of Otranto – as a PSSA. Such course of action has been followed by many other European Union member States, including those bordering the semi-enclosed Baltic Sea[441]. Reference

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[436] *Ibid*., Art. 6.1.

[437] Regulations for the Prevention of Pollution by Oil. The entire Mediterranean Sea acquired the status of a 'Special Area' based on the provisions of Annex V of MARPOL (Regulations for the Prevention of Pollution from Garbage from Ships). The Mediterranean Sea, however, has not been granted, differently from the Baltic Sea, a special area status Annex VI of MARPOL (Regulations for the Prevention of Air Pollution from Ships) neither under Annex IV of MARPOL in relation to Prevention of Pollution by Sewage from Ships.

[438] It has been estimated that an annual average of 250 illegal oil spills occurred in the Adriatic in the early 2000 and there are indicators that the situation has not substantially improved since then. See VIDAS (*op.cit* in footnote 7), pp. 364-365.

[439] The quantity of ballast waters released in 2003 in the Adriatic ports of Croatia, Italy and Slovenia amounted to 8 million tonnes, although less that 10 percent of the mentioned quantity originated outside the Mediterranean. See also ISPRA (Istituto Superiore per la Protezione e la Ricerca Ambientale), *Legal and Policy Aspects Relevant for the Ships' Ballast Water Management in the Adriatic Sea Area*, Rome, 2016.

[440] *Ibid*., pp. 361-363.

[441] In 2004 the IMO confirmed upon a joint proposal by Belgium, France, Ireland, Portugal, Spain and the UK, the 'Western European Atlantic Waters' as a PSSA (IMO Doc. MEPC 49/8/1, 11 April 2003). The same occurred in 2005 with the 'Baltic Sea area' (with the exception of Russian waters) based on the joint proposal by Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden (IMO Doc. MEPC 51/8/1, 19 December 2003).

should be made to the fact that the possibility of the proclamation of PSSAs in the Adriatic Sea has already been made by the 2005 Agreement on the Sub-regional Contingency Plan, by which Croatia, Italy and Slovenia agreed to cooperate in the designation of PSSAs in the area covered by the Plan. It is important to note that a PSSA may be located within or beyond the limits of the territorial sea, and as pointed out it *"offers the opportunity to enable the development of common jurisdictional and enforcement regimes for environmentally significant marine areas"*.[442]

At this point it may be useful to refer again to the definition of a PSSA, which can be defined as a marine area that needs special protection through action by the IMO because of its significance for recognized *ecological or socio-economic or scientific reasons*, and because it may be vulnerable to damage by international shipping activities. The three general requirements are further elaborated in the 2005 PSSA Guidelines[443]. They are not cumulative, as one criterion must be fulfilled at least. Furthermore, as provided by para. 1.5 of the 2005 PSSA Guidelines:

> Identification and designation of any PSSA and the adoption of any associated protective measures requires consideration of three integral components: the particular attributes of the proposed area, the vulnerability of such an area to damage by international shipping activities, and the availability of associated protective measures within the competences of IMO to prevent, reduce or eliminate risks from these shipping activities[444].

It follows that to the extent approved by the IMO, the PSSA status allows coastal States to enforce specific associated measures (within the competence of the IMO), namely: compulsory reporting systems; compulsory pilotage*;* routeing measures; 'Special Area' status under MARPOL; and application of discharge restrictions. Taking into account that three of the said protective measures are already in force in the Adriatic Sea (the 'Special Area' status on the basis of Annexes I and V of MARPOL; the reporting system on the basis of SOLAS – ADRIREP – ; and a system of compulsory routeing measures in the Northern Adriatic coupled with proposed traffic flows in the Central and Adriatic and Channel of Otranto on the basis of COLREG), it could be asked what the added value could be of proclaiming an Adriatic PSSA. It is important to note in this regard that the proposed associated measures may have an 'identified legal basis' also in IMO Conventions or Codes that are not in force yet or in proposed amendments to the said Conventions or Codes. An outstanding example in the past was represented by the 2004 Ballast Water Convention, between its adoption in 2004 and its entry into force in 2017[445]. Reference should be furthermore made to the fact that the Mediterranean Sea (including the Adriatic and Ionian Seas) does not have for the time being, differently from the Baltic Sea, the status of a 'Special Area' under Annex VI of MARPOL (*Regulations for the Prevention of Air Pollution from Ships*), which allows for the establishment of special emission control areas (SOx and

[442] See SLIM and SCOVAZZI (*op. cit.* in footnote 12), p. 36.
[443] IMO Assembly Resolution A. 982(24), 1 December 2005, para. 4.
[444] Emphasis added.
[445] See SLIM and SCOVAZZI (*op. cit.* in footnote 12), pp. 120-122.

NOx) nor a 'Special Area' status under Annex IV or MARPOL (*Prevention of Pollution by Sewage from Ships*).

The opportunities related to the process of identification and designation of a PSSA derive primarily from its legal nature, on which basis a PSSA may potentially represent a powerful aid in the quest for protection of a specific sensitive area from international shipping. On the other hand, challenges relate mostly to the rather complicate procedure for a PSSA designation and the endorsement of additional associated protective measures within the IMO. Noteworthy is the fact that the designation process allows the IMO to undertake a comprehensive assessment of the shipping threats to the proposed PSSA area with the aim to devise the most appropriate protective measures to address the threat[446]. However, as the (additional) associated protective measures and the PSSA itself need to be confirmed by the relevant IMO bodies, the process of a PSSA designation is not only an environmental or technical process, but also a political one.

An application for a PSSA designation should be submitted by an IMO member State or more affected member States (i.e., the States bordering the PSSA area) to the IMO and include, apart from the proposed geographical extent of the PSSA, a proposal for at least one associated protective measure[447]. If there are already associated protective measures in the area, as currently the case in the Adriatic Sea (i.e., routeing measures, reporting obligations, etc.), then there is no requirement to propose additional associated protective measures, although such measures may be identified in the future. In the latter case, the application should identify the threat of damage or damage being caused to the area by international shipping activities and show how the area is already being protected from such identified vulnerability by the associated protective measures already in place[448]. Each PSSA application should accordingly consist of two parts: 1) description, significance of the area and vulnerability; 2) appropriate associated protective measures and IMO's competence to approve or adopt such measures.

Reference should be furthermore made to the fact that the application needs to identify the legal basis for each proposed associated protective measure. A legal base in this regard may be: (i) any measure that is already available under an existing IMO document (whether in force or not); (ii) any measure that does not exist yet, but could become available through amendment of an IMO instrument or adoption of a new IMO instrument. However, the legal basis for any such measure will only be available after amendment or adoption of a new IMO instrument; (iii) any measure proposed for the adoption in the territorial sea, or pursuant to Art. 211, para. 6, UNCLOS related to the exclusive economic zone[449], where existing measures or a generally applicable measure

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[446] YEON KIM, *Problems and Processes of Restricting Navigation in Particularly Sensitive Sea Areas,* in *International Journal of Marine and Coastal Law*, 2021, p. 438.
[447] 2005 PSSA Guidelines, Art. 7.1.
[448] *Ibid*., Art. 7.2 and 7.3.
[449] *Ibid*., Art. 7.5.2. Article 211, para. 6, *a*, UNCLOS provides as follows: *"Where the international rules and standards referred to in paragraph 1 are inadequate to meet special circumstances and coastal States have reasonable grounds for believing that a particular, clearly defined area of their respective exclusive economic zones is an area where the adoption of special mandatory measures for the prevention of pollution from vessels is required 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, the coastal*

would not adequately address the particularized needs of the proposed area. Such measures may include ships' routeing measures, reporting requirements discharge restrictions, operational criteria and prohibited activities. They should be specifically tailored to meet the need of the area to prevent, reduce or eliminate the identified vulnerability of the area from international shipping activities[450]. The application should furthermore indicate the categories of ships to which the proposed associated protective measures would apply, whereby account should be taken of the relevant provisions of the UNCLOS and other pertinent documents, with particular regards to vessels entitled to sovereign immunity[451].

Some general observations could be made in this regard. As previously stated, the PSSA may be designated either within or beyond the territorial sea, including therefore the exclusive economic zone and the high seas. Due to its exercise of sovereignty, within the territorial sea a costal state enjoys wide rights with regard to the adoption of restrictive navigational measures (including routing measures) and, therefore, the designation of a PSSA solely within the territorial sea would not represent, in most cases, a substantial added value[452]. On the other hand, the adoption of more stringent measure for the protection of the marine environment (including biodiversity) from international shipping activities in an exclusive economic zone, also on the basis of Art. 211, para. 6, UNCLOS, is nowadays primarily possible through the designation of a PSSA.

