

Recommendations

to support common understanding
on a regional scale on MSP,
including synergic implementation
of regionally relevant policy instruments

December 2018



Supporting Implementation of Maritime Spatial Planning
in the Western Mediterranean region



European Commission
Directorate-General for Maritime Affairs and Fisheries

Grant Agreement: EASME/EMFF/2015/1.2.1.3/02/SI2.742101

Component: C 1.3 Support for Member States' implementation of Maritime Spatial Planning

Sub-component: C 1.3.1 Develop and propose a conceptual methodology for transboundary MSP in the Western MED, with operational details on selected aspects

Deliverable Lead Partner: PAP/RAC
Start Date of Project: 01/01/17
Duration: 24 months
Version: 5

Dissemination Level

PU	Public	
PP	Restricted to a group specified by the Consortium (including the Commission services)	
RE	Restricted to other programme participants (including the Commission services)	
CO	Confidential, only for members of the Consortium (including the Commission services)	

Document Information

Deliverable Title	Definition and application of MSP by the Barcelona Convention taking into consideration the relationship between EU and non-EU countries (C 1.3.1.2.) Coordination of sectorial policies (C 1.3.1.3.)
Coordinators	Marina Marković, Željka Škaričić (PAP/RAC)
Authors	Emiliano Ramieri Athena Mourmouris Daniela Addis Martina Bocci
Contributions	Project partners: Matteo Braida, A. Celli, Oliviero Montanaro (MATTM) Stavros Antoniadis, Tatjana Hema (UN Environment/MAP)
Editing	Branka Barić (PAP/RAC) Slobodan Pavasović
Recommended Citation	Ramieri, E., Mourmouris, A., Addis, D. and Bocci, M. (2018). Recommendations to support common understanding on a regional scale on MSP, including synergic implementation of regionally relevant policy instruments. EU Project Grant No.: EASME/EMFF/2015/1.2.1.3/02/SI2.742101. Supporting Implementation of Maritime Spatial Planning in the Western Mediterranean region (SIMWESTMED). Priority Actions Programme Regional Activity Centre (PAP/RAC). 52pp. DOI: 10.5281/zenodo.2592049

Disclaimer

Disclaimer: The contents and conclusions of this report, including the maps and figures, do not imply the expression of any opinion or endorsement of the participating partners concerning the legal status of any country, territory, area, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The depiction and use of boundaries, geographic names and related data shown on maps included in this report are not warranted to be error free nor do they imply official endorsement or acceptance by any of the participating partners. This report is a working document and may rely on data from sources external to the SIMWESTMED project Consortium and, in addition to this, it may contain some information gaps. Neither the European Commission or Executive Agency for Small and Medium-sized Enterprises nor UN Environment/MAP Barcelona Convention Secretariat may be held responsible for any use that may be made of the information contained in this report.

Table of Contents

List of Acronyms	i
List of Figures	iii
List of Tables.....	iii
List of Boxes.....	iii
Foreword	1
1. Objectives.....	3
2. State of MSP implementation	4
3. MSP under the Barcelona Convention	6
3.1 Legal and policy frame	6
3.2 United Nations Convention on the Law of the Sea	10
3.3 Current policy initiatives regarding MSP in the framework of BC.....	18
3.4 Links with the 2030 Agenda for Sustainable Development and Sustainable Development Goals.....	19
3.5 Mediterranean Strategy for Sustainable Development	20
3.6 Transboundary cooperation in MSP in the Mediterranean.....	20
4. The ecosystem approach.....	22
4.1 The ecosystem approach (EcAp) of the UN Environment MAP.....	23
4.2 The ecosystem-based approach in the EU MSP Directive.....	25
4.3 The ecosystem-based approach in other EU policies.....	26
5. Key issues important to MSP implementation in the Western Mediterranean.....	34
5.1 UN Environment/MAP Ecosystem Approach	35
5.2 Links to ICZM.....	35
5.3 Adaptive approach	36
5.4 Cross-border cooperation and multi-scale approach to MSP	37
5.5 Integration and coordination	38
5.6 Stakeholder involvement	39
5.7 Project-based initiatives and MSP practices	39
5.8 Data availability and accessibility.....	39
6. SIMWESTMED proposals on integration of principles of the Barcelona Convention within MSP implementation.....	40
6.1 UN Environment MAP's Ecosystem Approach	40
6.2 Links to ICZM.....	41
6.3 Adaptive approach	42
6.4 Cross-border cooperation and multi-scale approach to MSP	42
6.5 Integration and coordination	43
6.6 Stakeholders involvement.....	44
6.7 Uptake of the project-based initiatives and MSP practices	45
6.8 Data availability and accessibility.....	45
6.9 Tools for Environmental assessment of MSP	46
References	48
Annex 1: Barcelona Convention legal background.....	50

List of Acronyms

ABNJ	Areas Beyond National Jurisdiction
ABS	Access and Benefit Sharing
All	Adriatic and Ionian Initiative
APEI	Areas of Particular Environmental Interest
BC	Barcelona Convention
BD	Birds Directive
BD	Biological Diversity
BOD	Biochemical Oxygen Demand
BQE	Biological Quality Element
CAMP	Coastal Area Management Programme
CBD	Convention on Biological Diversity
CF	Conceptual Framework
CIEM	Spanish Inter-Ministerial Commission on Marine Strategies
CMS	Convention on the Conservation of Migratory Species of Wild Animals
COP	Conference of the Contracting Parties
CRF	Common Regional Framework
DDT	Dichloro-Diphenyl-Trichloroethane
DIRIM	French Interregional Directorates for the Sea
EBA	Ecosystem Based Approach
EBSA	Ecologically or Biologically Significant Marine Area
EcAp	Ecosystem Approach
EEZ	Exclusive Economic Zone
EFMZ	Ecological and Fisheries Protection Zone
EIA	Environmental Impact Assessment
EO	Ecological Objectives
EPZ	Ecological Protection Zone
EU	European Union
EUSAIR	EU Strategy for the Adriatic and Ionian Region
FAO	United Nations Food and Agriculture Organization
FCS	Favourable Conservation Status
FPZ	Fisheries Protection Zone
GES	Good Environmental Status
GFCM	General Fisheries Commission for the Mediterranean
GOBI	Global Ocean Biodiversity Initiative
GVA	Gross Value Added
GW	Gigawatt
HD	Habitat Directive
HELCOM	Helsinki Commission (Baltic marine protection)
ICCAT	The International Commission for the Conservation of the Atlantic Tuna
ICZM	Integrated Coastal Zone Management
IMAP	Integrated Monitoring and Assessment Programme
IMCAM	Integrated Marine and Coastal Area Management
IMMA	Important Marine Mammal Areas
IMO	International Maritime Organization
IMP	Integrated Maritime Policy
IPCC	Intergovernmental Panel on Climate Change
ISA	International Seabed Authority
IUCN	International Union for Conservation of Nature
IUU	Illegal, Unreported and Unregulated (fishing)
KBAs	Key Biodiversity Areas
LBS	Land-Based Sources (of Pollution)
LSI	Land Sea Interactions

MAB	Man and the Biosphere Programme
MAP	Mediterranean Action Plan
MATTIM	Italian Ministry of Environment, Land and Sea Protection
MedWet	Mediterranean Wetlands Regional Initiative
MEPC	Marine Environment Protection Committee
MPA	Marine Protected Area
MSFD	Marine Strategy Framework Directive
MS	Member States
MSP	Marine Spatial Planning
MSSD	Mediterranean Strategy for Sustainable Development
MWO	Mediterranean Wetland Observatory
NDR	National Data Repository
NFP	National Focal Points
OECMs	Other Effective area-based Conservation Measures
PAP/RAC	Priority Actions Programme Regional Activity Centre
PEFZ	Protected Ecological-Fishery Zone
PoW	Programme of Work
PSSA	Particularly Sensitive Sea Area
RAC	Regional Activity Centre
RB	River Basin
RFMO	Regional Fisheries Management Organizations
SAC	Special Area of Conservation
SDI	Spatial Data Infrastructure
SPA/RAC	Specially Protected Areas Regional Activity Centre
RSC	Regional Seas Conventions
SAC	Special Area of Conservation
SDG	Sustainable Development Goals
SDIMED	Spatial Data Infrastructure of the Mediterranean
SEA	Strategic Environmental Assessment
SIMWESTMED	Supporting Implementation of Maritime Spatial Planning in the Western Mediterranean region
SPAMI	(List of) Specially Protected Areas of Mediterranean Importance
SPED	Maltese Strategic Plan for Environment and Development
SUPREME	Supporting Maritime Spatial Planning in the Eastern Mediterranean
TEIA	Transboundary Strategic Environmental Assessment
TEU	Treaty on European Union
UNCLOS	United Nations Convention of the Law of the Sea
UNEP	United Nations Environment Programme
UNESCO-IOC	United Nations Educational, Scientific and Cultural Organisation – Intergovernmental Oceanographic Commission
UN Environment	United Nations Environment Programme
VASAB	Vision and Strategies around the Baltic Sea
VMEs	Vulnerable Marine Ecosystems
WCMC	The World Conservation Monitoring Centre of the United Nations Environment Programme
WFD	Water Framework Directive

List of Figures

- Figure 1: Main policies relevant for MSP..... 22
- Figure 2: Calendar of the EcAp implementation process 24
- Figure 3: Links between ecosystem and MSP principles 26
- Figure 4: Links between MSFD, ecosystem principles and MSP 27
- Figure 5: Links between WFD, ecosystem principles and MSP..... 30
- Figure 6: Links between Birds Directive & Habitat Directive, ecosystem principles and MSP..... 31
- Figure 7: Links between Blue Growth Directive, ecosystem principles and MSP 32
- Figure 8: Links between SEA Directive, ecosystem principles and MSP 33
- Figure 9: Schematic representation of the proposed path for policies coordination through MSP process, in the framework of the ecosystem-based approach..... 44

List of Tables

- Table 1: Comparison between EU-Marine Strategy Framework Directive (MSFD) and Mediterranean Action Plan-Ecosystem Approach (MAP-EcAp) vision, strategic goals, and ecological objectives already defined 28
- Table 2: Transboundary issues, as reported in the Initial Assessment..... 37

List of Boxes

- Box 1: Geographical scope of MSP 7
- Box 2: Relevant Action Plans that need to be taken into account for the implementation of MSP by the CPs 9
- Box 3: Legal instruments complementary to UNCLOS 13

Foreword

The preparation of this document overlaps with the parallel activity and preparation of the document *“Recommendations and guidelines to support common understanding and integration of Barcelona Convention principles in MSP activities, with a focus on EU Member States within marine waters of the Adriatic, Ionian, Aegean and Levantine Seas”*, undertaken within the framework of **SUPREME** project.

Performing and finalisation of these outputs was undertaken and presented in a synergic way, for the overall benefit of SUPREME and SIMWESTMED project partners.

1. Objectives

This document identifies a number of key issues considered particularly relevant for the implementation of MSP in the Western Mediterranean. Preliminary contents were presented and discussed at the “SIMWESTMED regional meeting” held on the 5th of October 2017 in Hyeres (France). Outcomes of the discussion have been used to integrate and detail the preliminary identified issues and develop the current version of the document.

The main goal is to identify common issues driving or hindering MSP implementation in the Western Mediterranean and provide suggestions to strengthen drivers and/or remove obstacles, taking into consideration the framework provided by the Barcelona Convention (including its Protocols, in particular the one dealing with ICZM) and the Directive 2014/89/EU on MSP. Some of the identified issues are common also to the Eastern Mediterranean, thus applying to the entire Mediterranean Basin.

In the following pages, the document briefly describes the current state of MSP implementation in the Western Mediterranean, with particular focus on EU countries, mainly referring to the information included in the EU MSP Platform¹ and the eight major issues identified, including for each of them a number of specific suggestions. Besides considering the results of the Hyeres workshop, the issues and related suggestions have been defined capitalizing the work done for the elaboration of the Conceptual Framework for MSP in the Mediterranean.

¹ <http://msp-platform.eu/>

2. State of MSP implementation

Maritime Spatial Planning, compared to land-use planning, is a fairly new and emerging process in the Mediterranean Basin, including the Western Mediterranean sub-basin. The EU Directive on MSP is a key enabling factor that has triggered concrete actions towards MSP implementation in all EU Member States of Western Mediterranean (and in general in the entire Mediterranean). All the four Western Mediterranean EU countries have finalized the transposition of the MSP EU Directive into national legislation and identified the competent MSP national authorities, i.e.: Ministry of Agriculture, Food & Environment in Spain; Ministry for Ecologic Transition (*Ministère de la transition écologique et solidaire*) in France; Ministry of Transport and Infrastructure in Italy; and the Planning Authority for Malta. Indeed, MSP is a cross-sector process and its implementation involves a wider number of authorities acting at the national and sub-national levels (as among the others: the four of Maritime and Terrestrial Prefectures and the four Interregional Directorates for the Sea (*Direction Inter-régionale de la Mer – DIRM*) in France, the 11 coastal autonomous regions in Spain and the Italian coastal regions).

Coordination mechanisms exist or are being created to this scope² and definition of roles and responsibility within the MSP process is in progress. Moreover, countries are concretely developing other MSP-related activities as: data collection and structuring, setting out of guidelines, development of methodologies, and/or identification of the number of expected MSP plans and related geographic scope³. However, MSP initiatives and projects are still unbalanced between the two shores (northern and southern) of Western Mediterranean.

Although MSP can be seen primarily as a country-based process, cross-border cooperation is essential to ensure that MSP plans (and ICZM processes) are coherent and coordinated across the coastal zones and the marine regions. Westerner Mediterranean countries are expected to work together across borders to deal with some common general challenges, for examples: (i) increase safety and security, (ii) promote sustainable blue economy and jobs, (iii) preserve ecosystems and biodiversity. Some cross-border aspects related to these general challenges are clearly MSP-related (UNEP/MAP, 2017), e.g.:

- Management of maritime traffic specifically in congested areas (e.g. Strait of Gibraltar, Strait of Bonifacio or Corsica Channel);
- Reduction of risk of ship collisions and environmental accidents;
- Reduction of overfishing and improvement of sustainable management of fish resources;

² Through the Legislative Decree No. 201 of 17.10.2106, Italy established the Inter-Ministerial Coordination Table chaired by the Presidency of the Council of Ministries (Department of European Policies) and the Technical Committee coordinated by the Ministry of Infrastructures and Transport. Malta is working to establish a specific committee of the Executive Council of the Planning Authority to promote national coordination among the different entities involved in MSP. Spain created the Inter-Ministerial Commission on Marine Strategies (CIEM) in 2012 that is expected to play a role also in improving coordination within MSP. In France, the National Committee for the Seas and the Coast brings together relevant national stakeholders, whereas at the sub-national level four Sea basin councils (*Conseils Maritime de Façade*) have been established.

³ At the current stage of MSP implementation, the following plan can be possibly expected: three MSP plans for Italy (Western Mediterranean, Adriatic Sea, Ionian and Central Mediterranean); one maritime plan for each of the five marine subareas of Spain (North Atlantic, South Atlantic, Alboran Strait, Levantine-Balearic and Canary Islands); four plans for France (East Channel and North Sea, West Channel and North Biscay, South Biscay, Mediterranean Sea). In the case of Malta, the Strategic Plan for Environment and Development (SPED, developed in 2015) is the overarching document for planning issues on land and sea in an integrated manner; it constitutes the national MSP Plan.

- Biodiversity protection and designation of marine protected areas to meet the 10% Aichi target and also implement protection in the Areas Beyond National Jurisdiction (ABNJ);
- Reduction of marine litter;
- Coastal erosion and more in general adaptation to climate change.