As already stated, a PSSA application should include a proposal for at least one additional associated protective measure. An exception is represented by the scenario – as currently the case in the Adriatic Sea – whereby some pre-existing associated protective measures (i.e., routing measures) are already in place. The first step in the process of designing an area as a PSSA is the submission of a proposal by an IMO member State or more IMO member States. Once the proposal reaches the IMO, then the MEPC considers the application and establishes an informal technical group formed by its representatives with appropriate environmental, scientific, maritime and legal expertise. The task of the informal technical group is to prepare a brief report to the MEPC, summarizing their findings and the outcome of the assessment, which should be also reflected in the MEPC final report[453]. The MEPC considers applications on a case by case basis, with the final aim to establish whether the application fulfils at least one of the criteria among ecological, socio-economic or scientific attributes. After adoption by the MEPC, the particular associated protective measures are referred to the competent IMO

States, after appropriate consultations through the competent international organization with any other States concerned, may, for that area, direct a communication to that organization, submitting scientific and technical evidence in support and information on necessary reception facilities. Within 12 months after receiving such a communication, the organization shall determine whether the conditions in that area correspond to the requirements set out above. If the organization so determines, the coastal States may, for that area, adopt laws and regulations for the prevention, reduction and control of pollution from vessels implementing such international rules and standards or navigational practices as are made applicable, through the organization, for special areas. These laws and regulations shall not become applicable to foreign vessels until 15 months after the submission of the communication to the organization".

[450] 2005 PSSA Guidelines, Art. 7.5.2.4.

[451] *Ibid*., Art. 7.5.2.5.

[452] See YEON KIM (*op.cit.* in footnote 446), p. 443.

[453] 2005 PSSA Guidelines, Art. 8.3.1.

committee, which may be, depending on the nature of the proposed associated measure(s), the Maritime Safety Committee, the Sub-Committee on Navigation, Communications and Search and Rescue or the Assembly itself[454]. The PSSA does not in itself provide a legal basis for the enforcement of a specific associated protective measure, as the latter require a separate approval process within the relevant IMO committee[455]. Eventually, the MEPC endorses a PSSA only after the proposed associated protective measures are adopted by the competent IMO committee. Due to such demanding procedure, involving IMO member States, the MEPC, its informal technical group and the relevant IMO committee or the IMO Assembly itself, the procedure for the designation of a PSSA, from the time of submission of the proposal until the time of actual designation, may last more than one year[456]. Notwithstanding such challenging procedure, the IMO has so far designated 17 PSSAs, including in 2011 the Strait of Bonifacio[457]. The latter is, for the time being, the only PSSA designed within the Mediterranean Sea[458].

The main opportunities provided by the PSSA concept include the possibility to introduce for the particular area additional associated protective measures, although limited to those having its legal basis in an adopted IMO instrument. The later may be or may not be in force. An outstanding example of an instrument adopted by the IMO, but not in force yet, was represented by the 2004 Ballast Water Convention (before its entry into force in 2017). While certain associated protective measure (i.e., routing measures, reporting systems, etc.) based on legally binding IMO instruments may be introduced outside the PSSA on the basis of the endorsement by the relevant IMO committee, this is not possible for IMO documents (Conventions, Codes, Guidelines, etc.) not already in force[459]. The practical result of designing a PSSA is that the included associated protective measures are granted validity *erga omnes partes*, even if a certain IMO document has not entered into force. An additional benefit of designing a PSSA is represented by the fact that associated protective measures may differ within the area and be tailored for a specific (smaller) part of a broader PSSA.

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[454] *Ibid*., Art. 8.3.2. See also YEON KIM (*op.cit.* in footnote 446), p. 444.
[455] *Ibid*., p. 444.
[456] *Ibid*., p. 445.
[457] See *supra*, sub-para. 3.4, A.
[458] The following PSSAS have been designated: The Great Barrier Reef, Australia (1990); The Sabana-Camagüey Archipelago in Cuba (1997); Malpelo Island, Colombia (2002); The sea around the Florida Keys, United States (2002); The Wadden Sea, Denmark, Germany, Netherlands (2002); Paracas National Reserve, Peru (2003); Western European Waters (2004); Extension of the existing Great Barrier Reef PSSA to include the Torres Strait (proposed by Australia and Papua New Guinea) (2005); Canary Islands, Spain (2005); The Galapagos Archipelago, Ecuador (2005); The Baltic Sea area, Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden (2005); The Papahānaumokuākea Marine National Monument, United States (2007); The Strait of Bonifacio, France and Italy (2011); The Saba Bank, in the North-eastern Caribbean area of the Kingdom of the Netherlands (2012); Extension of Great Barrier Reef and Torres Strait to encompass the south-west part of the Coral Sea (2015); The Jomard Entrance, Papua New Guinea (2016) Tubbataha Reefs Natural Park, the Sulu Sea, Philippines (2017).
[459] According to IMO MSC.1/Circ.1608 of 20 August 2019, Procedure for the Submission of Documents Containing Proposals for the establishment of, or amendments to, ships' routing systems or ship reporting systems *"for proposals primarily related to matters of protection of the marine environment and wildlife, proponents should consider first a submission to the Marine Environment Protection Committee (MEPC) with a view to establish Particularly Sensitive Sea Areas (PSSAs), and/or associated protective measures, as appropriate; (…)"* (Art. 3.1).

Even in the case that the designated PSSA mirrors (only) existing measures, the sole designation of a PSSA may represent an extremely important cooperative framework for participating IMO member States and their governmental (maritime) authorities. The main advantage in this regard seems to be the internationally raised awareness about the area's vulnerability to damage by international shipping, which in turn may and should increase community and mariners' awareness of the sensitivity of, and risk to, navigation in the area[460]. Noteworthy is the fact that when a PSSA receives a final designation, all associated protective measures, therefore both pre-existing and new, should be identified on charts in accordance with the symbols and methods of the International Hydrographic Organisation (IHO)[461]. The case of the Wadden Sea PSSA is particularly interesting. Before the designation of a PSSA, the Wadden Sea was already managed as a marine protected area in Germany and as a Trilateral Cooperation area with Denmark and Netherlands. Furthermore, the Wadden Sea had already – before its designation as a PSSA – the status of 'Special Area' under Annex I and V of MARPOL. The designation of a PSSA was not accompanied by any new proposed associated protective measure[462]. On the basis of available sources, the PSSA designation of the Wadden Sea was primarily intended for international recognition of the environmental significance of the area and with the aim to internationally publicise the already existing measures and competent enforcement authorities[463]. It is suggested that such an approach may either directly or indirectly increase maritime safety and furthermore provide, as emphasized, an extremely important cooperative framework within which relevant governmental authorities could monitor the functioning of existing associated protective measures and work on proposals for their further upgrades. Due to increased awareness of the public, the designation of a PSSA may also facilitate the prevention and reporting of violations.

Another extremely important opportunity related to the designation of the PSSA is that it can be used as a supplementary measure within an already established marine protected area or, alternatively, can be proposed as a separate sectoral measure in parallel with the process of establishment of a (transboundary) marine protected area, including a SPAMI. The example of the Strait of Bonifacio, where all previously instruments, including previously established national marine protected areas both on the French and Italian side, a pre-existing (Pelagos Sanctuary) SPAMI and a PSSA coexist over roughly the same area, is a clear example in this regard[464].

Noteworthy is the fact that out of 15 designates PSSAs, if we do not count for this purpose the two larger PSSA represented by the semi-enclosed Baltic Sea or an even larger area represented by the Western-European Waters PSSA, only one – the Jomard Entrance PSSA – was not previously designed as a national or international marine protected area. 9 of the 15 mentioned PSSAs were already listed as 'world heritage sites'.

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[460] KLEVERLAAN, *Overview of IMO Instruments to protect sensitive sea areas from international shipping (ppt),* UNEP, Adriatic Region Workshop on PSSA*,* 10-11 December 2019, Tirana, Albania*.*
[461] 2005 Revised Guidelines, Art. 9.1.
[462] IMO, *Identification of the Wadden Sea as Particularly Sensitive Sea Area*, IMO Resolution MEPC.101(48), 11 October 2002, IMO Doc. MEPC 48/21 (24 October 2002), Annex 5, p. 17.
[463] YEON KIM (*op.cit.* in footnote 446), p. 451.
[464] See *supra*, sub-para. 3.4, A, and YEON KIM (*op.cit.* in footnote 446), p. 452.

Other areas were at least partially protected as 'wetlands of international importance'[465]. Some criticism in this regard concerned the fact that the concept of PSSA has become a tool for basically reiterating rules already put in place on the basis of UNCLOS, SOLAS and MARPOL[466].