3. MSP under the Barcelona Convention

3.1 Legal and policy frame

The Mediterranean Action Plan (MAP) has come a long way since its approval in 1975. Its main policy achievement is, in the context of the Regional Seas Programme, the adoption of a framework Convention for the Protection of the Marine Environment against Pollution (**Barcelona Convention, BC**, signed in 1976), renamed later as Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (as amended in 1995), and its related seven legal Protocols⁴, embracing all 21 Countries bordering the Mediterranean Sea together with the European Union. The **Barcelona Convention**, with its related Protocols, is the only regional multilateral legal framework for the protection of the Mediterranean marine and coastal environment, setting the obligations “*to prevent, abate, combat and to the fullest extent possible 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*” (BC, Art 4).

MAP therefore contributed in setting out a **legal and institutional framework for cooperation in addressing common challenges of marine environmental degradation**, while MAP itself (including its Regional Activity Centres – RACs) remains the **technical** mechanism, assisting the Mediterranean Governments in their efforts to implement their respective commitments for the protection of the marine and coastal environment in the Region, multilaterally or unilaterally.

While MSP is a relatively new term within the Barcelona Convention frame, several BC Protocols regulate key maritime sectors. This particularly refers to:

- 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 (**Offshore Protocol**);
- the Protocol for the Prevention and Elimination of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea (**Dumping Protocol**);
- the Protocol concerning cooperation in preventing pollution from ships and, in cases of emergency, combating pollution of the Mediterranean Sea (**Prevention and Emergency Protocol**); and
- the Protocol concerning the prevention of pollution of the Mediterranean Sea by transboundary movements of hazardous wastes and their disposal (**Hazardous Wastes Protocol**).

⁴ Protocol for the protection of the Mediterranean Sea against pollution from land-based sources and activities (LBS Protocol, adopted in 1996 and entered into force on 11 May 2008); Protocol concerning the prevention of pollution of the Mediterranean Sea by transboundary movements of hazardous wastes and their disposal (Hazardous Wastes Protocol, adopted in 1996 and entered into force on 19 January 2008); Protocol concerning cooperation in preventing pollution from ships and, in cases of emergency, combating pollution of the Mediterranean Sea (Prevention and Emergency Protocol, adopted in 2002 and entered into force on 17 March 2004); Protocol for the Prevention and Elimination of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea (Dumping Protocol, adopted in 1995 but not yet in force. The 1976 Dumping Protocol is in force since 1978), 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 (Offshore Protocol, adopted in 1994 and entered into force on 24 March 2011); Protocol concerning specially protected areas and biological diversity in the Mediterranean (SPA/BD Protocol, adopted in 1995 and entered into force on 12 December 1999); Protocol on Integrated Coastal Zone Management in the Mediterranean (ICZM Protocol, adopted in 2008 and entered into force on 24 March 2011).

In addition, planning of the marine space is a concept already taken on board by the **ICZM Protocol**. Spatial planning of the coastal zone is regarded as an essential instrument of the implementation of the same Protocol. One of the main objectives of ICZM is to “*facilitate, through the rational **planning of activities**, the sustainable development of coastal zones by ensuring that the environment and landscapes are taken into account in harmony with economic, social and cultural development*” (**ICZM Protocol**, Art. 5). Planning is recalled also in other parts of the Protocol, as in the case of articles dealing with the protection of wetlands, estuaries and marine habitats (Art. 10) or the protection of coastal landscape (Art. 11).

According to Art. 3, the area to which the Protocol applies (i.e. the coastal zone) is the area between:

- the **seaward** limit of the coastal zone, which shall be the external limit of the territorial sea of Parties; and
- the **landward** limit of the coastal zone, which shall be the limit of the competent coastal units as defined by the Parties.

The geographic scope of the Protocol includes both the land and the sea and it follows that **planning should be equally applied to both components of the coastal zones**.

It has also to be considered that the ICZM Protocol is part of the European legal system, due to its ratification by the European Union with Decision 2010/631/EU of 13 September 2010⁵.

In this perspective, **MSP can be considered as the integrative part of the implementation of ICZM in the marine part of the coastal zone** – corresponding to the external limit of the territorial sea of Parties – and specifically for its sustainable planning and management. Land-sea interactions could be regarded as part of the definitions given in Art. 2 and are the basis of the principles outlined in Art. 6.

Box 1: Geographical scope of MSP

Geographical scope of MSP in:

- Directive 2014/89/EU → marine waters, meaning the waters, the seabed and subsoil located on the seaward side up to the boundaries of the area of application of Member State jurisdictional rights, corresponding to the continental shelf, the declared Economic Exclusive Zone EEZ, Fishery Protection Zone FZ, Ecological Protection Zone EPZ, Protected Ecological-Fishery Zone PEFZ and including the coastal waters and its seabed and subsoil (that are the surface waters on the landward side of a line, every point of which is at a distance of one nautical mile on the seaward side from the nearest point of the baseline from which the breadth of territorial waters is measured), extending where appropriate up to the outer limit of the transitional waters.
- ICZM Protocol (*by means of interpretation*) → the marine waters within the seaward limit of the coastal zone, meaning the waters, the seabed and subsoil within the external limit of the territorial sea of Parties and including the internal waters and the transitional waters.

⁵ Council Decision of 13 September 2010 concerning the conclusion, on behalf of the European Union, of the Protocol on Integrated Coastal Zone Management in the Mediterranean of the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean.

Given the definition of the coastal zones in the ICZM Protocol, almost all other Protocols of the Barcelona Convention are related in one or the other way to it. ICZM can and should provide support to the implementation of several of these Protocols and the relevant objectives and provisions of these Protocols should be taken into account in all ICZM projects, plans and strategies. Given these links, **the application of MSP, at least, within the framework and the geographic scope of the ICZM Protocol, can contribute to the goals defined by other Protocols**, as in the case of identification, planning and management of protected areas according to the SPA/BD Protocol or the protection of the Mediterranean Sea against pollution resulting from exploration and exploitation of the continental shelf and the seabed and its subsoil (Offshore Protocol).

In addition to the Protocols, several specific Action Plans, related to the marine environment, have been elaborated and approved by the Contracting Parties (see Box 2).

Since the aforementioned Action Plans provide for concrete targets, actions and measures that have an impact on the activities undertaken on or affecting the coastal and marine areas, these should be taken into full consideration when developing and applying MSP.

Taking into consideration all the above, the Contracting Parties to the Barcelona Convention and its Protocols, at their nineteen Ordinary Meeting (COP 19, Athens, Greece, 2016), recommended to strengthen MAP activities in the field of **Marine Spatial Planning (MSP)** in order to contribute to Good Environmental Status (GES) of the Mediterranean Sea and Coasts, investigate in more details connections between land and sea areas and propose coherent and sustainable land and sea-use planning frameworks relating with key economic sectors and activities that may affect the coastal and marine resources. The elaboration of a Conceptual Framework (CF) for MSP as an emerging issue in the entire Mediterranean Region, **interlinked with ICZM and the related Protocol**, is envisaged by the UNEP/MAP Programme of Work (PoW) approved for 2016-2017. **Its main aim is to introduce MSP within the Barcelona Convention**, as the main tool/process for the implementation of ICZM in the marine part of the coastal zone and specifically for planning and managing maritime human activities in line with the Ecological Objectives and GES and related targets adopted by the Barcelona Convention Contracting Parties, thus contributing to the balance between environmental, social and economic dimensions of sustainable development. The 20th Meeting of the Contracting Parties to the Barcelona Convention (COP 20 – Tirana, Albania, 2017) adopted the Conceptual Framework for Marine Spatial Planning as a guiding document to facilitate the introduction of this management tool into the Barcelona Convention framework (see Chapter 3.3).

Implementation of MSP in EU Member States falls under the EU legislation. In addition to the EU Directive 2014/89/EU, establishing a framework for maritime spatial planning, the principle of the duty of sincere co-operation is fundamental for the implementation of MSP. Since the Treaty of Lisbon, this principle that can be found in Article 4 (3) TEU, according to which the Union and the Member States shall, in full mutual respect, assist each other in carrying out tasks which flow from the Treaties, take any appropriate measure, general or particular, to ensure fulfilment of the obligations arising out of the Treaties or resulting from the acts of the institutions of the Union, facilitate the achievement of the Union's tasks and refrain from any measure, which could jeopardize the attainment of the Union's objectives.

Also in the light of the duty of sincere co-operation and in accordance with the provisions of the EU Treaties (Article 3 et seq.), according to which the EU ensures compliance with and the proper implementation of international treaties in promoting their development, MSP can only be applied consistently and in the light of the principles and objectives of the BC System, as they have been developed and implemented over the years in their continuous evolution, also through the adoption and implementation of the related seven Protocols enhancing the Convention's overall effectiveness, including the ICZM Protocol.

Box 2: Relevant Action Plans that need to be taken into account for the implementation of MSP by the CPs.

Source: www.unep.org/uneppmap/action-plans

Pollution

- Mediterranean Offshore Protocol Plan
- Regional Plans adopted in the framework of the LBS Protocol on the reduction or elimination of substances or their inputs:
 - Regional Plan on the elimination of Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Mirex and Toxaphene
 - Regional Plan on the phasing out of DDT
 - Regional Plan on reduction of BOD5 from urban waste water
 - Regional Plan on the reduction of inputs of Mercury
 - Regional Plan on the reduction of BOD5 in the food sector
 - Regional Plan on the phasing out of Hexabromodiphenyl ether, Heptabromodiphenyl ether, Tetrabromodiphenyl ether and Pentabromodiphenyl ether; Phasing out of Lindane and Endosulfan; Phasing out of Perfluorooctane sulfonyl acid, its salts and Perfluorooctane sulfonyl fluoride
 - Elimination of Alpha hexachlorocyclohexane, Beta hexachlorocyclohexane, Chlordecone, Hexabromobiphenyl, Pentachlorobenzene
 - Regional Plan on Marine Litter Management in the Mediterranean

Specialty Protected Areas and Biological Diversity

- Regional Working Programme for the Coastal and Marine Protected Areas in the Mediterranean Sea including the High Sea
- Action Plan for the conservation of Cartilaginous Fish (Chondrichthyans) in the Mediterranean
- Action Plan for the conservation of marine vegetation in the Mediterranean Sea for the period 2012-2017
- Action Plan for the conservation of Mediterranean Marine Turtles in the Mediterranean Sea for the period 2014-2019
- Action Plan for the conservation of Bird species listed in Annex II to the SPA/BD Protocol in the Mediterranean for the period 2014-2019
- Action Plan for the conservation of Cartilaginous Fishes in the Mediterranean Sea for the period 2014-2019
- Action Plan for the conservation of Habitats and Species associated with seamounts, underwater caves and canyons, aphotic engineering benthic invertebrates and chemo-synthetic phenomena, in the Mediterranean Sea
- Roadmap towards a comprehensive, ecologically representative, effectively connected and efficiently managed network of Mediterranean Marine Protected Areas by 2020

Integrated Coastal Zone Management

- Action Plan for the implementation of the ICZM Protocol 2012-2019

Sustainable Consumption and Production

- Action Plan on Sustainable Consumption and Production

Climate Change adaptation

- Regional Climate Change Adaptation Framework for the Mediterranean Marine and Coastal Areas

Therefore, the link between the MSP of the EU Directive 2014/89/EU, establishing a framework for maritime spatial planning, and the respective UNEP/MAP activities is based on the underlined principles of the Barcelona Convention System, designed to achieve the objective of protecting and enhancing the marine environment so as to achieve and/or maintain a Good Environmental Status of the Mediterranean Sea and Coasts and contribute towards the sustainable development of the Mediterranean.

We are thus seeing a rapid evolution of the legal framework that, in a virtuous circle, triggers a process of correct and consistent interpretation and application of all its legal components. The implementation of individual components could facilitate the objective of consistency in the application of the entire legal system (European, Regional with the Regional Seas Conventions and international).

For these reasons, through the implementation of MSP, the underlying principles of the Barcelona System and, in particular, of the ICZM Protocol, shall be fully and completely enforced and implemented within the EU.

3.2 United Nations Convention on the Law of the Sea

The **United Nations Convention on the Law of the Sea** identifies several marine spaces between areas within national jurisdiction, i.e. the Territorial Sea, the Continental Shelf, the Exclusive Economic Zone (EEZ) and the related Ecological Protection Zone (EPZ), Ecological and Fisheries Protection Zone (EFPZ), Fisheries Protection Zone (FPZ), as well as areas beyond national jurisdiction. It also provides sectorial approaches and focuses on shipping, fishing, waste dumping and minerals mining, regulating the regime of international Straits and Channels. UNCLOS provides the legal framework for all activities in the oceans and seas, including the conservation and sustainable use of marine biodiversity beyond areas of national jurisdiction. UNCLOS obliges States to protect and preserve the marine environment (including rare or fragile ecosystems), with particular requirements on co-operation between Parties on a global and regional basis for formulating and elaborating the necessary international rules (UNCLOS, Articles 192, 194 and 197).

UNCLOS (Part XII, Articles 205 and 206), also provides measures on the so called environmental assessment, in particular by providing that where States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment, including a duty to notify. This duty encompasses planned activities under the jurisdiction or control of States which may cause significant and harmful changes to the marine environment beyond national jurisdiction. These principles are also foreseen in the SEA Directive 2001/42/EC and in the Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context (SEA Protocol, Kyiv 2003), ratified by the EU on 21 November 2008 and transposed in EU legislation through the SEA Directive.

Legal framework for MSP, under the BC, in particular in relation to the UNCLOS and Regional Seas Conventions (RSC) provisions, calls for the necessity of a multi-scale approach to acknowledge specificities of the Mediterranean basin and its marine regions, also from a legal point of view.

All EU Member States in the Mediterranean have ratified UNCLOS.

3.2.1 The Exclusive Economic Zones

Taking into account the objectives of the SIMWESTMED project in the legal context of the European Union, the geographic scope of spatial planning is that specified in Directive 2014/89/ EU, which also includes the **Exclusive Economic Zones (EEZ)**.

In the Exclusive Economic Zones (EEZ) (UNCLOS, Part V) – an area beyond and adjacent to the Territorial Sea, extending seawards to a distance of no more than 200 nautical miles (370 km) out from its coastal baseline – a coastal State has been given sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources. In the Ecological Protection Zones (EPZ), adopted by some Countries more recently, a coastal State has been given, as a minus, sovereign rights only for the purpose of conserving and managing the natural resources. The coastal State has specific management responsibilities, especially as concerns the living resources of the zone. In the light of these management responsibilities, a coastal State, which has claimed an Exclusive Economic Zone or an Ecological Protection Zone cannot pursue a policy of inaction with respect to its living resources.