Challenges related to the designation of a PSSA mostly refers to the technical and, at least in some instances, also to a political process within a PSSA designation process within the IMO. This results from the fact that the IMO rightly tries to balance interests related to the protection of biodiversity and marine environment with interest of international shipping. As pointed out by the 2005 PSSA Guidelines,

> Member Governments which have ships operating in the area of the designed PSSA are encouraged to bring any concerns with the associated protective measures to IMO so that any necessary adjustments are made[467].

Also non-governmental organisations (e.g., the World Wild Fund for Nature) and other professional organisations particularly from the shipping sector (e.g., the International Chamber of Shipping, Intertanko, etc.) are allowed to present their views. The practical result of such technical and, at the same time, political process is that initial proposals for additional associated protection measures are often 'watered down' during the process of a PSSA designation, both with regard the relevant number and contents. A noteworthy example, in this regard, is again represented by the Strait of Bonifacio PSSA, whereby Italy and France originally proposed, as an additional associated protective measure, a mandatory traffic separation scheme, an area to be avoided (ATBA), a VTS under the SOLAS and a mandatory pilotage system[468]. At the end of the process, the adopted additional protective measures only recommend pilotage and a two-way route[469]. It may be expected that shipping States, States with a strong interest in navigation in a particular area and shipping representative bodies (e.g., the International Chamber of Shipping) will try within the relevant IMO body to prevent any restriction on navigation, particularly if that relates to a main international shipping route.

Reference should be made to the fact that, eventually, the most important challenge is the endorsement, preparation and joint submission of a PSSA proposal to the IMO by all interested States. This is also due to the fact that a designed PSSA shall not extend to waters over which a coastal State opposing such designation exercises sovereignty or sovereign rights[470]. A proposal jointly elaborated and submitted by all interested States, as for example by those States bordering and enclosed or semi-enclosed

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[465] YEON KIM (*op.cit.* in footnote 446), p. 450.
[466] *Ibid*., p. 449.
[467] 2005 PSSA Guidelines, Art. 8.4.
[468] Identification and protection of Special Areas and Particularly Sensitive Areas: Designation of the Strait of Bonifacio as a Particularly Sensitive Area, Submitted by France and Italy, IMO Doc. MEPC 61/9, 25 June 2010, Annex, p. 11.
[469] See YEON KIM (*op.cit.* in footnote 446). Designation of the Strait of Bonifacio as a Particularly Sensitive Sea Area, IMO Resolution MEPC.204(62), adopted 15 July 2011, IMO DOC MEPC 62/24/Add.1, 26 July 2011, Annex 22, p. 17.
[470] See the example of Russian waters not included in a PSSA in the context of the Baltic Sea.

sea, will have much better chances of success. The second challenge relates to the need to pass a proposal through the relevant IMO bodies and, in this regard, to convince other States, particularly those using the area for international navigation, of the environmental importance of the area and of its vulnerability to international shipping. Even in that case, third States need to be assured that, through the designation of a PSSA and adoption of associate protective measures, navigation will be regulated and made environmentally safer, but not unnecessarily hindered or even prevented. Accordingly, the chances of success of a proposal are far greater if, for example, all States bordering the enclosed or semi-enclosed sea are united and submit a joint proposal with regard to the designation of the PSSA and associate protective measures. The chances of success are further enhanced, if such proposal is supported within the IMO bodies by the European Union and its member States as a united block, as for example the case has been during the process of adoption of the 'Western European Waters' PSSA in 2004[471].

10.2. Work undertaken so far

The proposal to designate an Adriatic PSSA originates from a Croatian proposal and is based on studies carried out in the period 2004-2006. In 2006, a Joint Expert Group on PSSA, comprising representatives of all Adriatic States (later replaced by the Correspondence Group), was established upon the Croatian initiative and held several meetings, including the meetings in Opatija (April 2006), Portorož (October 2006) and Zagreb (June 2007)[472]. According to the prepared draft text of the proposal[473], the associated protection measures applicable in the Adriatic PSSA would, in addition to the strengthening of the already existing measures (i.e., the potential strengthening or extension of the existing routeing measures to other parts of the Adriatic, the upgrading of the ADRIREP reporting system), include some associated protective measures having its identifiable legal basis in the 2004 Ballast Water Convention, which was not in force at that time. That would include the potential designation of the Adriatic Sea as a 'No-Ballast-Water Exchange Area' for extra Adriatic traffic and, among other, the extension of the existing mandatory ship reporting system also on ballast waters entering the Adriatic[474]. Other associated measures proposed could have included, for example, the 'Special Area'

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[471] YEON KIM (*op.cit.* in footnote 446), pp. 454-456.
[472] See VIDAS (*op. cit.* in footnote 7), p. 370.
[473] Joint Expert Group on PSSA; *Designation of the Adriatic Sea as a Particularly Sensitive Area,* Second Draft (internal document, Zagreb, 28 June 2007). On file with the authors.
[474] See VIDAS (*op. cit.* in footnote 7), p. 369. Noteworthy is the fact that the contracting parties to the Barcelona Convention adopted in 2011, through the assistance of REMPEC, a *Harmonized Voluntary Arrangements for Ballast Water Management in the Mediterranean Region.* The Guidelines provided guidance and options to vessels transiting the Mediterranean with regard to ballast water management and exchange, although only on a voluntary basis. The Guidelines were applicable till the entry into force of the 2004 Ballast Water Convention in 2017. See IMO, International Convention for the Control and Management of Ship's Ballast Water and Sediments. Communication received from the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea', BWM.2/Circ.35, 15 August 2011, Annex 1. See in this regard also the results of the Ballast water management system for Adriatic Sea protection project (BALMAS) undertaken in the period 2013-2016 and co-financed by the IPA Adriatic Cross-Border Cooperation Programme. More info available at http://www.izvrs.si/project/bewater-making-society-an-active-participant-in-water-adaptation-to-global-change-2/?lang=en.

status on the basis of Annexes IV and VI of the MARPOL and other measures embodied in present or potential future IMO Guidelines and Codes – and this even before their entry into force.

It is accordingly regrettable that, despite an ambitious timetable for the submission of the joint proposal to the IMO (end of 2007), the work on the proposal stopped. It was encouraging, however, that authorities and stakeholders from all Adriatic States (and the European Union) participating at the high-level stakeholder conference 'Setting an Agenda for Smart, Sustainable and Inclusive Growth from the Adriatic and Ionian Sea', held in Zagreb on 6 December 2012, *"express readiness to continue the joint efforts towards the designation of the Adriatic Sea as a Particularly Sensitive Sea Area (PSSA), in accordance with the IMO Guidelines"*[475].

It is to be hoped that the proposal will be finalized and submitted to the IMO and that the whole waters of the Adriatic Sea will be – like those of the Western European Atlantic Waters (2004) and the Baltic Sea (2005, without the Russian waters) – proclaimed as a PSSA. It is suggested, in this regard, that an Adriatic PSSA would represent a flexible tool, a potential forum and a main incentive for Adriatic States for discussing the management of the risks posed by international shipping[476], including by operational pollution. Furthermore, as it was also emphasized by an expert, *"the designation of a PSSA in the Adriatic Sea can provide a significant regional cooperative framework, in line with the European Union policy, and also highlight the awareness of the vulnerability of the Adriatic Sea environment"*[477].

It seems possible to conclude that the proclamation of an Adriatic PSSA, in addition to the proclamation of one or more SPAMIs over the most vulnerable Adriatic Sea areas, may substantially contribute to the protection of the Adriatic marine environment from shipping activities, including from operational pollution[478].

10.3. Marine areas to be covered and potential associated protected measures

Independently of the fact that the 2006 draft proposal related to the designation of the Adriatic Sea as a PSSA was not finalized and submitted to the IMO, also as a result of the existence of diverging views among Adriatic States regarding additional associated protection measures to be included (i.e., the designation of the Adriatic Sea as a 'No-Ballast-Water Exchange Area' for extra Adriatic traffic), the said draft proposal may represent a sound basis either for its update and finalisation or as a starting point for the preparation of a new PSSA proposal. Noteworthy is the fact that the draft proposal was prepared by the Joint Expert Group on PSSA, which included representatives from all Adriatic States, apart from Greece. Furthermore, the list of proposed protective measures was elaborated in close coordination with the at that time TrilateralCommission, which participated in the preparation of the proposal prevalently through its sub-commission

[475] Conclusions of the Conference.
[476] See VIDAS (*op. cit.* in footnote 7), p. 348.
[477] *Ibid*., p. 348.
[478] See discussion in VIDAS and KOSTELAC MARKOVČIĆ, *Ballast Water and Alien Species: Regulating Global Transfers and Regional Consequences,* in VIDAS and SCHEI (eds) (*op.cit.* in footnote 35), pp. 390-392.

on ballast water management. A lot of painstaking work was invested by different bodies and experts on the proposal. The fact that the proposal was close to its finalisation makes its update, upgrade and eventual submission to the IMO a feasible option.

Based on the said proposal, an Adriatic PSSA area should have embraced the entire Adriatic Sea, including the territorial seas, zones under sovereign rights or jurisdiction of coastal States and the high seas. It should have included the entire Channel of Otranto area, north from the latitude 40°25'00" N. Such geographical extent corresponded and still corresponds to the area of application of the existing associated protective measures in the Adriatic Sea. The proposal accordingly intended to include and furthermore build upon existing associated protective measures, including mandatory and proposed routing measures and ADRIREP. Within an eventual new PSSA proposal, researches could be undertaken on whether to geographically extend the proposed PSSA further into the Ionian Sea, particularly to the area outside, but adjacent to, the Channel of Otranto.

A. Existing associated protective measures

As also enumerated in the mentioned PSSA draft proposal, there are several associated protective measures adopted so far under the ambit of the IMO, applicable either specifically to the Adriatic Sea or to the Adriatic Sea as part of the wider Mediterranean Sea. These include: a) mandatory ship reporting systems; b) routeing systems; and c) 'Special Area' status under the relevant Annexes to MARPOL. The first two sets of measures are applicable specifically to the Adriatic Sea and were adopted by the IMO upon joint proposals submitted by Adriatic Sea countries: Albania, Croatia, Italy, Slovenia, and Serbia and Montenegro.

The existing associated protective measures may be broadly divided into the three following groups.

a. Mandatory ship reporting

The Maritime Safety Committee of the IMO, at its 76th session (December 2002) adopted the mandatory ship reporting system in the Adriatic Sea (ADRIREP), which entered into force on 1 July 2003. The operational area of the mandatory ship reporting system covers the whole Adriatic Sea, north from latitude 40°25'00" N. Ships of the following categories are required to participate in the system: all oil tanker ships of 150 gross tonnage and above; and all ships of 300 gross tonnage and above, carrying on board, as cargo, dangerous or polluting goods, in bulk or packages. The primary objective of the system is to support safe navigation and the protection of the marine environment through the exchange of information between the ship and the shore. If the ship does not submit reports and can be positively identified, information will be passed to the competent flag State authorities for investigation and possible prosecution, in accordance with national legislation. Information will be passed also to port State inspectors[479].

[479] See supra fn 473, Part II, Section 2.1. PSSA draft proposal, on file with the author.

b. Routeing

The Maritime Safety Committee of the IMO, at its 78th session (May 2004) adopted new traffic separation schemes and associated routeing measures in the Adriatic Sea, with implementation as of 1 December 2004. Accordingly, routeing system in the Adriatic Sea currently consists of the following:

- Traffic separation scheme *North Adriatic Sea - Eastern Part*;
- Traffic separation scheme *North Adriatic Sea - Western Part*;
- Precautionary area at the southern limits of the traffic separation scheme;
- Traffic separation scheme *Approaches to Gulf of Trieste*;
- Traffic separation scheme *Approaches to Gulf of Venice*;
- Traffic separation scheme in the Gulf of Trieste;
- Traffic separation scheme *Approaches to/from Koper*;
- Traffic separation scheme *Approaches to/from Monfalcone*;
- Precautionary area in the Gulf of Trieste;
- ATBA in the *North Adriatic Sea*.

In addition, there are recommended directions of traffic flow in the Channel of Otranto, Southern and Central Adriatic Sea[480].

c. MARPOL Special Areas

The entire Mediterranean Sea, including the Adriatic Sea, was declared as a 'Special Area' under MARPOL Annex I (Regulations for the Prevention of Pollution by Oil; Regulation 10) and Annex V (Regulations for the Prevention of Pollution by Garbage; Regulation 5) with the aim to protecting these sensitive sea areas against the discharge of oil or oily mixtures and garbage. Subject to the provisions of Annex I, *inter alia*, any discharge into the sea of oil or oily mixtures from any oil tanker, and any ship of 400 gross tonnage and above other than an oil tanker, is prohibited in the 'Special Area'. As pointed out, recent evidence indicates that this prohibition is frequently violated by ships involved in international traffic in the Adriatic Sea. Both annexes require reception facilities within 'Special Areas'.

B. New associated protective measures

A first possibility would be that the designated Adriatic PSSA mirrors (only) already existing measures, similarly as the previously discussed scenario in the Wadden Sea. The advantage of such approach seems to be the internationally raised awareness about the area's vulnerability to damage by international shipping, also as a result of the compulsory identification of all associated protective measures, which should be identified on charts in accordance with the symbols and methods of the IHO. The second preferred option could be the strengthening and upgrading of existing associated protective measures, coupled with eventual proposals for new associated protective

[480] *Ibid.*

measures. Such new associated protective measures could be applicable to the entire Adriatic Sea, or only to part of it[481].

Existing routeing measures could be, for example, the strengthening through the upgrade of the existing proposed traffic flows (in the central Adriatic close to the Jabuka/Pomo Pit area and within the Otranto Channel), from proposed traffic flows to compulsory traffic separation schemes. A possibility could also be the proposal for new compulsory traffic separation schemes or proposed traffic flows in other areas of the Adriatic Sea, including within the Central and Southern Adriatic. Reference was made in this regard to the Sazani Strait and the Bay of Boka Kotorska as potential areas[482]. The ADRIREP reporting system could be in turn upgraded with regard to the types of ships which are bound to report and with regard the information which needs to be reported, including in the field of ballast water management. Another aim of the upgrade of ADRIREP could be to achieve harmonization and standardization of VTS in the region.

Regarding the status of the Adriatic as a 'Special Area' under MARPOL, a further associated protective measure could be the designation of the Adriatic Sea, either alone or as part of the wider Mediterranean, as a 'Special Area' under, firstly, Annex IV of MARPOL in relation sewage discharges and, secondly, based on the provisions of Annex VI to MARPOL, related to air pollution[483]. A straightforward example in this regard is represented by the Baltic Sea PSSA, which includes among its protective measures a 'Special Area' status based on the provisions of Annex I, IV and V, as well as a SECA (as per 19 May 2006) and NECA 'Special Area' (as per 1st January 2021) based on the relevant provisions of Annex VI to the MARPOL Convention.

The designation of a PSSA or more geographically separated PSSAs within the Adriatic and Ionian Seas may potentially represent a powerful aid in the quest for protection of a specific sensitive area from international shipping. Noteworthy is the fact that the PSSA designation process allows the IMO to undertake a comprehensive assessment of the shipping threats to the proposed PSSA area, with the aim to devise the most appropriate protective measures to address the threat. However, as the additional associated protective measures and the PSSA itself need to be confirmed by the relevant IMO bodies, the process of a PSSA designation is not only an environmental and technical process, but also a political exercise. The main opportunity provided by the PSSA concept is the possibility to introduce for a particular area additional associated protective measures, although limited to those having its legal base in an adopted IMO instrument. The latter may be or may not be in force. The practical and legal result of a designed PSSA is that the

[481] An interesting case from the standpoint of an eventual proposal for the designation of the Adriatic Sea a PSSA is represented by the Klek/Neum Bay. The latter represents the only exit of Bosnia and Herzegovina to the Adriatic Sea. A peculiarity is represented by the fact that the Bosnian territorial waters in front of the Klek/Neum peninsula are encircled by Croatian internal waters over which, based on the provisions of the 2005 Revised Guidelines, a PSSA cannot be designed. See GRBEC (*op.cit.* in footnote 1), chapter 4.5.

[482] Mediterranean Seminar on PSSAs, Report of the Seminar, 12 December 2019, Tirana, Albania.

[483] See in this regard UNEP, *Road Map for a Proposal for the Possible Designation of the Mediterranean Sea, as a whole, as an Emission Control Area for Sulphur Oxides Pursuant to MARPOL Annex VI, within the Framework of the Barcelona Convention*, UNEP/MED IG.24/22.

included associated protective measures are granted validity *erga omnes partes*, even if a certain IMO instrument has not yet entered into force. An additional benefit of designing a PSSA is represented by the fact that associated protective measures may differ within the area and be tailored for a specific (smaller) part of a broader PSSA.

Even in the case that the designated PSSA mirrors (only) already existing measures, in the case of the Adriatic Sea that would include routing measures (both compulsory and proposed), compulsory reporting (ADRIREP) and 'Special Area' status under MARPOL Annexes I and V. The sole designation of a PSSA may represent an extremely important cooperative framework for participating IMO member States and their governmental (maritime) authorities. The main advantage in this regard seems to be the internationally raised awareness about the area's vulnerability to damage by international shipping, which in turn may – and should – increase community and mariners' awareness of the sensitivity of, and risk to navigation in, the area. A preferred option should however be the strengthening and upgrading of the already existing associated protective measures through the designation of a PSSA, coupled with eventual proposals for new associated protective measures. Such new associated protective measures could be applicable to the entire Adriatic Sea, to only to part of it, or to the area adjacent to the PSSA (Ionian Sea).