Hereinafter a summarized framework of the situation in the western Mediterranean area, gradually changed, until the proclamation during the last period by the majority of the coastal States of either Exclusive Economic Zones (EEZ) or Fishery Zones (FZ), as well as the recently emerging regime of Ecological Protection Zones (EPZ) and combinations of ecological and fishery zones:

- **French EPZ** declared in **2003** and **converted in 2012 into a full-fledged Economic Exclusive Zone;**
- **Italy** has not established an Exclusive Economic Zone (EEZ), but has adopted a law in **2006**, which provides for an **Ecological Protection Zone** beyond the outer limit of the territorial sea for the protection and preservation of marine environment and archaeological and historical heritage. In **2011** was adopted the first of the implementing enactments for the establishment of an Ecological Protection Zone in the Nord-west Mediterranean Sea, Ligurian and Tyrrhenian Seas. In this defined area are to be applied, also with respect to foreign flagged ships and to foreign nationals within the EPZ, the rules of international, European and national laws related to prevention, response and control of all kinds of marine pollution, including pollution from ships and ballast tanks, pollution by dumping of waste; pollution as a result of exploration and exploitation of the sea-bed and subsoil (the so called “offshore activities”); pollution of atmospheric origin; protection of biodiversity and in particular marine mammals.
- **Malta** has not established an Exclusive Economic Zone. However, it did establish a continental shelf by the Continent Shelf Act and a special 25 nautical miles zone, which is a **Fisheries Conservation and Management Zone (1971-2004)**. The zone is intended to protect fish resources and the ecosystems on which they depend. The conservation measures limit fishing effort by restricting size and engine power. The zone is accessible only for small-scale boats (smaller than 12 metres) with the exception of a number of particular categories.
- **Spain** has established an Exclusive Economic Zone in the Mediterranean Sea Basin. Furthermore, Spain established in **1997 a Fisheries Protection Zone** in the Western Mediterranean which runs from Cape Gata in the south up to the terrestrial boundary with France. This means that the Fishery Protection Zone does not apply to the Alboran Sea;
- **Libya**, in **2005**, established a **fisheries protection zone** whose limits extend seaward for a distance of 62 n.m. from the external limit of the territorial sea;
- **Tunisia** and **Algeria** declared a **fishing zone beyond the limit of the territorial sea;**
- **Morocco** 1981, **Tunisia** 2005 and **Libya** 2009 declared an Exclusive Economic Zone (**EEZ**).

While **Fishing Zone** or **Ecological Protection Zone** are not mentioned in the UNCLOS, they are compatible with international law, also on the basis of the general principle that the right to do less is implied in the right to do more (*in maiore stat minus*); encompassing only some of the rights that can be exercised within the EEZ.

UNCLOS is complemented by **other international related legal instruments**, on the context of United Nations specialized agencies, organizations and programmes and of intergovernmental organizations, including the ones given in the **Box 3** (see below).

Another important issue to be address is the **EEZ/FZ/EPZ/PEFZ** within the MAP **Barcelona Convention system**. It is interesting to underline the rules concerning the application of Contracting Parties' laws on environmental protection also beyond the outer limit of the territorial sea. In particular:

- **Art 1 of the Barcelona Convention**, stating that *"the geographical coverage of the Convention is the Mediterranean Sea Area as the maritime waters of the Mediterranean Sea proper."*
- **Art 1, letter k** of the Protocol concerning the prevention of pollution of the Mediterranean Sea by transboundary movements of hazardous wastes and their disposal (**Hazardous Wastes Protocol**), which states that area under the national jurisdiction of a State (referred for example to Article 5) means also marine area within which State exercises administrative and regulatory responsibilities in accordance with international law in regard to the protection of human health or the environment.
- **Article 2** of the Protocol concerning cooperation in preventing pollution from ships and, in cases of emergency, combating pollution of the Mediterranean Sea (**Prevention and Emergency Protocol**) specifying that the geographical coverage to which the Protocol applies is the Mediterranean Sea Area.
- **Art. 2** of 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 (**Offshore Protocol**) on the geographical coverage to which the Protocol applies, specifying that is the Mediterranean Sea Area including the continental shelf and the seabed and its subsoil.
- **Articles 2 and 5** of the Protocol concerning specially protected areas and biological diversity in the Mediterranean (**SPA/BD Protocol**), specifying the geographical coverage which applies in *"the area of the Mediterranean Sea as delimited in Article 1 of the Convention"*, including the seabed and its subsoil (Art. 2) and enabling establishment of Specially Protected Areas (Art. 5) in the marine and coastal zones subject to the sovereignty or jurisdiction of the Parties (included EEZ/FZ/EPZ/EPFZ) (art 5a) and in the zones partly or wholly on the high seas (5b).

Detailed analysis is given in Annex 1.

Summing up, all the provisions of the Barcelona Convention and its related Protocols – which regulate in detail each activity for protection of the environment and prevention of pollution – shall be applied and implemented also in the established EEZ/FZ/EPZ/EPFZ. Therefore, the establishment of these zones by Contracting Parties constitutes an enhancement of the management of the Mediterranean in achieving the BC objectives, enlarging the marine areas where the national jurisdiction powers are applied and implemented. However, it should be underlined that provisions of the BC apply, regardless of the EEZ, even for the activities beyond national jurisdiction.

Box 3: Legal instruments complementary to UNCLOS

The 1976/1995 **Regional Seas Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention)** and its related 7 Protocols:

- Dumping Protocol (from ships and aircraft);
- Prevention and Emergency Protocol (pollution from ships and emergency situations);
- Land-based Sources and Activities Protocol;
- Specially Protected Areas and Biological Diversity Protocol;
- Offshore Protocol (pollution from exploration and exploitation);
- Hazardous Wastes Protocol;
- Protocol on Integrated Coastal Zone Management (ICZM).

The 1995 Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean (MAP Phase II)

The **International Seabed Authority (ISA)** is an autonomous international organization established under the UNCLOS and the 1994 Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea, with the role regarding marine scientific research and the protection of the marine environment. The Authority is the organization through which States Parties to the Convention shall, in accordance with the regime for the seabed and ocean floor and subsoil thereof beyond the limits of national jurisdiction (the Area) established in Part XI and the Agreement organize and control activities in the Area, particularly with a view to administering the resources of the Area⁶.

ISA guidelines provide for **Areas of Particular Environmental Interest (APEIs)**, which, in particular, stipulate that prior to the issuance of test-mining and exploitation permits, preservation reference areas will be delineated “in which no mining will occur to ensure representative and stable biota of the seabed in order to assess any changes in the flora and fauna of the marine environment” (ISBA/4/C/4/Rev.1, annex 4, sect. 5.6). “The preservation reference zone[s] should be carefully located and large enough so as not to be affected by the natural variations of local environmental conditions. The zone[s] should have species composition comparable to that of the test mining area[s]. It should be located upstream of the test mining area[s] and should be outside of test mining area[s] and areas influenced by the plume” (International Seabed Authority 1999, p. 226).

Thus, (2007-2012) International Seabed Authority (**ISA Guidelines for Areas of Particular Environmental Interest (APEIs)**), which, in particular, stipulate that prior to the issuance of test-mining and exploitation permits, preservation reference areas will be delineated “in which no mining will occur to ensure representative and stable biota of the seabed in order to assess any changes in the flora and fauna of the marine environment” (ISBA/4/C/4/Rev.1, annex 4, sect. 5.6).

Hence, the full range of habitat and community types, potentially found in mining claim areas, must be represented in preservation reference areas, and the scale of preservation reference areas must be large enough that these community types are “stable”, i.e., sustainable. Furthermore, the interests of all stakeholders (including the ISA, signatories to the UNCLOS, nodule mining, claim holders, non-governmental organizations, and the science community) will be incorporated into the design process. In addition, preservation reference areas should be established as soon as possible so that sound, ecosystem-based management principles can be incorporated into mining strategies and into the positioning of future claim areas.

⁶ <http://www.isa.org.jm>

It has also to be mentioned the role of the 1948 UN Agency **IMO (International Maritime Organization)** which role is to adopt legislation in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships, including the designation of **Particularly Sensitive Sea Area (PSSA)**.

A PSSA is 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.

Resolution A.982(24) contains Revised guidelines for the identification and designation of Particularly Sensitive Sea Areas (PSSAs).

These guidelines include criteria to allow areas to be designated as PSSA if they fulfil a number of criteria, including:

- i) ecological criteria, such as unique or rare ecosystem, diversity of the ecosystem or vulnerability to degradation by natural events or human activities;
- ii) social, cultural and economic criteria, such as significance of the area for recreation or tourism;
- iii) scientific and educational criteria, such as biological research or historical value.

When an area is approved as a particularly sensitive sea area, specific measures can be used to control the maritime activities in that area, such as routeing measures or an area to be avoided: an area 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; strict application of MARPOL discharge and equipment requirements for ships, such as oil tankers; and installation of Vessel Traffic Services (VTS).

Inter alia, the **Strait of Bonifacio**, between France and Italy, **has been designated as PSSA in 2011**⁷.

The 1973/1978 the International **Convention for the Prevention of Pollution from Ships (Marpol Convention)** was developed by IMO to minimize pollution of the oceans and seas, including dumping, oil and air pollution. The objective of this Convention is to preserve the marine environment in an attempt to completely eliminate pollution by oil and other harmful substances and to minimize accidental spillage of such substances.

Another organization worth to be mentioned is the 1945 **United Nations Educational, Scientific and Cultural Organization (UNESCO)** and, in its contest, **Man and the Biosphere Programme (MAB)** and the 1972 **World Heritage Convention** which identify sites of outstanding cultural or natural importance to the common heritage of humanity and the **Intergovernmental Oceanographic Commission (IOC)**, in particular the **Ocean Biogeographic Information System**; the World Conservation Monitoring Centre of the United Nations Environment Programme (**UN Environment-WCMC**) and the Global Ocean Biodiversity Initiative (**GOBI**) with the key role to establish a repository for scientific and technical information and experience related to the application of the scientific criteria on the identification of ecologically or biologically significant marine areas (EBSAs), and to develop an information-sharing mechanism with similar initiatives, such as FAO's work on vulnerable marine ecosystems (VMEs). In 1997, the **Methodological Guide to Integrated Coastal Zone Management** was adopted.

⁷ <http://www.imo.org/OurWork/Environment/PollutionPrevention/PSSAs/Pages/Default.aspx>

Besides the UN Fish Stocks Agreement, the **United Nations Food and Agriculture Organization (FAO)** in collaboration with relevant international and regional organizations, including **Regional Fisheries Management Organizations (RFMOs)**, has the task to guarantee the sustainability of fisheries, by managing the impacts of fisheries on species and the wider throughout implementing the ecosystem approach, eliminating illegal, unreported and unregulated (IUU) fishing; minimizing the detrimental impacts of fishing practices; mitigating and managing by-catches sustainably and reducing discards, in order to attain a sustainable exploitation level of marine fishery resources and thereby contributing to a good environmental status in marine waters.

The creation of marine protected areas (MPAs) in particular areas closed to certain fishing activities could constitute valuable means to reduce the impact of fishing on vulnerable marine habitats and species.

Under the same umbrella are:

- 1995 FAO Code of Conduct for Responsible Fisheries
- In 2005 the **ICCAT Recommendation 04-12** on management measures concerning recreational fishery in the Mediterranean (GFCM, 2005)

The **United Nations General Assembly Resolution 64/72**, paragraphs 113 through 130, on responsible fisheries in the marine ecosystem, addresses the impacts of bottom fishing on vulnerable marine ecosystems and the long-term sustainability of deep-sea fish stocks, in areas beyond national jurisdiction, calling on States and/or regional fisheries management organizations (RFMOs), consistent with the FAO Guidelines for the Management of Fisheries and consistent with the precautionary approach, to conduct impact assessments, conduct further marine scientific research and use the best scientific and technical information available to identify areas where vulnerable marine ecosystems are known or likely to occur, either adopt conservation and management measures to prevent significant adverse impacts on such ecosystems or close such areas to fishing, and adopt measures to ensure the long-term sustainability of deep-sea fish stocks (both target- and non-target stocks), and not to authorize bottom-fishing activities until such measures have been adopted and implemented (*see also* CBD COP 10, Decision X/29).

The 1991 **Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention)**, entered into force in 1997, which sets out the obligations of Parties to assess the environmental impact of certain activities at an early stage of planning; to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries.

Under the UNEP umbrella, the 1992 **Convention on Biological Diversity (CBD)** has a fundamental role in contributing to international action on the protection of sensitive and representative ecosystems, including through the establishment of **MPAs**, and in supporting the identification of **Ecologically or Biologically Significant Marine Areas (EBSAs)** and, in general, global cooperation. It contains a specific requirement under Article 14(1)(a) and (d), to conduct EIAs for activities under a Contracting Party's jurisdiction or control which are likely to have significant adverse effects on biodiversity – both terrestrial and marine – and for areas within and beyond national jurisdiction.

Under the same umbrella are:

- 1995 Jakarta Mandate on Marine and Coastal Biological Diversity (Decision II/10) 1998 (Decision IV/5)
- Integrated Marine and Coastal Area Management (IMCAM) approaches for implementing the Convention on biological diversity
- Decision X/29 on marine and coastal biodiversity, adopted by COP 10 (Nagoya, Japan, 18-29 October 2010)
- “Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their utilization to the Convention on Biological Diversity” (the ABS Nagoya Protocol, 2010), worth it to manage marine genetic resources.

The 1996 **Accobams Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic area** to preserve all species of cetaceans and their habitats within the geographical Agreement area by the enforcement of more stringent measures.

The 1971 **Ramsar Convention on wetlands**, the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.

Taking into account that the Mediterranean region is unique because of its special type of climate and its very long history of human use, in 1991 was established the **Mediterranean Wetlands Regional Initiative (MedWet)**, which brings together 26 Mediterranean and peri-Mediterranean Countries that are Parties to the Convention on Wetlands. The MedWet Mission is to ensure and support the effective conservation of the functions and values of Mediterranean wetlands and the sustainable use of their resources and services.

The **Mediterranean Wetland Observatory (MWO)** was established in 2008, with the main objective to act as a wetland management tool serving the MedWet Initiative's countries, and therefore to help to improve political decisions regarding the conservation and sustainable management of wetlands, particularly in terms of legislation, governance and best practices.

The 1979 **Convention on the Conservation of Migratory Species of Wild Animals (CMS or Bonn Convention)**⁸ aims to conserve migratory species, their habitats and migration routes on a global scale throughout their range, complementing and cooperating with a number of other international organizations, especially promoting concerted action among the Range States of many of these species.

A number of legally binding Agreements have been concluded to date under the auspices of CMS, inter alia with the aim to conserve Cetaceans of the Mediterranean Sea.

Important Marine Mammal Areas (IMMAs), defined as discrete portions of habitat, important to marine mammal species, that have the potential to be delineated and managed for conservation, recognized by CMS to address the needs of Migratory Species.

The 1999 **Multilateral Agreement** between France, Italy, and Monaco establishing the Marine Mammals Sanctuary or **Pelagos Sanctuary** (entered into force on February 2002), to protect endangered and endemic marine mammals (primarily whales and dolphins, but also other species that share the same ecosystem) in an area of approximately 90 000 km² of internal, territorial, and adjacent high seas waters, between Toulon (France), Cape Falcone (north-western Sardinia), Cape Ferro (north-eastern Sardinia) and Fosso Chiarone (Tuscany). It is cited as the first example of a legally-designated transnational/high seas MPA (B. Lausche, 2011).

In 2001, the Pelagos Sanctuary was included in the List of Specially Protected Areas of Mediterranean Importance (SPAMI), provided by the 1995 Protocol Concerning Mediterranean Specially Protected Areas and Biological Diversity in the Mediterranean under the Barcelona Convention, calling upon Contracting Parties to the Protocol to respect the protective status of the transnational/high seas MPA.

In 2005 the Extraordinary Meeting of the Barcelona Convention Contracting Parties agreed on the opportunity to include the Pelagos Sanctuary in the UNESCO World Heritage List and of its designation as a Particularly Sensitive Sea Area under the IMO Convention.

The **Council of Europe Landscape Convention**, adopted in 2000 and entered into force in 2004, promotes the protection, management and planning of European landscapes and organises European co-operation on landscape issues.

⁸ See <http://www.cms.int/>

In 2004, the International Convention for the Control and Management of Ships' Ballast Water and Sediments (**entered into force on 8 September 2017**) was adopted to prevent the spread of harmful aquatic organisms from one region to another, by establishing standards and procedures for the management and control of ships' ballast water and sediments.

The 2009 **FAO Agreement on Port State Measures to prevent, deter and eliminate illegal, unreported and unregulated fishing (IUU)**. The United Nations Food and Agriculture Organization (FAO), in collaboration with relevant international and regional organizations, including Regional Fisheries Management Organizations (RFMOs) and the General Fisheries Commission for the Mediterranean (GFCM), which has the task to guarantee the sustainability of fisheries, by managing the impacts of fisheries on species and the wider throughout implementing the ecosystem approach, eliminating illegal, unreported and unregulated (IUU) fishing; minimizing the detrimental impacts of fishing practices; mitigating and managing by-catches sustainably and reducing discards, in order to attain a sustainable exploitation level of marine fishery resources and thereby contributing to a good environmental status in marine waters.

The 2009 **Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships**, aimed at ensuring that ships, when being recycled after reaching the end of their operational lives, do not pose any unnecessary risk to human health and safety or to the environment.

Under the same umbrella:

- Resolution MEPC.196(62), adopted on 15 July 2011, Guidelines for the development of the ship recycling plan
- Resolution MEPC.210(63), adopted on 2 March 2012, Guidelines for safe and environmentally sound ship recycling

The 2016 IUCN Global Standard for the Identification of **Key Biodiversity Areas (KBAs)**, sets out globally agreed criteria for the identification of KBAs worldwide.

The 2017 **Initiative for the sustainable development of the blue economy in the Western Mediterranean** and the related **“Framework for Action on the Initiative for the sustainable development of the blue economy in the Western Mediterranean”**.

The Initiative builds on the Union for the Mediterranean process and its Ministerial Declaration on the Blue Economy adopted on 17 November 2015.¹ This Declaration invited the countries of the Union for the Mediterranean to explore the added value and feasibility of appropriate maritime strategies (including at sub-regional level), building on the experience of the 5+5 Dialogue process. Therefore the 10 countries concerned have been fully involved in preparing both the Initiative and of the Framework for Action.

The extensive, bottom-up consultation process for the Framework for Action involved a wide range of stakeholders from the region representing international, national, regional and local authorities, but also the private sector, academia and civil society.

As far as **spatial planning and coastal management** are concerned, actions will seek to improve the management of maritime, marine and coastal areas by local actors and ensure an appropriate and coordinated implementation of the EU Maritime Spatial Planning (MSP) Directive and the Protocol on Integrated Coastal Zone Management (ICZM) of the Barcelona Convention for addressing the cumulated impact of economic activities at sea and on the coasts based on ecosystem approach. They will also aim to improve knowledge of land-sea interactions and develop eco-friendly engineering solutions for the good environmental status of seas and coasts. Another key area of work will concern the tools to select appropriate sites for offshore installations and to fulfil the energy and environmental requirements of the region.

Added value: consistency will be sought in the implementation of the MSP Directive, the EU Marine Strategy Framework Directive and the Barcelona Convention Protocol on ICZM. Additionally, an enabling environment for public and private stakeholders to feed and inform the decision-making process will be promoted.

3.3 Current policy initiatives regarding MSP in the framework of BC

The most relevant current activities regarding MSP in the framework of BC are the Common Regional Framework (CRF) for ICZM and Conceptual Framework (CF) for MSP.

The preparation of a **Common Regional Framework (CRF)** on Integrated Coastal Zone Management (ICZM) in the Mediterranean is foreseen by the ICZM Protocol (Art. 17 and 18). More recently, UN Environment/MAP Mid-Term Strategy (MTS) 2016-2021, in the Decision IG.22/1 of the 19th Meeting of the Contracting Parties (COP 19) (Athens, Greece, 9-12 February 2016), indicates the definition of the CRF for ICZM as one of its key outputs. In addition, UN Environment /MAP Programme of Work (PoW) approved for 2016-2017, envisages the preparation of a **Conceptual Framework (CP) for Marine Spatial Planning (MSP)** as an emerging issue in the entire Mediterranean Region. **Both outputs are interlinked**, which makes it necessary to clarify their relationship and establish a clear hierarchy between them.

Following these commitments, an in-depth study of the existing general context for the implementation of ICZM in the Mediterranean Region took place and was carried out through a series of workshops and consultations with the participation of nominated experts from thirteen Mediterranean countries as well as PAP/RAC National Focal Points (NFPs). As a result of an extensive consultation process with the Contracting Parties (CPs), it was felt that the development of the full text of such a complex and comprehensive document as the CRF for ICZM is needing more time, resources and consultation opportunities than initially envisaged by the relevant COP 19 Decision. Thus, the PAP/RACNFPs preferred to adopt a step-wise approach and to propose solely an Annotated Structure of the CRF for ICZM as a basis for the development of the full document during the next biennium

CRF envisages the application of MSP within the framework and the geographic scope of the ICZM Protocol. As such, it can also contribute to the goals defined by other Protocols, as in the case of identification, planning and management of protected areas according to the SPA/BD Protocol or the protection of the Mediterranean Sea against pollution resulting from exploration and exploitation of the continental shelf and the seabed and its subsoil (so called Offshore Protocol). Therefore, an implementation of **CRF on ICZM** could have a multiple **added value** at different levels, relevant for MSP. Among else, it could:

- Contribute to GES and ultimately sustainable development of the concrete coastal zones;
- Reduce stress on the marine part of a coastal zone originating from its terrestrial part;
- Contribute to better understanding and managing the LSI at all possible levels and of all possible forms;
- Ensure more coherence and complementarity of planning processes regarding the land and the sea parts of coasts;
- Facilitate transboundary cooperation on cross-border issues;
- Provide policy guidance, tools, methodologies and good practices to non-EU Mediterranean countries, thus contributing to more effective protection of their coastal and marine environment.

This would be beneficial to both their Mediterranean neighbors and the EU related policies.

The **Conceptual Framework on MSP** is even more directly connected to the current exercise. Contents of the CF have been developed building also on experience from a large number of projects. They can be used as a checklist to verify that needed elements of the MSP process are taken into consideration. However, in no case guidelines provided with CF shall be considered prescriptive, as each MSP process

needs to be tailored according to specific characteristics of its geographic scope, objectives and expected results. The challenge is to capitalize available experiences rather than develop new step-by-step methodologies.

The main axes and principles of the CF are as follows:

- Use EcAp as a guiding principle for MSP;
- Apply an Adaptive Approach;
- Apply a Multi-Scale Approach;
- Ensure Integration;
- Take into account Land-Sea Interactions;
- Provide for Four Dimensions (3 spatial and time);
- Base Projects on Knowledge;
- Seek Suitability and Spatial Efficiency;
- Facilitate Connectivity; and
- Strengthen Cross-border Cooperation.

The CF on MSP, based on the analysis of existing methodologies, suggests also some concrete steps and sub-steps as a sort of checklist to facilitate efforts of CPs to develop their own MSP policies, keeping in mind that each MSP process needs to be tailored according to specific characteristics of its geographic scope, objectives and expected results.

Recently adopted Decision (IG.23/7; 2017) of the Contracting Parties of the Barcelona Convention on implementation of the Integrated Coastal Zone Management Protocol, adopts CF for MSP, linked with CRF for ICZM, acknowledging the introduction of **MSP as the main tool/process for the implementation of ICZM in the marine part of the coastal zone** and specifically for planning and managing maritime human activities, according to EcAp goals and objectives.

3.4 Links with the 2030 Agenda for Sustainable Development and Sustainable Development Goals

The 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) were adopted by world leaders in September 2015 at an historic UN Summit. Over the next fifteen years, with these new Goals that universally apply to all, countries will mobilize efforts to end all forms of poverty, fight inequalities and tackle climate change, while ensuring that no one is left behind. While the SDGs are not legally binding, governments are expected to take ownership and establish national frameworks for the achievement of the 17 Goals. Countries have the primary responsibility for follow-up and review of the progress made in implementing the Goals, which will require quality, accessible and timely data collection. Regional follow-up and review will be based on national-level analyses and contribute to follow-up and review at the global level.

In recognition of the growing importance of the role of oceans in sustainable development, SDG **Goal 14** aims to conserve and sustainably use the oceans, seas and marine resources; UN Environment will play a key role in contributing to the implementation of that goal in coordination with other actors. As the importance of the regional dimension is increasingly recognized for the implementation of global agendas, the Regional Sea Programmes are considered to be the units of marine ecosystems that can

functionally provide services to human beings surrounding these seas. Therefore, there is close coordination between Mediterranean countries and MAP in support of the implementation and monitoring of relevant SDGs (UNEP/MAP, 2017).

The overarching SDG 14 will orientate MSP implementation in Eastern Mediterranean and more in general in the entire Mediterranean basin, applying therefore to provisions included in the EU MSP Directives, as well as in the guidelines provided by the CF for MSP developed in the framework of the Barcelona Convention.

3.5 Mediterranean Strategy for Sustainable Development

The Mediterranean Strategy for Sustainable Development (MSSD) 2016-2025, adopted by Barcelona Convention COP 19, provides a strategic policy framework for securing a sustainable future for the Mediterranean region consistent with Sustainable Development Goals.

It aims to harmonize the interactions between socio-economic and environmental goals, adapt international commitments to regional conditions, guide national strategies for sustainable development, and stimulate regional cooperation between stakeholders in the implementation of sustainable development.

One of its key objectives is to ensure sustainable development in marine and coastal areas. With such an objective it focuses on strengthening implementation of and compliance with the Protocols of the Barcelona Convention and other regional policy instruments and initiatives supplemented by national approaches, as well as establishing and enforcing regulatory mechanisms, including Maritime Spatial Planning, to prevent and control unsustainable open ocean resource exploitation.

3.6 Transboundary cooperation in MSP in the Mediterranean

Cross-border cooperation in MSP is essential at all levels; it is underlined by the EU MSP Directive calling for a maritime planning process to be promoted through the cooperation among Member States, enhancing effective cross-border/transboundary cooperation between Member States (Art. 11) and with neighbouring third Countries (Art. 12), in accordance with relevant UNCLOS provisions. In fact, the MSP is a process based on coordinated actions through coherent maritime-related policies and relevant international cooperation, to guarantee that maritime spatial plans are coherent and coordinated across the marine region concerned.

The Mediterranean Basin is a **semi-enclosed sea (UNCLOS, Part IX)** where the cooperation *of the bordering States is highly needed to:*

- a) coordinate the **management, conservation, exploration and exploitation of the living resources** of the sea;
- b) coordinate the implementation of their rights and duties with respect to the **protection and preservation of the marine environment;**
- c) coordinate their **scientific research policies** and undertake where appropriate joint programmes of scientific research in the area;
- d) invite, as appropriate, **other interested States or international organizations** to cooperate with them in further strengthening such joint actions.

In the context of MSP implementation, the cooperation shall be pursued in particular through existing regional institutional cooperation structures such as Regional Sea Conventions. It is to be pointed out at this stage that – as proved by experience – multilateral cooperation is always easier than bilateral one among countries having unsettled pending issues.

Though easy to express such a wish and guidance, one should keep in mind that a major prerequisite for the implementation of such a commitment is mutual **trust**. The long-lasting multilateral cooperation of the Mediterranean countries in the framework of the BC system has paved the way to a certain degree to this end. For more than 40 years, the BC, among others, promotes cooperation between and among CPs in Environmental Impact Assessment (EIA) procedures related to activities under their jurisdiction or control which are likely to have a significant adverse effect on the marine and coastal environment of other CPs or areas beyond the limits of national jurisdiction, on the basis of notification, exchange of information and consultation (Art.4, para 3, lett. d of the BC). In addition, and in the framework of ICZM Protocol, international cooperation and scientific data exchange is required for:

- the activity in the field of monitoring and observation (Art. 16), training and research, technical and scientific cooperation (Art. 25-27);
- the development of policies and the adoption of measures for the prevention of natural hazards, prevention and mitigation of the negative impacts of coastal erosion, and response to natural disasters (ICZM Protocol-Part IV, Art. 22-24);
- the implementation of environmental assessments (SEA, TEIA), taking into consideration the cumulative impacts on the coastal zones and their carrying capacities, in particular adopting by means of cooperation guidelines for the determination of procedures for notification, exchange of information and consultation at all stages of the process (Art. 4 para 3 lett d of BC and Art. 19 and 29 of the ICZM Protocol).

Furthermore, in order to achieve good governance among actors involved in and/or related to coastal zones and to promote consistency and coherence of across marine regions and identified sub-regions, CP have agreed to elaborate a CRF for ICZM (see 3.2), thus **further strengthening** trans-boundary cooperation, in particular between the CPs sharing a marine region. Through the definition of CRF they would jointly elaborate measures to strengthen regional cooperation using coordinated mechanisms for:

- *Processes* to accelerate achievement of results agreed and outcomes/outputs set out;
- *Indicators* as essential tools for tracking progress, supporting policy evaluation and informing the public and decision makers;
- *Methods and practices* to achieve Objectives and the General Principles of the ICZM Protocol.

Overall, **transboundary cooperation among CPs in the framework of the Barcelona Convention is fundamental in order to address MSP in the Mediterranean Sea at strategic level.**

4. The ecosystem approach

The ecosystem-based approach can be defined as the integrated management of land, water and living resources that provides sustainable delivery of ecosystem services in an equitable way. It goes beyond examining single issues, species, or ecosystem functions in isolation. Instead, it recognizes ecological systems for what they are: rich mixes of elements that interact with each other continuously. This is particularly important for coasts and seas, where the nature of water keeps systems and functions highly connected.

The Maritime Spatial Planning being cross-sectorial by definition, has also been given the challenge to strongly link with the ecosystem-based approach: in fact, the MSP Directive states that “the application of an ecosystem-based approach will contribute to promoting the sustainable development and growth of the maritime and coastal economies and the sustainable use of marine and coastal resources“ (Directive 2014/89/EU). Therefore, the ecosystem-based approach must be at the base of the MSP process. A considerable number of sectorial policies and related tools, developed both by EU and the Barcelona Convention, are available in the Mediterranean, addressing various aspects of the ecosystem approach: pollution, biodiversity, socio-economic aspects, marine litter, key economic sectors, etc., whose implementation contribute to the protection of the marine environment and the coastal zone. These policies are relevant for MSP under several perspectives, including their relation with ecosystem approach and their impact on marine and coastal ecosystem and biodiversity (Figure 1).

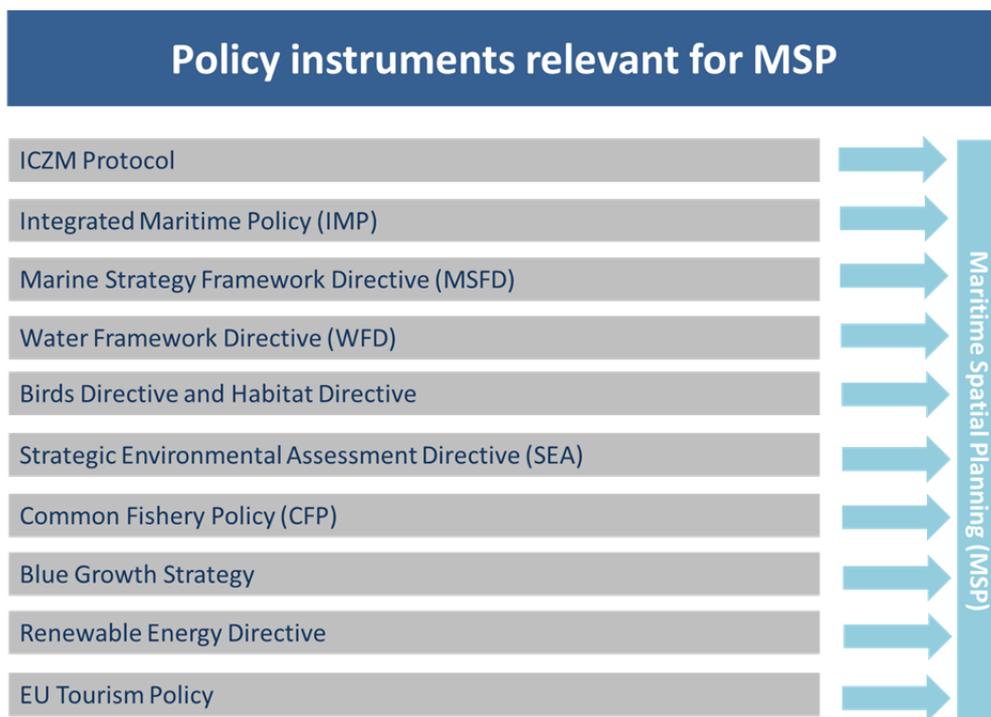


Figure 1: Main policies relevant for MSP

4.1 The ecosystem approach (EcAp) of the UN Environment MAP

Since its adoption in 2000 by the United Nations Environment Programme (UN Environment), the ecosystem approach to the management of human activities is making its way through almost all Regional Seas Convention programmes. In the Mediterranean, the ecosystem approach (EcAp) represents the overarching guiding principle to all policy implementation and development undertaken under the auspices of UN Environment/MAP Barcelona Convention. EcAp is to be integrated in all of its policies and activities as it makes an explicit link between the status of natural resource systems and services they provide; it seeks to maintain the integrity and functioning of ecosystems as a whole; and recognizes that the impacts of human activities are a matter of social choice.