Another extremely important opportunity related to the designation of the PSSA is that it can be used as a supplementary measure within an already established marine protected area. Alternatively, it can be proposed as a separate sectoral measure (other effective area-based conservation measure) in parallel with the process of establishment of a (transboundary) marine protected area, including a SPAMI. The example of the Strait of Bonifacio, where all previously instruments, including previously established national marine protected areas both on the French and Italian side (marine parks, NATURA 2000), a SPAMI and a PSSA coexist over roughly the same area, is a clear example in this regard.

Independently of the fact that the draft PSSA proposal prepared in the period 2006-2011 related to the designation of the entire Adriatic Sea as a PSSA was not eventually finalized and submitted to the IMO, the said draft proposal may represent a sound basis either for its update and finalisation or as a starting point for the preparation of a new PSSA proposal.

CHAPTER 11

CONCLUSIONS AND WAYS FORWARD

11.1. Adriatic and Ionian Seas response to global challenges in the field of marine environmental protection: a coordinated network of transboundary marine protected areas?

An important consideration with regard to the **juridical status of the Adriatic and Ionian Seas** is that once all coastal States will proclaim an exclusive economic zone – namely, Albania, Greece, Italy and Montenegro, in addition to Croatia that has already proclaimed a full exclusive economic zone in 2021 – the high seas will disappear from the Adriatic and Ionian Seas. Currently, there are still substantial areas beyond the limits of national jurisdiction (high seas) in the Adriatic and Ionian Seas, whereby the high seas regime is applicable. However, such areas are potential exclusive economic zones, awaiting either delimitation or implementation. It is likely that such a transitional situation will change in the near future.

The present trend towards the establishment of exclusive economic zones could become an incentive towards the adoption of a coherent and coordinated Mediterranean and Adriatic and Ionian network of marine protected areas and other effective area-based conservation measures. The UNCLOS and other treaties applicable at the world or regional level promote the establishment of marine protected areas and other effective area-based conservation measures in any kind of marine spaces, irrespective of their legal condition. There is a need to comply with the UNCLOS and customary international law and to take into account that the regime applicable in coastal areas and, in particular, the rights that are granted to coastal States vary in accordance with the legal condition of the waters where the marine protected area is established (marine internal waters, territorial sea, exclusive economic zone, continental shelf). The extension of jurisdiction by a European Union member State (e.g., Croatia) automatically entails the extension of the European Union legal order and policies on that part of the sea (in the Croatian case, on its newly proclaimed exclusive economic zone). Such order includes the EU-IMP, having the MSFD as its environmental pillar, the Birds and Habitats Directive with its NATURA 2000 Network of protected areas, and maritime spatial planning as one of the most important cross-sectoral policies. The MSFD clearly identifies the Adriatic Sea as a separate management sub-region (eco-region) within the wider Mediterranean region, while the Ionian Sea forms a separate sub-region, together with the Central Mediterranean.

Noteworthy is the fact that both the Adriatic and Ionian Seas qualify as juridical 'enclosed or semi-enclosed seas' based on the provisions of Part IX UNCLOS. Coastal states are accordingly under a good faith obligation to establish among themselves closer means of cooperation than those applying in other seas. Reference should be made furthermore

to the fact that all States bordering the Adriatic and Ionian Seas are State parties to the UNCLOS.

With regard to the **interrelation between the global, European Union, regional, sub-regional and national legal frameworks**, no significant substantive conflicts may be noticed between the provisions of the main treaties applicable in the field of marine protected areas, since all these instruments are inspired by similar general principles and protection objectives, and the regional or sub-regional treaties provide for a more specific and enhanced protection compared to that achieved through global treaties (criterion of the added value). Marine protected areas are implicitly referred to in Art. 194, para. 5, UNCLOS, which includes, among the measures for the protection and preservation of the marine environment, 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. The establishment of marine protected areas is also envisaged, as a special measure to conserve biological diversity, by the CBD. Sectoral treaties provide for the establishment of effective area-based conservation measures, as a means to achieve their objective: this is the case of the International Convention for the Regulation of Whaling, as regards sanctuary areas, the MARPOL, as regards special areas, or the Convention for the Protection of Underwater Cultural Heritage, as regards the preservation *in situ* of this heritage.

Also regional agreements call for the creation of marine protected areas or the adoption of effective area-based conservation measures, in particular the Areas Protocol, as regards the SPAMIs; the Bern Convention as regards the Emerald Network; the ACCOBAMS, as regards areas for cetacean conservation; and the Agreement establishing the GFCM, as regards FRAs.

For the Adriatic and Ionian Seas, four main existing forums for sub-regional cooperation have been established, namely: additional sub-regional cooperation within the institutional framework of the Barcelona Convention and its protocols; cooperation within the Quadrilateral Commission, based on the 1974 Belgrade Agreement between Italy and the former Yugoslavia; cooperation within the framework of the AII; and cooperation within the framework of the EUSAIR.

Reference should be made to the fact that the Trilateral Commission – which is also referred to as 'Quadrilateral Commission' after the accession of Montenegro in 2010 – may be regarded nowadays as one of the most important institutional frameworks for the cooperation of Adriatic States. Its potential, however, has still to be fully exploited, *inter alia* through enhanced coordination and coordination with other regional (Mediterranean) and sub-regional (Adriatic and Ionian) cooperative frameworks, particularly the AII and EUSAIR. Despite being two separate cooperative arrangements, the AII and EUSAIR are nowadays complementary, as they share the same priorities with intertwined governance structure and are both involved in the implementation of the EUSAIR. An argument may be put forward that regional cooperation, particularly that of relevance for the whole Adriatic and Ionian region and falling under one of the four priority EUSAIR pillars, should be nowadays better undertaken within the auspices of EUSAIR, although in close cooperation and coordination with the AII and the Quadrilateral

Commission. The reactivation of the latter and its enlargement to all Adriatic and Ionian coastal States is accordingly highly advisable.

With regard to the **global basis for the establishment of transboundary marine protected areas (international agreements and policy framework)**, all the main policy instruments approved at the international level in the last three decades, such as 'Agenda 21' (1992), the 'Plan of Implementation of the World Summit on Sustainable Development' (2002), 'The Future We Want' (2012), the '2030 Agenda for Sustainable Development' (2015), and the last United Nations General Assembly Resolution on Oceans and the Law of the Sea (2020) call for action towards the establishment of marine protected areas and the adoption of other effective area-based conservation measures. This action can be considered as a corollary of the customary international law obligation to protect the marine environment and as applicable to any kind of marine waters, irrespective of their legal condition (internal waters, territorial sea, exclusive economic zone, continental shelf, high seas, seabed beyond national jurisdiction). However, rules of international law of the sea on the legal regime of different marine spaces and the activities that are carried out therein must be taken into consideration in the process for the establishment of marine protected areas and the implementation of the measures provided therein. In particular, it would be a mistake to think that the freedom of the high seas is an insurmountable obstacle against the adoption of environmental measures, including the establishment of marine protected areas. Even if treaties do not apply to third parties, also non-party States are bound to abide by general provisions of international law and not to undermine the reasonable measures for the protection of the environment and the sustainable development of marine resources that have been agreed upon by other States.

The general trend to protect the marine environment by establishing marine protected areas or adopting area-based conservation measures is confirmed by the practice developed within the CBD, where EBSAs have been identified and the objective to protect at least 30% of sea areas has been put forward, as well as within the IMO, where PSSAs have been identified and navigation therein has been subjected to restrictions (for example, in the Mediterranean, the Strait of Bonifacio). The Annex to Decision XII/22, adopted by the Conference of the Parties to the CBD held in 2014, provides the results of seven regional workshops on the description of areas meeting the scientific criteria for EBSAs. The workshop for the Mediterranean, held in Malaga in 2014, described 15 EBSAs, including three located in the Adriatic and Ionian Seas (*Northern Adriatic*, *Jabuka/Pomo Pit* and *South Adriatic Ionian Strait*). The EBSAs criteria can provide to the interested States useful information on where marine protected areas could be established according to scientific evidence. They do not enter into the political and legal questions that are linked to creation of marine protected areas. The new concept of 'other effective area-based conservation measures' has been elaborated to identify measures that, while being adopted for other purposes (fishing, shipping, underwater archaeology, security, etc.), indirectly contribute to the achievement of conservation objectives.

With regard to **European Union law and policies in the field of transboundary marine protected areas**, the European Union Integrated Maritime Policy seeks to

provide a more coherent approach to maritime issues, with increased coordination between different policy areas and, as such, it attempts to coordinate complex and interdependent policies related to maritime affairs, as well as to allocate ecological economic resources in a holistic and integrated manner. An important role is played by ICZM and MSP. Their role is to efficiently plan cross-sectoral and cross-border management of coastal zones and, furthermore, to overview and coordinate possible uses of maritime and coastal resources.

The overriding goal of the MSFD, as the environmental pillar of the European Union integrated maritime policy, is the integration of environmental considerations into all relevant policy areas. The geographical scope of the MSFD, as well as, generally speaking, that of the European Union *acquis* and coastal State legislation, is however limited to waters over which member States and third States in the same region or sub-region exercise sovereignty or jurisdiction rights in accordance with the UNCLOS, and not on the high seas. According to the MSFD, the establishment of marine protected areas, including NATURA 2000 sites designed or to be designed based on the provisions of the Habitats and Bird Directive, is an important contribution and an important tool for the achievement of good environmental status. Measures in this regard 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 SACs pursuant to the Habitats Directive, SPAs pursuant to the Birds Directive, and marine protected areas, as agreed by the European Union or by the member States concerned in the framework of international or regional agreements to which they are parties (e.g., the Barcelona Convention). Furthermore, with the aim to having a truly coherent and resilient trans-European nature network, it is of paramount importance to set up ecological corridors in order to prevent ecologic isolation, allow for species migration, and maintain and enhance healthy ecosystems. This objective should be achieved though the maintenance and the setting up of new green corridors between NATURA 2000 sites and other protected areas, either on land (green corridors) or on the sea (blue corridors), and through their interconnection.

Reference should be furthermore made to the fact that all EUSAIR member States are parties also to the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention). This gives a possibility also to non-member States in the Adriatic and Ionian region (i.e., Albania, Montenegro, North Macedonia, Serbia) to establish marine protected areas that are equivalent to those established by European Union member States within the NATURA 2000 Network (Emerald network), as well as, in this regard, the possibility to coordinate their policies and undertake joint (transboundary) projects of cooperation with the European Union and its member States, including within the framework of the EUSAIR macro-region.

Regarding the **regional legal basis for the establishment of transboundary marine protected areas,** in the Mediterranean regional context – including the Adriatic and Ionian Seas – three protocols to the Barcelona Convention are of particular relevance for the establishment of marine protected areas, which may also be given a transboundary character. The **Areas Protocol** is the most appropriate tool to protect highly migratory

marine species, by creating 'blue corridors'. The instrument does not prejudice any question concerning maritime delimitations. It regulates the establishment of SPAs or SPAMIs – the latter being included in a List that ensures them an *erga omnes partes* effect. So far, 39 SPAMIs have been listed, 6 of which are located in the Adriatic and Ionian Seas, namely: *Miramare marine protected area* (Italy), *Plemmirio Marine Protected Area* (Italy); *Torre Guaceto Marine Protected Area and Natural Reserve* (Italy); *Porto Cesareo Marine Protected Area* (Italy); *Karaburun Sazan National Marine Park* (Albania); and *Landscape Park Strunjan* (Slovenia). No area in the central portion of the region of concern has yet been included under the special protection regime of the SPAMI List. Three proposals identify potential SPAMIs in the *Northeastern Ionian*, which would encompass the Jabuka/Pomo Pit; in *Santa Maria di Leuca*, which would encompass waters falling only under Italian jurisdiction; and in the *Northern and Central Adriatic*. The **Offshore Protocol** envisages 'precautions' in particular for SPAs that have been identified under the Areas Protocol or established by a party. Improving participation in the Offshore Protocol by the States in the region of concern is critical, furthermore when considering that seabed activities are intensively carried out on the Adriatic continental shelf. The **Coastal Zone Protocol** provides Mediterranean States with a legal and technical tool to ensure sustainable development throughout the shores of this regional sea. This instrument certainly opens up to the opportunity of building transboundary integrated coastal management based on spatial planning. Other effective area-based conservation measures, in the form of FRAs, are in place within the framework of the **GFCM** and aim at protecting vulnerable species and ecosystems of deep-sea habitats. In the context of the Barcelona System, noteworthy is that the MAP Programme of work for the biennium 2020-2021 includes the recourse to the tool of coastal and marine protected areas among its 'strategic objectives'.

Existing national frameworks for the establishment of marine protected areas **within areas of national sovereignty and jurisdiction** include the Protected Areas Act No. 81 of 2017 of Albania; the Nature Protection Act of 2013 of Bosnia and Herzegovina; the Nature Protection Act of 2013 of Croatia; the of Greece; the Framework Law on Protected Areas No. 394 of 1991 and Law No. 972 of 1982, with subsequent amendments, of Italy; the Nature Protection Act of 2016 of Montenegro; and the Nature Conservation Act of 1999, as amended several times, of Slovenia. It may be noted that almost all the coastal States of the Adriatic and Ionian Seas have enacted recent legislation concerning the establishment, management and monitoring of protected areas, which in all cases explicitly refer also to marine protected areas. Other States, such as Italy and Slovenia, have preferred to progressively update previous legislation. As regards the effectiveness of national instruments, some indicators may be identified that could be used as helpful references against which to measure both the drafting and implementation of relevant legislations, namely: the achievement under the relevant legislation of a coordinated implementation of international and regional commitments; an efficient institutional coordination; the adoption of specific legal provisions for the establishment and management of marine protected areas, as they imply differences from terrestrial protected areas; the adoption of effective protection measures; the implementation of

management planning and zoning; the integration of marine protected areas into coastal and marine spatial planning policies; the involvement of all relevant stakeholders; the provision of adequate financing mechanisms; and effective schemes and measures for monitoring, compliance and enforcement. In addition, national legislations should provide for an appropriate registering mechanism and public access to the relevant data, because the first challenge faced in the effort of assessing the number and the status of national marine protected areas is the lack of an accurate inventory, which is coupled with the lack of compilation of new potential sites with the highest biodiversity value. Steps are being taken in this regard under the auspices of the SPA/RAC, with a view to elaborating criteria for inclusion of specially protected areas in a Mediterranean directory.

Examples of **transboundary marine protected areas beyond the territorial waters of Mediterranean coastal States** include the **Pelagos Sanctuary**, which is one of the two SPAMIs including also waters beyond the limit of the territorial sea (the other one being the Cetacean Migration Corridor off the coasts of Spain). The Pelagos Sanctuary was established under an Agreement signed in Rome in 1999 by France, Italy and Monaco and is the first treaty ever concluded with the specific objective of establishing a protected area for marine mammals. 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. In fact, also in those portions of water eventually declared as exclusive economic zones, third States enjoy a number of freedoms, including the freedom of navigation, which causes certain impacts to cetaceans, such as those deriving from collisions and underwater noise. The sanctuary has been included in the SPAMI List and, accordingly, also enjoys the protection regime provided for under the Areas Protocol. Another example of transboundary cooperation concerns the **Strait of Bonifacio**, which is an international strait regulated by the regime of transit passage under Arts. 37 to 44 UNCLOS. It is located between Corsica and Sardinia (two Mediterranean islands belonging to France and Italy, respectively). As the strait represents one of the most outstanding areas in the Mediterranean Sea in terms of marine biodiversity, France and Italy have long since decided to adopt in the strait a restrictive approach to navigation, insofar as ships flying their respective flags are concerned. To this purpose, they necessarily acted through the IMO. In 2011, the strait was also designated as a PSSA – the first established in the Mediterranean Sea and the second in the world for an international strait. Noteworthy is the initiative of two French and Italian public local entities with competencies in the field of marine environment protection, which in 2013 registered with the Committee of the Regions of the EGTC Convention establishing the *International Marine Park of the Strait of Bonifacio*. Other effective area-based conservation measures of transboundary character include FRAs established within the framework of the GFCM, 2 of which lie in the Adriatic and Ionian Seas, namely: the **Lophelia reef off Capo Santa Maria di Leuca** and the **Jabuka/Pomo Pit**.