It is essentially organized around four themes, reflecting the main deliverables expected from the Contracting Parties:

1. Adoption of regional targets and the establishment of a definition for Healthy Environment;
2. Development of a regional integrated monitoring programme based on indicators and targets;
3. Coupling of integrated assessment with socioeconomic analysis for the Mediterranean ecosystem;
4. Establishment of an assessment cycle through the development of a UN Environment/MAP policy on the assessment of marine and coastal environments (Cinnirella et al., 2014).

It refers to a specific **process** under the UN Environment/MAP Barcelona Convention, as its Contracting Parties have committed to implement the ecosystem approach in the Mediterranean with the ultimate objective of achieving the good environmental status (GES) of the Mediterranean Sea and Coast. This process aims to achieve GES through informed management decisions, based on integrated quantitative assessment and monitoring of the marine and coastal environment of the Mediterranean.

Through Decision IG.17/6 the Contracting Parties to the Barcelona Convention have committed to progressively apply EcAp to the management of human activities with the goal of effecting real change in the Mediterranean marine and coastal environment. Decision IG.17/6 outlines a roadmap for the implementation of EcAp, consisting of several subsequent steps, such as the development of ecological objectives, operational objectives and respective indicators, the development of GES descriptors and targets, monitoring programmes, and finally the necessary management measures and programmes to achieve GES.

Decision IG.20/4 on “Implementing the Ecosystem Approach Roadmap”, following up on Decision IG.17/6, validated the work done so far regarding the 11 ecological objectives, operational objectives and indicators for the Mediterranean. It also mandated the Secretariat to prepare an EcAp Monitoring Programme, to determine GES and targets and to prepare an in-depth socio-economic analysis of human activities that impact on, or benefit from, the quality and ecological health of coastal and marine ecosystems. Finally, it asked to integrate EcAp in the overall work of UNEP/MAP Barcelona Convention and mandated the Secretariat to establish an EcAp governance framework.

As most relevant milestone of the 18th Ordinary Meeting of the Contracting Parties (COP 18, 2013), Decision IG.21/3 on the “Ecosystem Approach including adapting definitions of Good Environmental Status (GES) and targets” (the EcAp Decision) expresses the agreement on regionally common targets, lists of indicators to achieve GES in the Mediterranean, and an integrated list of Mediterranean GES, targets and indicators. Timeline for the EcAp implementation is presented in Figure 2.

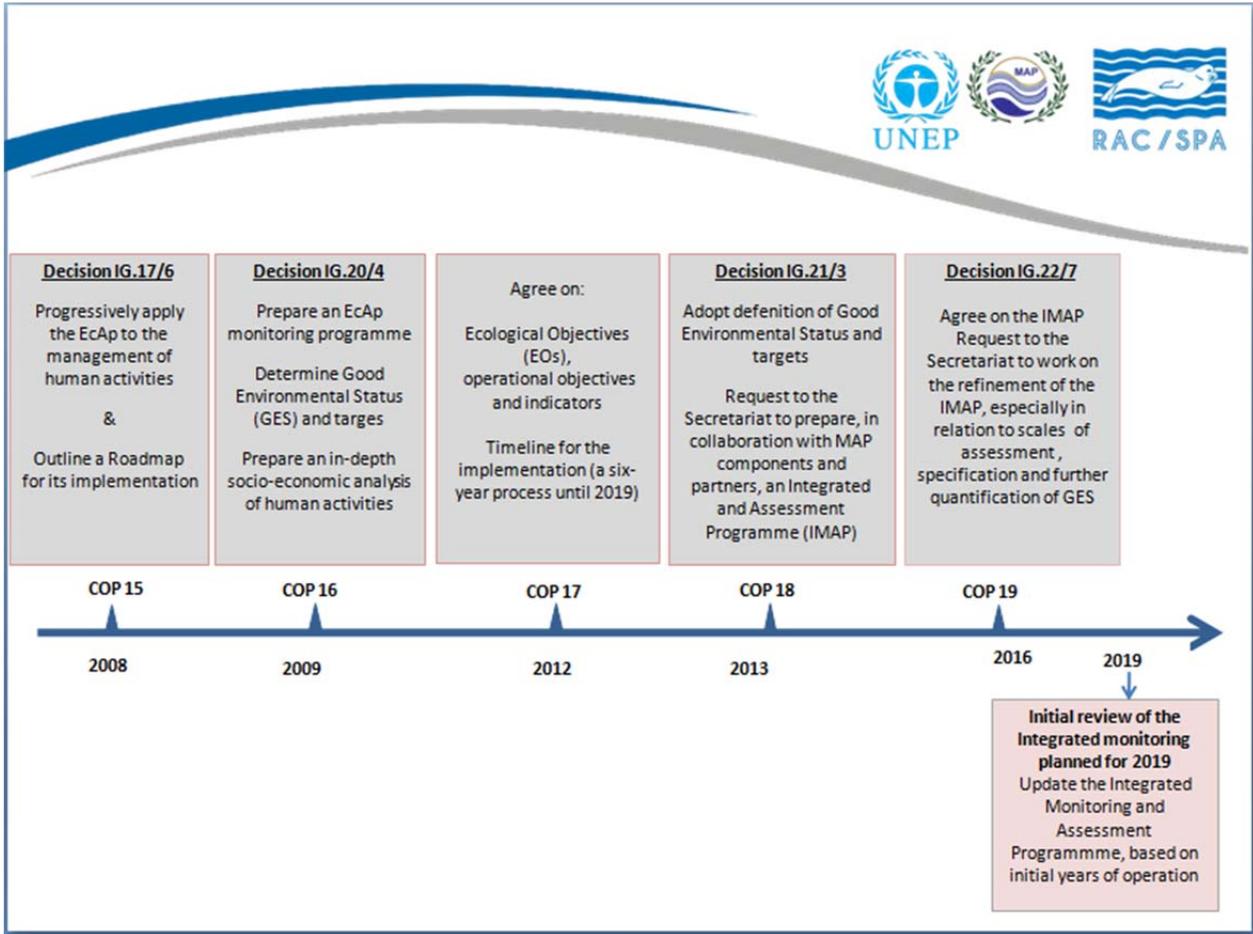


Figure 2: Calendar of the EcAp implementation process (source: SPA/RAC site)

Achieving Ecological Objectives (EO) and **Good Environmental Status** requires an integrated approach in order to address combined pressures and cumulative impacts in marine and coastal areas. ICZM provides the adequate tools to address these issues in coastal zones and promotes consensus among all parties involved in the use of coastal resources, while MSP does the same for marine areas. In fact, the ICZM Protocol underlines the Ecosystem Approach as one of its leading principles and constitutes the ideal instrument to promote and put into practice EcAp in the coastal zones.

One must stress the fact that the EcAp for the needs of ICZM goes beyond the GES of waters (marine or surface) and ecosystems. Therefore, there is a need to **expand the EcAp to include additional targets** that could be focused on achieving GES of the land part of the coastal zone, in a manner corresponding to requirements and/or specific articles of the ICZM Protocol.

Considering its conceptual framework (the 12 Malawi principles), and the operative approach (the Ecological Objectives and the Indicators), EcAp represents undoubtedly a powerful and comprehensive framework to ensure sustainable development for the Mediterranean, ensuring the conservation of its marine and coastal ecosystems and of the services they provide.

4.2 The ecosystem-based approach in the EU MSP Directive

The **EU Maritime Spatial Planning Framework Directive** (2014/89/EU) aims to set the framework for maritime spatial planning with the objective of promoting the sustainable growth of maritime economies, sustainable development of marine areas and sustainable use of marine resources, applying an ecosystem-based approach, promoting the coexistence of relevant uses and activities and taking into account land-sea interactions. In this sense, the ecosystem-based approach must seek to contribute to the sustainability of development of marine areas, of activities at sea and of uses of marine and coastal resources.

In fact, Article 5 of the MSP Directive defines the objectives of maritime spatial planning as follows:

1. When establishing and implementing maritime spatial planning, Member States shall consider economic, social and environmental aspects to support sustainable development and growth in the maritime sector, applying an ecosystem-based approach, and to promote the coexistence of relevant activities and uses.
2. Through their maritime spatial plans, Member States shall aim to contribute to the sustainable development of energy sectors at sea, of maritime transport, and of the fisheries and aquaculture sectors, and to the preservation, protection and improvement of the environment, including resilience to climate change impacts. In addition, Member States may pursue other objectives such as the promotion of sustainable tourism and the sustainable extraction of raw materials.
3. This Directive is without prejudice to the competence of Member States to determine how the different objectives are reflected and weighted in their maritime spatial plan or plans.

In addition, the MSP Directive sets out 10 key principles for MSP seeking to encourage the development of a common approach among Member States. These principles are closely linked to the ecological objectives of the ecosystem-based approach (EcAp) defined by UN Environment/MAP based also on related Mallawi principles (CBD decision; Ramieri et al., 2014) (Figure 3).

Ecosystem approach can be reflected in MSP, but also ICZM, at three stages (Mourmouris et al., 2016):

- When defining the area to be managed, by ensuring the integrity of ecosystems and the necessary buffer zones and corridors;
- When contributing to GES, by ensuring compatibility of located land and sea uses and limits of allowed pressures, as well as observing the respective GES descriptors and indicators;
- By respecting ecosystems diversity and connections, evaluating ecosystems services, addressing cumulative impacts, assessing tradeoffs, applying adaptive management, networking and using appropriate tools and measures.

In the Mediterranean, the ADRIPLAN methodology⁹ provides techniques and methods based on the ecosystem-based approach for practically implementing MSP in the Adriatic-Ionian macro-region.

The key elements of the ecosystem-based approach can be also integrated more specifically into **strategic environmental assessment** (SEA) as part of the planning process. Some of the key elements such as public participation and communication, subsidiarity and coherence, identification of ecosystem services, adaptation and the precautionary principle are applicable to the general planning process. The identification of ecosystem services can provide a new approach to the management of the sea and should contribute to the planning of sea areas as well (HELCOM – VASAB, 2016).

⁹ <http://msp-platform.eu/practices/adriplan-methodology>

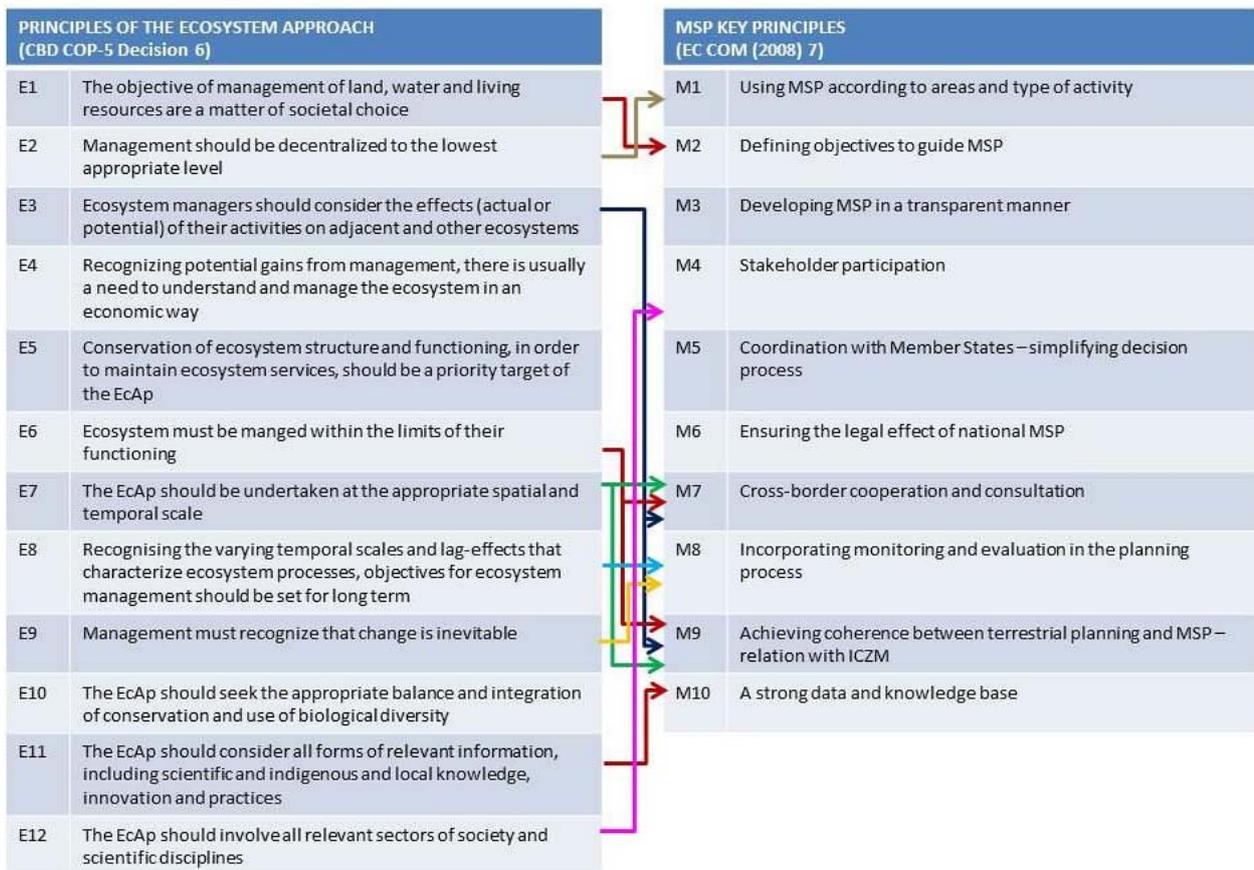


Figure 3: Links between ecosystem and MSP principles (redrawn from Ramieri et al. 2014)

4.3 The ecosystem-based approach in other EU policies

The most recent EU policy driver for the protection of the marine environment is the **Marine Strategy Framework Directive (MSFD)**, which represents an ecosystem-based approach towards marine management and governance, aiming towards achieving Good Environmental Status (GES). Together with the Water Framework Directive, the MSFD represents a framework through which other EU sectoral directives can be linked, providing integrated management from the catchment through the coast to open marine ecosystems. The “framework” nature of the MSFD is reflected in the eleven descriptors for determining GES, which cover the most important maritime sectors and their impacts on marine ecosystems (Qiun et al., 2013).

The Directive states that marine strategies shall apply an ecosystem-based approach ensuring that the collective pressure of human activities is kept within levels compatible with the achievement of a good environmental status and that the capacity of marine ecosystems to respond to human-induced changes is not compromised, while enabling the sustainable use of marine goods and services by present and future generations. Both programmes of measures and individual measures shall be based on such an ecosystem-based approach.