The **establishment of SPAMIs in the Northern and Central Adriatic** is supported by a number of elements, namely: a) within the Gulf of Trieste, two small SPAMIs have already been created by Italy (*Miramare Marine Protected Area*) and Slovenia (*Landscape Park Strunjan*); b) the report presented in 2010 to the extraordinary meeting of the focal points for the Specially Protected Areas Protocol listed in general the Northern and Central Adriatic among the 'priority conservation areas'; c) in 2014, the Conference of the Parties to the CBD identified the Northern Adriatic as an EBSA; d) EUSAIR has identified the Northern Adriatic and the Pomo/Jabuka Pit among the four pilot areas to carry out a review of the implementation of integrated coastal zone management and marine spatial planning concepts; e) measures for the establishment of a common routing system, a traffic separation scheme and a mandatory ship reporting system have been agreed by the bordering countries; f) in 2017, the GFCM established the Jabuka/Pomo Pit FRA; g) in 2010 the Meeting of the Parties to the ACCOBAMS recommended the creation of a marine protected area in the waters along the east coast of the Cres-Lošinj archipelago (Croatia), as a zone of special importance for cetaceans; in 2021, the newly adopted Maritime Spatial Plan of the Republic of Slovenia which support the enlargement of existing and the creation of new marine protected areas, envisaged two (transboundary) marine protected areas, one at the border with Italy (Debeli Rtic / Punta Sottile) and another one at the border with Croatia

A joint initiative by Croatia, Italy and Slovenia to establish one or two SPAMIs in the Northern and Central Adriatic would be intended to address the following specific challenges:

- to build upon the existing or proposed instruments of restricted or sectoral protection, coordinating them within a larger and coherent framework of transboundary cooperation and sustainable development;

- to include marine protected areas with the framework of a broader marine spatial planning concept applying to the whole Adriatic Sea and potentially extending to the Ionian Sea;

- to integrate and balance in a sound manner economic activities (especially navigation and fishing) and environmental needs;

- to increase confidence among the Adriatic Sea bordering States, showing that pending issues of maritime boundaries are not an unsurmountable obstacle against the strengthening of their environmental cooperation through the establishment of transboundary protected areas.

A transboundary SPAMI would not be legally feasible for the time being in the Ionian Sea and the Strait of Otranto area, as Greece is not yet a party to the Areas Protocol, nor in the Klek/Neum Bay area, due to the fact that neither Bosnia and Herzegovina is a State party to the said protocol. The ratification of the Areas Protocol by Greece and Bosnia and Herzegovina should be accordingly highly encouraged.

Among the main goals emphasized by both global and regional – Mediterranean and European Union – legal and policy documents is the effective management of all protected areas, the definition of clear conservation objectives and measures, and an appropriate monitoring. This is even more important in a transboundary context. In the European

Union and EUSAIR context, an interesting tool in this regard may be represented by the **EGTC,** which is an entity with legal personality under European Union law (EGTC Regulation 1082/2006, as amended in 2013). It aims at improving the implementation conditions for territorial cooperation with a view to strengthening cohesion in the European Union. In doing so, it complements funding instruments for ETC, known as 'Interreg'. Each EGTC is governed by a convention concluded by its members. These may be European Union member States, regional and local authorities of European Union member States, public undertakings and public bodies under certain conditions, also belonging to States that are not members of the European Union. What is necessary is that the EGTC is made up of members that are located on the territory of at least two European Union member States. In addition, the EGTC may include one or more States that are neighboring at least of one European Union member State that is a member of the same EGTC. A State that is not a member of the European Union is considered as a 'neighboring State' under the EGTC Regulation when *"it shares a common land border or where both the third State and the EU Member State are eligible under a joint maritime cross-border programme under the European territorial cooperation goal, or are eligible under another cross-border, sea-crossing or sea-basin cooperation programme, including where they are separated by international waters"* (Art. 3a, para. 1). The maritime borders between the countries concerned are included. Accordingly, Albania, Bosnia and Herzegovina and Montenegro – or public bodies of these States – could become members of an EGTC in the Adriatic and Ionian Seas. The possibility to resort to the EGTC instrument with a view to protecting the marine environment in a transboundary context, as a possible form of territorial cooperation, has been already affirmed through the establishment of the EGTC for the *International Marine Park of the Mouths of Bonifacio*, in the Tyrrhenian Sea.

The **designation of a PSSA or more PSSAs within the Adriatic and Ionian seas** may potentially represent a powerful aid in a quest for protection of a specific sensitive area from international shipping. Noteworthy is the fact that the PSSA designation process allows the IMO to undertake a comprehensive assessment of the shipping threats to the proposed PSSA area with the aim to devise the most appropriate protective measures to address the threat. However, as the additional associated protective measures and the PSSA itself need to be confirmed by the relevant IMO bodies, the process of a PSSA designation is not only an environmental and technical process, but also a political exercise. The main opportunity provided by the PSSA concept is the possibility to introduce for a particular area additional associated protective measures, although limited to those having its legal base in an adopted IMO instrument. The latter may be or may not be in force. The practical and legal result of a designed PSSA is that the included associated protective measure are granted a validity *erga omnes partes*, even if a certain IMO document has not entered into force. An additional benefit of designing a PSSA is represented by the fact that associated protective measures may differ within and may be tailored for a specific (smaller) part of a broader PSSA.

Even in the case that the designated PSSA mirrors only already existing measures, in the case of the Adriatic Sea that would include routing measures (both compulsory and proposed), compulsory reporting (ADRIREP) and Special Area status under MARPOL's

Annexes I and V. Reference should be made to the fact that the sole designation of a PSSA may represent an extremely important cooperative framework for participating member States and their governmental (maritime) authorities. The main advantage in this regard seems to be the internationally raised awareness about the area's vulnerability to damage by international shipping, which in turn may and should increase community and mariners' awareness of the sensitivity of, and risk to navigation within, the area. A preferred option should accordingly be the strengthening and upgrade of the already existing associated protective measures through the designation of a PSSA, coupled with eventual proposals for new associated protective measures. Such new associated protective measures could be applicable to the entire Adriatic Sea, to only to part of it, or even to an area adjacent to the Adriatic PSSA in the nearby Ionian Sea.

11.2. Ways forward

As all EUSAIR countries are either European Union member States or aspire to join the European Union in the (not too distant) future, the key European Union commitments in the field of nature protection provided by the 2030 Biodiversity Strategy seems to be particularly relevant. The latter may be summarized as follows:

(1) Legally protect a minimum of 30% of the European Union's land and 30% of the European Union's sea area and integrate ecological corridors, as part of the true trans-European nature network;

(2) Strictly protect at least a third of the European Union's protected areas, including all remaining European Union primary and old growth forest;

(3) Effectively manage all protected areas, defining clear conservation objectives and measures, and monitoring them appropriately.

Based on the provisions of the 2030 Biodiversity Strategy, European Union member States will be responsible for designating the additional protected and strictly protected areas, either by expanding or completing the NATURA 2000 Network or under national protection schemes (marine protected areas), including eventual (transboundary) marine protected areas established in accordance with the provisions of regional seas conventions (i.e., the Barcelona Convention). Fisheries management will need to be implemented in all marine protected areas, according to clearly defined conservation objectives and on the basis of the best available scientific advice. The Commission will aim to agree the criteria and guidance for additional designations of marine protected areas with member States by the end of 2021. Member States will then have until the end of 2023 to demonstrate significant progress in legally designating new protected areas and integrating ecological corridors.

The European Commission pointed out, in this regard, that full implementation and enforcement of European Union environmental legislation is at the heart of the 2030 Strategy. As regards the Birds and Habitats Directive, enforcement will focus on completing the NATURA 2000 Network, the effective management of all sites, species-protection provision and species and habitats that show declining trends. Furthermore, the application of an ecosystem-based management approach under European Union legislation will reduce the adverse impact of fishing, extraction and other human

activities, especially on sensitive species and seabed habitats. To support this, national maritime plans, which member Sates have to deliver in 2021, should aim at covering all sectors and activities, including other effective area-based conservation measures.

The targets put forward by the 2030 Biodiversity Strategy may be achieved by European Union member States – and generally EUSAIR coastal States – through the application of one or more of the following strategies.

a. Expanding and completing the NATURA 2000 - Emerald Network or through the establishment of marine protected areas under national protection schemes. The NATURA 2000 Network could be, for example, expanded not only in the Northern and Central Adriatic, but also in the Southern Adriatic (Channel of Otranto area) as well as within the Ionian Sea. EUSAIR coastal States that are not members of the European Union (Albania, Bosnia and Herzegovina, Montenegro) may contribute to this goal through the enlargement of the Emerald network, by establishing additional marine protected areas or through the designation of new marine protected areas under their national legislation. Taking into account that the Croatian waters surrounding the Bosnian waters in the Klek/Neum Bay have been already protected as NATURA 2000 sites, the plans of Bosnia and Herzegovina to protect its waters in the Klek/Neum Bay, in close cooperation and coordination with neighbouring Croatia, seems to be of particular importance. Bosnia and Herzegovina can achieve the said goal either on the basis of its national legislation or, alternatively, based on the provision of the Bern Convention, contributing in such way to the enlargement of the Emerald network of (marine) protected areas. The NATURA 2000 - Emerald Network of marine protected areas could be strengthened also in the Southern Adriatic, particularly in the Channel of Otranto area and surrounding Ionian Sea, through prompt action and coordination by Albania, Italy and Greece.

b. Establishing marine protected areas, including transboundary, in accordance with the provisions of the Barcelona Convention and its Protocols. Reference should be made in this regard to the possibility of establishing two transboundary SPAMIs or one bigger SPAMI in the Northern and Central Adriatic (including the Jabuka/Pomo Pit area) based upon a joint proposal by Croatia, Italy and Slovenia. Following the eventual ratification of the Areas protocol by Greece, a similar move could be envisaged in the Southern Adriatic (Channel of Otranto area) and the Ionian Sea. The scientific basis for such proposals may be found among other in the decisions of the Conference of the Parties to the CBD, which in 2014 identified the Northern, Central (including Jabuka/Pomo pit) and Southern Adriatic, including the Strait of Otranto area and nearby Ionian Sea, as EBSAs, and also in the report presented in 2010 to the extraordinary meeting of the focal points for the Areas Protocol, which listed the Northern and Central Adriatic as 'priority conservation areas' and together with *Santa Maria di Leuca* and *Northeastern Ionian* as potential SPAMIs. Noteworthy is the fact that the latter report was based on a study undertaken by SPA/RAC in the period between 2008-2010 with the financial support of the European Commission. The future accession of Bosnia and Herzegovina and Greece to the Areas Protocol seems, accordingly, of paramount importance.

c. *Establishing other sectoral other effective area-based conservation measures applicable to parts of Adriatic and Ionian Seas (FRAs, marine protected areas for cetaceans,*

underwater cultural heritage sites, etc.). Other effective area-based conservation measures of transboundary character may include FRAs established within the framework of the GFCM, two of which lie in the Adriatic and Ionian Seas, namely the *Lophelia reef off Capo Santa Maria di Leuca* and the *Jabuka/Pomo Pit.* Worth of mention is the *Bari Canyon*, which does not present a transboundary character, although it is located in the South Adriatic Sea off the territorial waters of Italy. Since 2005, the same organization has prohibited the use of towed dredges and trawl nets at depths beyond 1000 m in the Mediterranean and Black Seas: such effective area-based conservation measure includes portions of the Southern Adriatic and Ionian Seas. The designation of GFCM's FRAs in the Adriatic and Ionian Seas, particularly in its part where fisheries activities are prohibited is important also due to its contribution to achieving the goal of strictly protecting at least a third of the European Union's protected areas by 2030. It is of particular importance that the Jabuka/Pomo Pit has been recently confirmed as a 'permanent' FRA, together with all the associated management measures (44th session of the GFCM, held between the 2 and 6 November 2021) and that a proposed transboundary FRA within the region of concern (Albania, Italy) relating to *Deepwater essential fish habitats and sensitive habitats in the South Adriatic* seems close to its establishment under the GFCM. Furthermore, reference should be made to the fact, that Art. 11 of Regulation (EU) 1380/2013, relating to *Conservation measures necessary for compliance with obligations under Union environmental legislation*, allows for the adoption of conservation measures in order to achieve the objectives of the MSFD and Birds and Habitats Directives, and for the consequent establishment of protected areas of biological sensitivity, including FRAs also under the auspices of the European Union Common Fisheries Policy.

Additionally, as of today, 22 proposals for marine protected areas for cetaceans have been identified within the framework of the ACCOBAMS, four of which would be located in the Adriatic and Ionian Seas, namely: the *Waters along east coast of the Cres-Lošinj archipelago*; the *Sazani Island – Karaburuni Peninsula (Adriatic and Ionian Sea, Albania)*; the *Eastern Ionian Sea and the Gulf of Corinth (Greece)*; and the *Southwest Crete and the Hellenic Trench (Greece)*. The parties still have to achieve the objective of creating and maintaining a network of marine protected areas for cetaceans, which should coincide with those sites recognized as CCHs. The identification of CCHs is, in turn, based on the overlapping of IMMAs and the mapping of anthropogenic threats.

Some States have established marine protected areas also around underwater cultural properties (for example, Italy by decrees of 7 August 2002 established the two underwater parks of *Gaiola*, in the Gulf of Naples, and of *Baia*, in the Gulf of Pozzuoli), based on the relevant provisions of the UNESCO Convention on the Protection of Underwater Cultural heritage. The same approach could be used also in other areas located within the 'heritage rich' Adriatic and Ionian Seas, which are important for the *in situ* preservation of underwater cultural heritage.

d. Establishing a PSSA applicable to the entire Adriatic Sea, including the whole Otranto Channel area. An extremely important tool which may help in the achievement of the goals put forward by the 2030 Biodiversity Strategy and other global policy instrument is represented by the designation of the entire Adriatic Sea, including the

wider Otranto Channel area, as a PSSA. Noteworthy is the fact that a PSSA can be used as a supplementary measure within an already established marine protected area or other effective area-based conservation measure (e.g., FRA). Alternatively, it can be proposed as a separate sectoral measure in relation to threats posed by international shipping, in parallel with the process of establishment of a (transboundary) marine protected area, including a SPAMI. The example of the Strait of Bonifacio, where all previously mentioned instruments – i.e., national marine protected areas both on the French and Italian side, NATURA 2000 sites, international marine park co-managed by an EGTC, a SPAMI and a PSSA – coexist over roughly the same area, is a clear example in this regard.

One of the most important challenges in the process of designing a PSSA is represented by the endorsement, preparation and joint submission of a PSSA proposal to the IMO by all affected States. The chances of success of a proposal are far greater if all States bordering an enclosed or semi-enclosed sea (i.e., all coastal States bordering the Adriatic and Ionian Seas) are united and submit a joint proposal with regard to the designation of a certain area (e.g., the Adriatic Sea) as a PSSA, together with the relevant 'associate protective measures'. The chances of success are further enhanced if such proposal is supported within the IMO bodies by the European Union and its member States as a united block, as for example the case has been during the process of adoption of the 'Western European Waters' PSSA in 2004. Independently of the fact that the draft PSSA proposal prepared in the period 2006-2011 related to the Designation of the entire Adriatic Sea as a PSSA was not finalized and submitted to the IMO, the said draft may represent a sound basis either for its update and finalisation, or as a starting point for the preparation of a new PSSA proposal.

e. Effectively managing all protected areas, defining clear conservation objectives and measures, and monitor them appropriately. The aim of effectively managing all protected areas, defining clear conservation objectives and measures and monitoring them appropriately could be achieved in the Adriatic and Ionian Seas also with the help of an innovative legal entity, the EGTC, in accordance with the relevant European Union legislation. As an autonomous legal entity, an EGTC set up by the Adriatic and Ionian coastal States could be responsible for the management of a protected transboundary area, or network of areas, in the Adriatic and Ionian Seas and the identification of the relevant protection measures. Its legal personality based on public law, with tasks specified in the constitutive instruments, would ensure that such management authority participate through its legal and institutional representations in the most appropriate fora where marine environment protection tools are discussed and approved.

Another example of good practice which may be taken into account, both with regard to the management of marine protected areas in particular and the holistic governance of the Adriatic eco-region in general, is represented by the work of the International Sava River Basin Commission. The latter was established on the basis of, and with the aim to, implement the Framework Agreement on the Sava River Basin, concluded in 2004 by the riparian States: Bosnia and Herzegovina Croatia, Serbia and Slovenia. The key objective of the Framework Agreement (and of the Commission) is to achieve the sustainable development of the region through transboundary cooperation.

Particular emphasis is paid on the following goals: (1) to set up and international regime of navigation on the Sava River; (2) to establish sustainable water management; (3) to prevent or limit hazards (i.e., floods) and eliminate or at list reduce their negative consequences. Four protocols to the Framework Convention have been already concluded in the fields of Regime of Navigation (2004), Flood Protection (2015), Prevention of Water Pollution Caused by Navigation and Sediment Management (both in 2017). Noteworthy is the fact that the first Sava River Basin Management Plan was adopted in 2014 and is now already under review[484]. It may be suggested that a similar function to that of the Sava River Basin Commission could be undertaken in the Adriatic and Ionian context by the (expanded) Quadrilateral Commission.

[484] See https://www.savacommission.org/. See also ŽELJKO, *Sava Commission: Good practice of river basin management,* Presentation delivered at the Workshop: What can EUSAIR do to enable the blue and green sustainable growth in EUSAIR: MSP in EUSAIR state of the art, 9. November 2021, ppt available at: https://www.adriatic-ionian.eu/wp-content/uploads/2021/11/Item-5_ISBRC-River-basing-management_Dragan-Zeljko.pdf. As also emphasized in the Conclusions of the mentioned EUSAIR Workshop (9 November 2021)*:"(1) It is essential to accelerate the integration of ecosystem services into all development planning services; (3) Connecting protected areas to cross- border interconnected networks on land, around the sea is a measure that can make a significant contribution to improving ecological status (GIS) and biodiversity"*. Workshop's proceeding available at https://www.adriatic-ionian.eu/event/mediterranean-coast-and-macro-regional-strategies-week-2021-brings-new-dimension/presentations/

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