Overall, the ecosystem-based approach is relevant within MSFD at two levels:

1. The strategic level (see Figure 4), represented by the integration and application of the measures and objectives set out in the MSFD, which represents the Integrated Maritime Policy Environmental Pillar and is therefore the interconnection and interrelationship between different sectoral regulations.
2. The functional – procedural level, consisting of the application of the SEA Directive working tools, as a methodology that can concretely articulate the way the ecosystem-based approach needs to be integrated and used to define the MSP plans.

Considering the links between MSFD and the ecosystem-based approach, it is well known that the MSFD process and the EcAp under UN Environment/MAP (see chapter 3.6) share some commonalities. For example, achieving GES and Healthy Environment which are independent of national jurisdictional waters. MSFD is not applicable to the whole of the Mediterranean; however, its philosophy and principles could nonetheless be applied to the whole marine Mediterranean domain through the development of a shared vision via MAP. Comparison of MSFD and MAP-EcAp major features is given in Table 1 (Cinnirella et al., 2014).

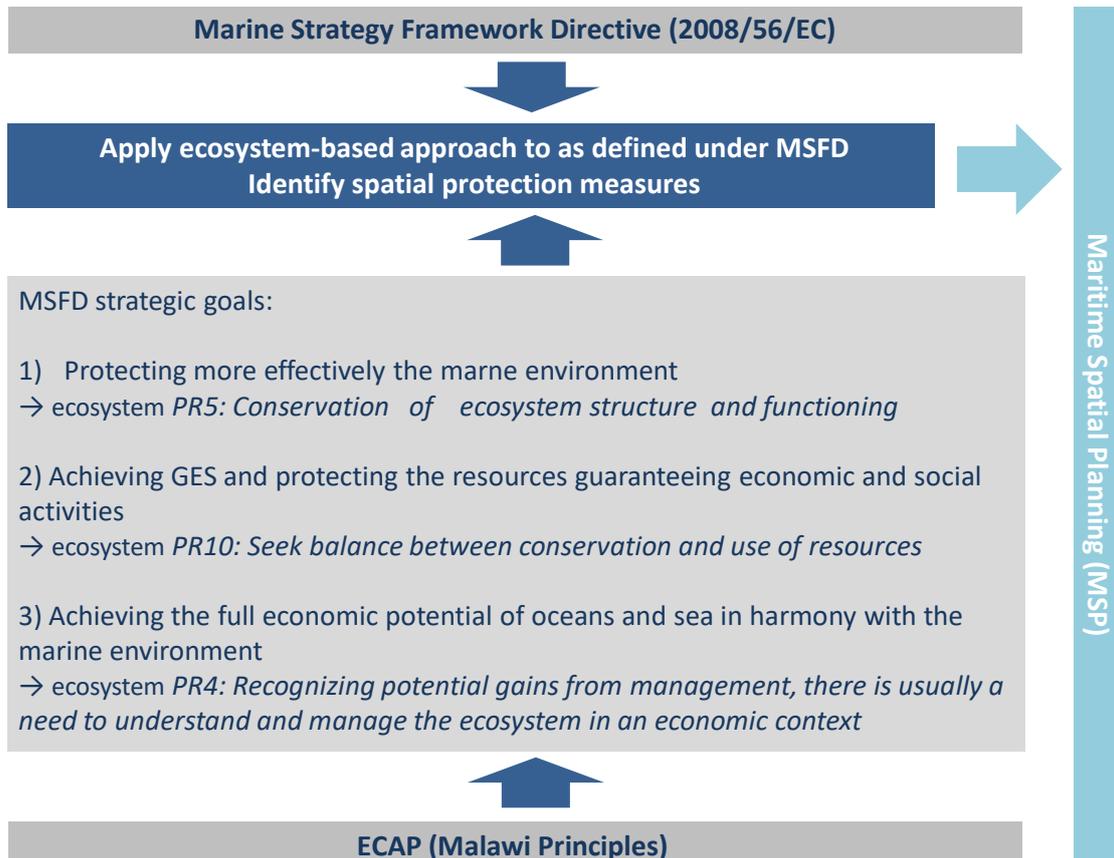


Figure 4: Links between MSFD, ecosystem principles and MSP

Table 1: Comparison between EU-Marine Strategy Framework Directive (MSFD) and Mediterranean Action Plan-Ecosystem Approach (MAP-EcAp) vision, strategic goals, and ecological objectives already defined

EU-MSFD	MAP-ECAP
VISION	
Good Environmental Status (GES)	A healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse for the benefit of present and future generations
STRATEGIC GOALS	
(i) to protect more effectively the marine environment across Europe;	(i) to protect, allow recovery and, where practicable, restore the structure and function of marine and coastal ecosystems thus also protecting biodiversity, to achieve and maintain good ecological status and allow for their sustainable use;
(ii) to achieve a Good Environmental Status of the EU's marine waters by 2020 and to protect the resource base upon which marine-related economic and social activities depend;	(ii) to reduce pollution in the marine and coastal environment so as to minimize impacts on and risks to human and/or ecosystem health and/or uses of the sea and the coasts;
(iii) to constitute the vital environmental component of the Union's future maritime policy, designed to achieve the full economic potential of oceans and seas in harmony with the marine environment.	(iii) to prevent, reduce, and manage the vulnerability of the sea and the coasts to risk induced by human activities and natural events (UNEP-MAP 2008).
DESCRIPTOR / OBJECTIVES	
1. Biological diversity is maintained. The quality and occurrence of habitats and the distribution conditions.	1. Biological diversity is maintained or enhanced. The quality and occurrence of coastal and marine habitats and the distribution and abundance of coastal and marine species are in line with prevailing physiographic, hydrographic, geographic, and climatic conditions.
2. Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystems.	2. Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystem.
3. Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock.	3. Populations of selected commercially exploited fish and shellfish are within biologically safe limits, exhibiting a population age and size distribution that is indicative of a healthy stock.
4. All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity.	4. Alterations to components of marine food webs caused by resource extraction or human-induced environmental changes do not have long-term adverse effects on food web dynamics and related viability.
5. Human-induced eutrophication is minimized, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms, and oxygen deficiency in bottom waters.	5. Human-induced eutrophication is prevented, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algal blooms, and oxygen deficiency in bottom waters.
6. Sea-floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected.	6. Sea-floor integrity is maintained, especially in priority benthic habitats.

EU-MSFD	MAP-ECAP
7. Permanent alteration of hydrographical conditions does not adversely affect marine ecosystems.	7. Alteration of hydrographic conditions does not adversely affect coastal and marine ecosystems.
8. Concentrations of contaminants are at levels not giving rise to pollution effects.	8. The natural dynamics of coastal areas are maintained and coastal ecosystems and landscapes are preserved.
9. Contaminants in fish and other seafood for human consumption levels established by community legislation or other relevant standards.	9. Contaminants cause no significant impact on coastal and marine ecosystems and human health.
10. Properties and quantities of marine litter do not cause harm to the coastal and marine environment.	10. Marine and coastal litter does not adversely affect coastal and marine environments.
11. Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment.	11. Noise from human activities causes no significant impact on marine and coastal ecosystems.

The 2000 **Water Framework Directive** (WFD) (2000/60/CE) adopts a holistic approach to environmental protection and regulation. This directive calls for a single system of water management based on a river basin (RB), a natural geographical and hydrological unit instead of according to administrative or political boundaries (Platjouw, 2016). The directive requires high level of protection for all types of waters by a set of deadlines. More specifically, the WFD aims at achieving Good Ecological Status for all waters (Art. 4, n. 107).

Considering the ecosystem-based approach, it is worth noting that the interpretation by WFD and MSFD respectively is very different. Under the WFD Good Ecological Status is assessed by first splitting up the ecosystem into several BQEs, then by comparing the structure of these individually before combining them and determining the overall condition. The approach is based on the practice that the status of the worst element, used in the assessment, determines the final status (Borja et al., 2010). Instead, the MSFD concentrates on a set of 11 descriptors which together summarise the way in which the whole ecosystem functions. The MSFD aims to provide a more holistic, functional approach as it takes the ecosystem and separates it into a set of process-related (functional) objectives and then recombines these to give a holistic approach, ensuring the integrity of the ecosystem.

The links between the ecosystem-based approach (Malawi principles) and WFD is presented in Figure 5.

The most significant policy drivers to MSP include also the **Birds** (Directive 2009/147/EC) and **Habitats Directive** (Directive 92/43/EEC). These Directive require EU Member States to designate and protect Special Protection Areas (SPAs) and Special Areas of Conservation (SACs), together known as the Natura 2000 network. Specifically, the aim of the Habitat Directive (HD) is to maintain and restore all habitat types and species of community interest to a Favourable Conservation Status (FCS). The Birds Directive (BD) focuses on conserving all naturally occurring birds in the wild.

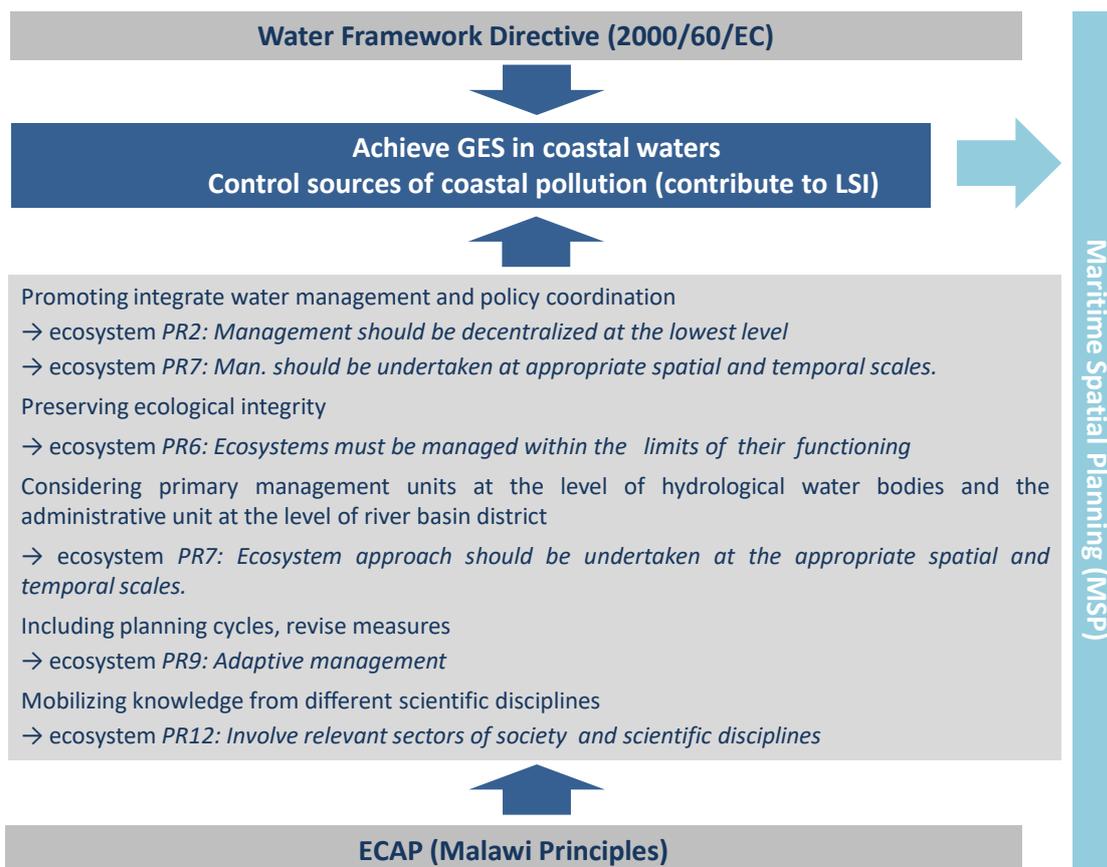


Figure 5: Links between WFD, ecosystem principles and MSP

A clear and strong link between the implementation of HB and BD Directives in the Mediterranean and the MSP process is determined by the present status of Natura 2000 network and other conservation measures in this regional sea. The 1,231 MPAs and OECMs now cover 7.14% of the Mediterranean through a large variety of conservation designations. To reach the 10% of protection of the marine space set up by the Aichi Target, an additional 71,900 km² (2.86% of the Mediterranean) would need to be placed under strong protection designations (MEDPAN-RAC/SPA, 2016). HD and BD express many principles in accordance with the ecosystem-based approach and their principles can be related to the Malawi Principles (Figure 6) (Rouillard J., 2018).

The EU **Integrated Maritime Policy (IMP)** seeks to provide a more coherent approach to maritime issues, with increased coordination between different policy areas. The IMP interacts with most other EU directives and regulations that affect the use and management of the marine environment, including those for fisheries, shipping, ports, renewable energy and nature conservation. The MSFD is regarded as being the “environmental pillar” of the IMP, however the MSFD’s relationship with other objectives or “pillars” is not clear. Compared to the MSFD, the IMP clearly places a greater focus on promoting cross-sectoral integration and maritime economic growth

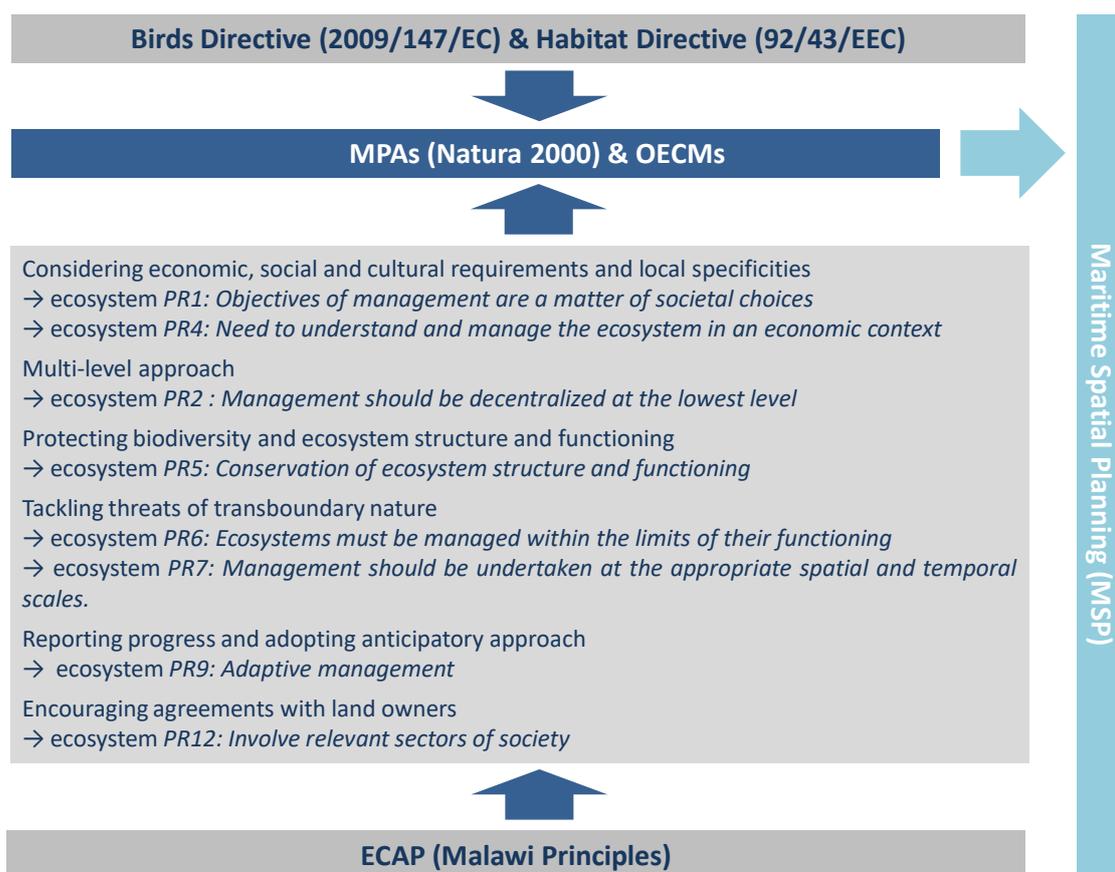


Figure 6: Links between Birds Directive & Habitat Directive, ecosystem principles and MSP

Blue Growth is the long-term strategy of the EU to support sustainable growth in the marine and maritime sectors as a whole (COM(2012) 494). The economic activities under the Blue Growth agenda might impact marine ecosystems, specifically in what concerns Good Environmental Status (GES). From an ecosystem-based approach point of view, the close interlinkage between Blue Growth activities and the marine ecosystems should be carefully considered, clearly understood and appropriately managed. In fact, there appears to be growing tensions between policies that focus on an ecosystem-based approach (MSFD, Birds/Habitats Directives, etc.) and policies that focus on Blue Growth (Qiu et al., 2013). In relation with the ecosystem-based approach, the basic concept is that durable maritime economy must rely on a sustainable use of ecosystem services supplied by seas (Figure 7).

At European level the ecosystem-based approach has also appeared within the **European Common Fishery Policy** (CFP) (Art 2.3). The ecosystem approach in fisheries management has been understood by the EU Commission as being about ensuring goods and services from living aquatic resources for present and future generations within meaningful ecological boundaries. Such fisheries management will strive to ensure that benefits from living marine resources are high which the direct and indirect impacts of fishing operations on marine ecosystems are low and not detrimental to the future functioning, diversity and integrity of these ecosystems (Platjouw, 2016).

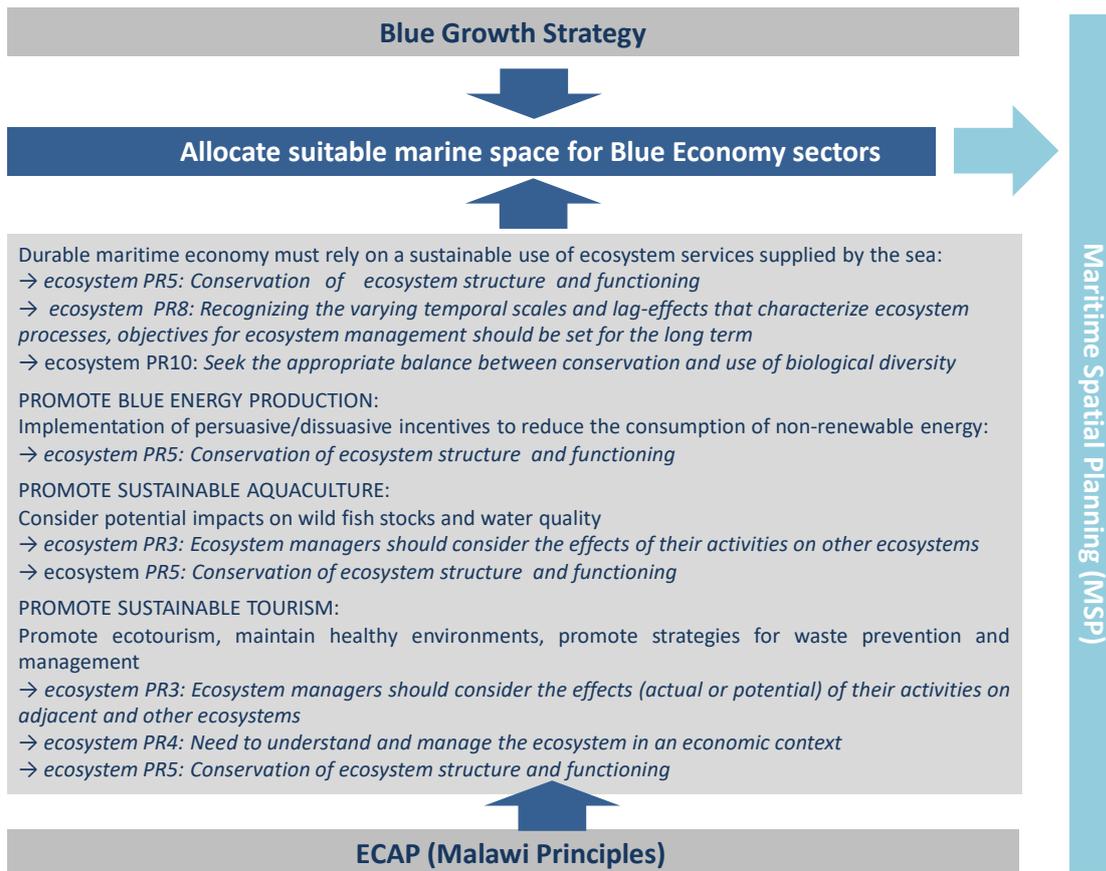


Figure 7: Links between Blue Growth Directive, ecosystem principles and MSP

Aquaculture is considered a strategic activity for the EU. The Commission intends to boost the aquaculture sector through the Common Fisheries Policy reform, and in 2013 published the Strategic Guidelines.¹⁰ Marine aquaculture is relevant for MSP as limited access to space is recognized by the Blue Growth Strategy as one of the major factors limiting the development of EU marine aquaculture. An ecosystem-based approach to aquaculture (EAA) has been developed by the FAO (Aguilar-Manjarrez et al., 2017) as a means to enhance aquaculture production in an environmentally and socially acceptable way that takes account of multiple uses of space, and is compatible with the legal basis defined in the MSFD and the CFP. The EAA should form the basis for development of spatial planning under the ecosystem approach within the EU.

Elaborating more on the idea of sustainability of the tourism sector, the Commission presented in 2014 the European Strategy for more Growth and Jobs in **Coastal and Maritime Tourism** (COM(2014) 86) where Integrated Coastal Management and Maritime Spatial Planning are indicated as factors “helping to ensure sustainable and Green Infrastructure development through smart planning and cooperation between government, public and private partners”. The document itself does not focus on ecosystem approach; however, the good environmental conditions for the tourism industry to prosper have been recognised.

¹⁰ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013DC0229&from=EN>

EU Renewable Energy Directive (Directive 2009/28/EC) is a key component of the EU Climate and Energy Pack adopted in 2008 to contribute to EU’s fulfilment of Kyoto Protocol objectives which includes a legally binding obligation to increase the share of renewables to 20% of total energy consumption in the EU by 2020. This would result in installing 44.2 GW of offshore wind energy and 2.3 GW of tidal, wave and ocean energy by 2020. The entry into force of the MSFD and the Renewable Energy Directive have provided a driving force for the designation of MPAs and the development of marine renewable energy, particularly wind farms, across Europe, which may claim extensive marine areas and lead to a “race for space” in the marine environment (COM (2014) 86). Implications of all these factors for MSP are relevant.

Strategic environmental assessment (SEA) is an important tool for implementing the ecosystem-based approach in maritime spatial planning as it identifies, describes and assesses the likely significant effects on the ecosystem. According to EU law (Directive 2001/42/EC) a SEA has to be carried out before a maritime spatial plan can be approved by the responsible authority in accordance with the criteria set out in this Directive and as required by the MSP Directive. This includes the preparation of an environmental report, the carrying out of public consultations, the taking into account of the environmental report and the results of the consultations in decision-making and the provision of information on the decision (HELCOM-VASAB, 2016).

In addition, for EU Member States, impact assessments of habitats and species (Art. 6 of the Habitats Directive 92/43/EEC) and of bird sanctuaries (Birds Directive 2009/147/EC) are obligatory.

Bases in its core principles, links between SEA and the ecosystem-based approach in the context of MSP can be identified (Figure 8).

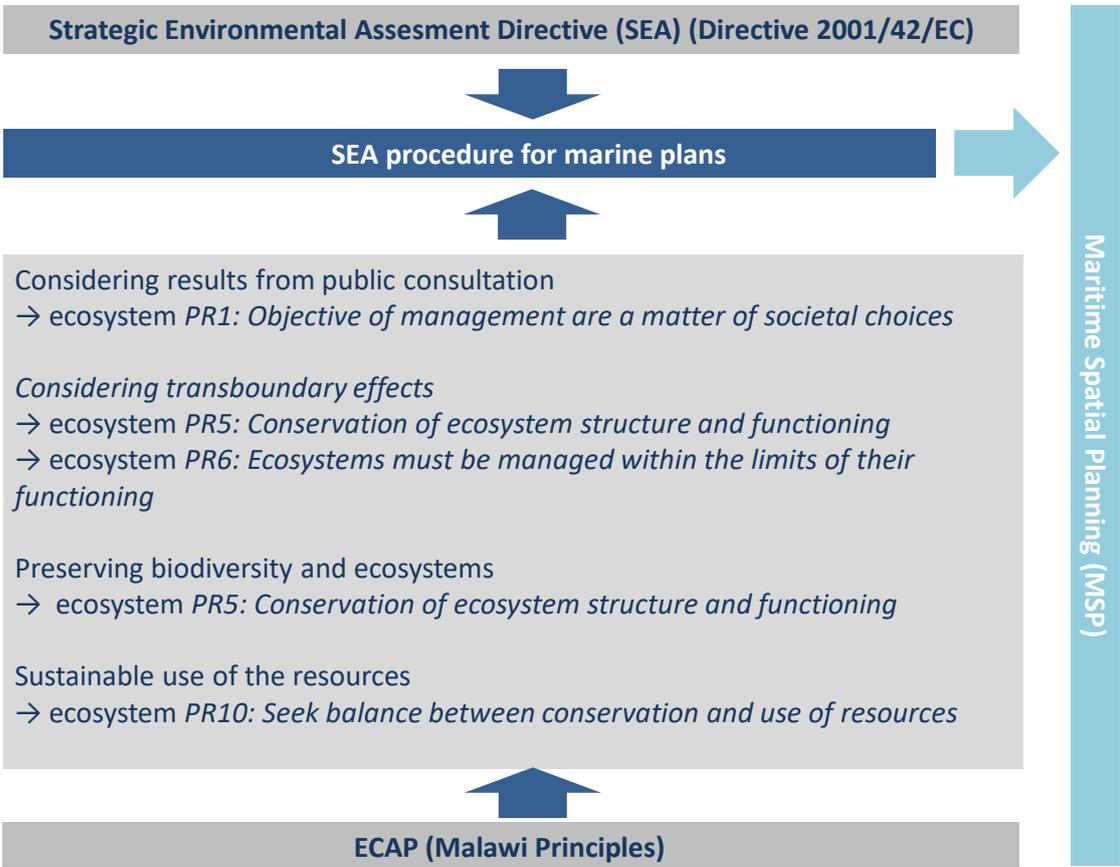


Figure 8: Links between SEA Directive, ecosystem principles and MSP

5. Key issues important to MSP implementation in the Western Mediterranean

In the Western Mediterranean, coastal and marine areas are subject to many pressures because of the high concentration of human activities and land use types (which are often incompatible with the natural landscape).

Two major types of conflicts are occurring:

- conflicts between human uses and the marine environment (user-environment conflicts), which in some countries are the predominant type; and
- conflicts among human uses (user-user conflicts) claiming the same space or natural resources and seeking profit – in most of the cases, on the expenses of the environment.

MSP aims to prevent, solve, or at least limit, both current and future conflicts caused by human activities as well as to take advantages of co-existence of different maritime activities and opportunities of co-use/multi-use of the same marine area and resources, thus providing integrated solutions. Based on Initial assessment (for France, Italy, Malta and Spain) performed by the SIMWESTMED project (SIMWESTMED, 2017) it is clear that MSP is initiated in all four Western Mediterranean EU countries. These assessments indicate that one Western Mediterranean EU country (Malta) has already an approved Spatial Plan applied to marine waters (as part of a broader Development Plan), while all four have Sectoral Management Marine Plans for one or more sectors. Spatial Plans must take into account regional policies as well trends that might cause potential increases in coastal conflicts due to the development of some key sectors (e.g. aquaculture, coastal tourism and energy) or the decline of others (e.g. intensive fisheries).

Main challenges in the Western Mediterranean are not that different as compared to those in the Eastern Mediterranean as regards MSP. Based on Initial assessment (SIMWESTMED, 2017), **differences** in practice between the two parts of the basin appear mostly for the following reasons characterising the Western Mediterranean countries:

- The southwestern European Mediterranean countries are almost all of them (with the exception of Monaco) members of the EU; therefore, they all share the *acquis communautaire*, the same principles and practices.
- They are more homogenous than the Eastern Mediterranean EU-MS as regards their economy and institutions.
- There is full geographical continuity and/or vicinity that would allow or encourage all of them to take joint ventures for the marine environment and spatial planning. They also have a good and long-standing experience in sharing methodologies and negotiating regional related policies thanks to the Barcelona Convention system.
- The continental shelf of most of them is clearly and formally delineated.
- EEZ has been declared so far in two of the Western Mediterranean countries (France and Spain), while Malta has declared a Fisheries Management Conservation Zone (FMCZ).
- There are less differences among the Western Mediterranean countries regarding availability and accessibility of related data.

However, it is important to emphasise, that, at the same time, in Western Mediterranean¹¹ there have also been a few cases of reported **synergies**: e.g., fisheries, tourism and nature protection (Malta); port related activities and energy operations (Malta); marine tourism and environment (Italy).

The major aspects of MSP that occur in the Western Mediterranean are further elaborated below; they include:

- Ecosystem Approach;
- Links to ICZM;
- Adaptive approach;
- Cross-border cooperation and multi-scale approach to MSP;
- Integration;
- Stakeholder involvement;
- Project-based initiatives and MSP practices;
- Data availability and accessibility;
- Governance – institutional issues.

Moreover, although not directly pertinent to MSP, the process of maritime spatial planning in the Mediterranean will have to take into consideration the urgent need for cooperation in the sector of **safety at sea**, which during the last years has faced increasing challenges.

5.1 UN Environment/MAP Ecosystem Approach

As elaborated in chapter 3.6, MSP can be considered as one of the tools to implement the EcAp as a strategic approach towards sustainable development in the Mediterranean that integrates all of its three components, i.e. environmental, social and economic sustainability. MSP should guarantee that they are in balance.

5.2 Links to ICZM

Although MSP is not analytically mentioned in the Protocol on ICZM in the Mediterranean (UNEP/MAP/PAP, 2008), its concept is somehow recalled by the same document. It appears in particular:

- in Art 2, giving the definition of coastal zone as “the geomorphologic area either side of the seashore in which the interaction between the marine and land parts occurs in the form of complex ecological and resource systems made up of biotic and abiotic components coexisting and interacting with human communities and relevant socioeconomic activities”, and
- in Art. 3, defining the area to which the Protocol applies, i.e. the area between: (a) the seaward limit of the coastal zone, which shall be the external limit of the territorial sea of Parties; and (b) the landward limit of the coastal zone, which shall be the limit of the competent coastal units as defined by the Parties.

According to the above definition, the scope of the ICZM Protocol also includes the marine area, within the limits of the territorial sea. Planning of the sea space can be considered, therefore, as part of the requirements of the legally binding ICZM Protocol.

¹¹ Information in Initial Assessments is not yet complete for all countries.

ICZM and MSP share common principles; however, they can be different processes, which still need to be coherent and complementary. ICZM can be defined as a dynamic, multi-disciplinary and iterative process to implement the sustainable management of coastal zones. It stresses the need for integration/cooperation among different governance bodies and policy sectors dealing with and active on the coast, as well as for informed participation and cooperation of all stakeholders. The same could be applied to MSP as well, as regards the sustainable management of marine areas. ICZM may result in strategies and management plans, and might lead to the allocation of space to specific activities (through spatial planning), in the way that MSP does for the sea.

Land-sea interactions were always the focus of ICZM. However, its activities in the past were focused predominantly (although not exclusively) on the land part of the coastal system. By the adoption of the ICZM Protocol, inclusion of the territorial sea in ICZM has become obligatory. MSP, on the other hand, does not extend its remit further inland than the high-water mark, although it has to take land-sea interactions into consideration, as well. Both ICZM and MSP need a full range of processes (strategy, planning, management, accompanying measures, monitoring and evaluation, revision) and links among themselves to be effective. MSP faces more uncertainties, since we still know less about the seas than about the land where we live, and it is a more complex issue given that it has to provide for three levels/dimensions (surface, water column and sea bed), the time factor being important for both ICZM and MSP.

In any case, starting from the overarching principle of EcAp, consistency must be ensured in the implementation of MSP, ICZM and MSFD.

5.3 Adaptive approach

The variety of definitions of the MSP is reflected by the variety of available methodologies; i.e. there is not a single approach fitting to all marine contexts and responding to all strategic objectives. MSP should be shaped and based on the specificities of individual marine areas that are concretely approached in its implementation. However, there are common steps that are considered in most of MSP initiatives and guiding documents.

It is widely acknowledged that Maritime Spatial Planning is not only concerned with minimising conflicts between on-going activities in a given maritime space, but is actually designed to avoid such conflicts to happen and develop synergies, in the first instance by anticipating future developments. MSP is clearly a future-oriented process, which must take in consideration potential future options of the evolution in the marine space in question, be they economic, technical or ecological, strategic or externally driven, or short- or long term. Moreover, all experiences highlight that MSP is not a linear exercise but (among other because it is a new field with a high degree of uncertainty due to missing knowledge and experience) it is an interactive process aiming to periodically adapt and improve the maritime spatial plans and the process itself, learning from the monitoring and evaluation, understanding pros and cons of the previous steps and cycles, and incorporating in the process new elements and parameters emerging in future stages. This approach must be integrated from the outset in the planning process, paying also due attention to worries expressed on several occasions in the Western Mediterranean by stakeholders as regards possible additional uncertainties for investments.

The adaptive approach also enables dealing with the uncertainty related to the future evolution of the considered marine area and the wider context, including the uncertainty of climate change effects.

5.4 Cross-border cooperation and multi-scale approach to MSP

Although MSP can be seen primarily as a country-based process, cross-border cooperation is essential to ensure that the MSP plans are coherent and coordinated across the coastal zones and the marine regions and that initiatives of one country are not jeopardizing sustainable development of neighbouring countries. In a perfect world, this should be reflected in cooperation. This implies (or at least requires) cooperation at the **methodological** (common methods, data and information sharing, tools sharing, MSP practice exchange, capacity building), **strategic** (common vision, shared principles and possible common objectives) and **implementation** (e.g. planning of marine bordering areas, etc.) levels, to the extent possible.

Most of the Western Mediterranean countries have already agreements signed and experience of cooperation with some or all their neighbours. Yet, there are still in some parts of the sub-region pending issues and sensitive areas causing disputes and calling for solutions.

Main transboundary issues occur in the major sectors like maritime tourism, transportation, energy production, fishing activities, and extraction of non-living resources. Several transboundary issues are related to administrative and cooperation sector. Mechanisms and plans (some already established) that can steer cooperation (in particular between EU and non-EU countries) are necessary.

The most important transboundary issues and concerns for the Western Mediterranean countries are summarised in Table 2, as highlighted by SIMWESTMED initial assessment.

Table 2: Transboundary issues, as reported in the Initial Assessment (SIMWESTMED, 2017)

<p>Italy</p> <p>Main transboundary issues include sectors like:</p> <ul style="list-style-type: none"> ▪ maritime tourism; ▪ transportation; ▪ shipping; ▪ energy production; ▪ fishing activities; and ▪ extraction of non-living resources. 	<p>France</p> <p><i>No issues identified</i></p> <p>There is a pending issue (claims) as regards the EEZ limits with Spain in the Gulf of Lion.</p>
<p>Malta</p> <p>The most important trans-boundary issues and concerns are:</p> <ul style="list-style-type: none"> ▪ the significant maritime traffic within the Malta-Sicily channel; ▪ infrastructure development between the Maltese islands and continental Europe and North Africa; ▪ extraction of non-living resources (risk of pollution); ▪ the need for compatible administrative approaches amongst identified competent authorities that can support MSP implementation; ▪ migrations. 	<p>Spain</p> <p><i>No issues identified</i></p> <p>There is a pending issue (claims) as regards the EEZ limits with Spain in the Gulf of Lion.</p>

The continental shelf of some countries has not been yet formally delineated and half of the countries have not yet proclaimed an EEZ. With all due respect to the difficulties and fully recognising that these issues are to be resolved in different contexts, one cannot avoid pointing out that a future proclamation of their EEZ by the Western Mediterranean countries nor having done it so far would facilitate considerably transboundary cooperation on technical issues and implementation of the MSP Directive.

Challenges that have a transboundary dimension might require the adoption of a common regional or sub-regional approach. In the Western Mediterranean, and in general in the entire Mediterranean Basin, a specific governance framework has yet to be fully developed for promoting and supporting cross-border and cross-sectorial maritime spatial planning. This can take advantage of existing initiatives, starting from the Barcelona Convention system for the entire Mediterranean, offering more than 40 years' experience of cooperation and a solid forum of dialogue, exchanges and governance of transboundary issues.

Different scales require different MSP approaches and processes, in particular in terms of objectives, vision/strategy and levels of analysis (assessment of existing conditions, stocktaking of current maritime uses, development of scenarios, analysis of current and future conflicts and synergies, analysis of current and future impacts, elaboration of the plan, etc.). MSP is, therefore, a typical multi-scale process.

5.5 Integration and coordination

MSP is a cross-cutting process, involving all sectors dealing with management and use of the sea and its resources, and requiring vertical and horizontal cooperation among different institutions. Western Mediterranean EU countries are progressing in the definition of the institutional and legal framework required for MSP implementation. Although significant steps have been made, planning and management of maritime activities are still sector-based and characterised by fragmented competences and responsibilities. Namely, country fiches prepared for France, Italy, Malta and Spain (SIMWESTMED, 2017) have reported, in one way or the other, that policies applied for MSP are fragmentary, as well as the actions of the different sectoral authorities, while there are often bureaucratic behaviours.

Some countries expressed the view that the issues related to the maritime planning should be focused on development of the comprehensive and coherent long term, multi-level and cross-sectorial governance structures. In fact, putting in place appropriate cooperation schemes and consultation/participation processes is a prerequisite to ensure coordination, consensus and synergies.

It is worthy to note that, in the process of transposition of EU MSP Directive, Italy has set out a **Technical Committee**, chaired by the Ministry of Infrastructure and Transport (as Competent Authority) and composed of representatives of the Ministries involved. It oversees the elaboration of the maritime spatial plans for each marine sub-region, in accordance to the guidelines to be developed by the Inter-Ministerial Coordination Table for Maritime Spatial Planning set out by a Legislative Decree. Maritime spatial plans for each marine sub-region will be approved by the Inter-Ministerial Coordination Table for Maritime Spatial Planning by 31 December 2020. The Inter-Ministerial Coordination Table for Maritime Spatial Planning monitors and evaluates the compatibility and complementarity between:

- a) the planning process as defined within the guidelines; and
- b) the maritime spatial plans developed by the Technical Committee.

Although, the EU MSP Directive has triggered changes and development in this field, institutional and legal processes must be enhanced in non-EU countries of the sub-basin as well.

5.6 Stakeholder involvement

Proper and effective stakeholder involvement (and commitment, ultimately) is often one key enabling factor for MSP, in particular in the visioning and strategic phases. Although it might not be one of the strongest obstacles for the implementation of MSP in Western Mediterranean countries (at least the EU ones), existing initiatives and platforms for stakeholder involvement should be analysed to assess whether they are proper and sufficient models to be applied within the formal MSP process. Strengths and weakness should be consequently highlighted. The ultimate goal should go beyond stakeholder involvement and pursue their real engagement.

5.7 Project-based initiatives and MSP practices

The Mediterranean context can benefit from a wide number of cross-border projects focusing on MSP or indirectly dealing with related aspects, even if few of them involve non-European countries. Although the project experience is wider for the Eastern Mediterranean, and in particular for the Adriatic-Ionian region, significant initiatives have been or are being implemented in the Western Mediterranean as well, starting from SIMWESTMED, but also including other examples: Coconet, CO-EVOLVE, MED-IAMER, MESMA, MEDTRENDS, POCTEFEX-ALBORAN, etc. Uptake of valuable project results by formal MSP processes is still limited.

5.8 Data availability and accessibility

Data availability probably is not the main limiting factor for MSP implementation in EU Western Mediterranean countries, although it is a key enabling element for a knowledge-based, transparent and conscious (e.g. of uncertainty and gaps) planning and decision-making process. However, several differences in terms of data availability occur between northern and southern Mediterranean countries; geological, oceanographic and ecological features of southern waters are still poorly known. Moreover, in general most knowledge is available for marine areas close to the coastline, while data on offshore areas is limited or very limited. Understanding the real data gaps that might hamper the MSP process is an important issue, not only in terms of spatial coverage but also in relation to time series that are essential to understand evolution of marine and maritime processes.

It should be also stressed that in some cases more than missing data, the lack of validated data may act as a limiting factor. In order to avoid downstream conflicts regarding planning decisions, it might be crucial to build plans and programmes on reliable data; data validation can be long.

While data availability *per se* seems to be a relatively minor issue for some of the Western Mediterranean countries (at least for EU Member States), ensuring transparent and open access to accurate, complete, homogenous, quality checked and somehow validated information is certainly important. There is also an obvious need to improve dissemination of information and cross-sectorial knowledge based-policy and plan-making. Evidence-based MSP requires harmonised and up-to-date marine and maritime data. Indeed, data availability and data sharing are cross-cutting elements which assume relevance for other issues as well, e.g. cross-border cooperation, stakeholder involvement, vertical and horizontal cooperation and coordination within a country.

6. SIMWESTMED proposals on integration of principles of the Barcelona Convention within MSP implementation

Taking into consideration recent initiatives among CPs within the framework of Barcelona Convention system, it is clear that the MSP activities in the Mediterranean should be implemented in the light of the Barcelona Convention's main objectives, which are to (UNEP/MAP, 2015):

- Ensure sustainable management of natural marine and coastal resources;
- Integrate the environment in social and economic development;
- Protect the marine environment and coastal zones through prevention and reduction of pollution, and as far as possible, elimination of pollution, whether land or sea-based;
- Protect the natural and cultural heritage;
- Strengthen solidarity among Mediterranean coastal States;
- Contribute to improvement of the quality of life.

In addition, Decision IG.23/7 (2017) of the Contracting Parties of the Barcelona Convention on implementation of the ICZM Protocol, acknowledges the introduction of MSP as the main tool/process for the implementation of ICZM in the marine part of the coastal zone.

Initial proposals for addressing the principles of the Barcelona Convention in MSP, in the framework of SIMWESTMED project, are tailored around eight key issues identified in the previous chapter. An additional issue dealing with processes and tools for the assessment of environmental effects of the MSP plan is also considered, including specific proposals for its implementation. The entire set of proposals has been developed considering also the specific input provided by the Initial Assessment performed within the SIMWESTMED project. These proposals are fully in line with the Conceptual Framework for MSP, adopted at COP 20 (Tirana, 2017). Identified proposals are specifically meant to inform SIMWESTMED project and involved partners on possible approaches towards implementation of MSP in the framework of BC. Although the importance of each specific issue may vary from location to location, all of them are considered relevant for the implementation of MSP in Western Mediterranean. SIMWESTMED case studies could test a sub-set of the identified proposals, focusing on those applicable at case study scale and more relevant for the specific characteristics of the case study geographic area.

6.1 UN Environment MAP's Ecosystem Approach

In the Mediterranean, ecosystem approach (EcAp; or EBA according the language of the MSFD and the MSP Directive) is the overarching guiding principle to all policy implementation and development undertaken under the auspices of UNEP/MAP Barcelona Convention. Therefore, EcAp/EBA should guide MSP implementation in the Eastern Mediterranean, too.

This might imply the following specific proposals in order to support the MSP implementation:

- Establish clear links between MSP objectives and ecological objectives, targets and indicators defined within EcAp and MSFD implementation in each country, also approaching the issue in a cross-border perspective at the scale of Western Mediterranean sub-basin.
- As far as possible, define the planning and management area in order to facilitate the assessment and management of the two major types of conflicts identified: conflicts between

human uses and the marine environment (user-environment conflicts) and conflicts among human uses (user-user conflicts). EcAp does not stop at sea, it involves land too. Taking EcAp in consideration in the MSP process also implies a strong focus on land-sea interactions (LSI) and in particular on interactions among terrestrial and marine ecosystems, habitats and species.

- Together with maps of maritime uses, produce maps of key descriptors of the ecosystem and environmental status of the sea. Use such maps to plan the use (including the protection) of the sea.
- In the future MSP plans, consider the best available scientific knowledge about the ecosystem and its dynamics, and assess major information gaps and related uncertainties.
- Identify the ecosystem services provided by the marine area and assess how they support human maritime activities.
- Evaluate effects of human activities on the ecosystem, as: direct and indirect, cumulative, short and long-term, permanent and temporary, positive and negative effects, also taking land-sea interaction in consideration.

The link between EcAp/EBA (and MSFD) and MSP is a two-way relation. MSP can contribute to the overall objective of achieving the GES, reducing marine-based source of pressure affecting the marine environment through spatial efficiency and control of temporal distribution of human activities. It can also include spatial measures (e.g. identification of areas under specific regime of environmental protection) aiming to preserve processes and functions essential for achieving the GES.

6.2 Links to ICZM

MSP and ICZM should be linked as much as possible, and in any case should be consistent and complementary, since they both seek to address the problems of fragmented governance in coastal and marine areas and share similar principles (e.g. the sustainable management and development of coastal-marine areas, the sustainable use of marine resources, the importance of stakeholder participation, etc.). **Coordinated implementation of MSP and ICZM should be ensured, including reference to EcAp.** They may work together in addressing common issues as local socio-economic development of coastal communities or nature protection across land-sea.

There is an evident overlapping of the potential geographic scope of ICZM (as defined by the Protocol on ICZM in the Mediterranean) and MSP (as defined by the Directive 2014/89/EU): both include territorial sea. In this perspective, **MSP can be considered the main tool/process for the implementation of ICZM in the marine part of the coastal zone**, also to avoid this overlapping becoming an obstacle.

Understanding and addressing land-sea interactions (LSI) is crucial to ensure sustainable management and development of coastal areas and coherent planning of land and sea-based activities. **LSI should be taken on board when dealing with MSP**, taking into consideration two main typologies of interactions: interactions related to land-sea natural processes and interactions among land and sea uses and activities. Other relevant aspects, which needs to be managed and balanced when dealing with LSI are interactions among people (tradition, culture, expertise, education, etc.) and interactions of planning processes and plans for land and sea areas.

6.3 Adaptive approach

MSP is a future-oriented process and should be based on an adaptive approach. Analysis of alternative options of future development of the marine area in question and related effects on planning of marine and maritime activities (including minimisation of conflicts and capitalization of synergies) are essential component of the MSP process. Moreover, monitoring, evaluation (also using performance and result indicators) and revision steps should be part of the process since its **beginning**. This implies the following suggestions for the MSP implementation:

- Where possible, promote **active adaptive management**, which includes the evaluation and comparison of alternative hypothesis (e.g. scenarios) about the future evolution of the considered marine area. Active adaptive management can be very useful when strategies and plans for future development of sectors affected by MSP are not defined or known, thus enabling to manage uncertainty of the future.
- Develop **MSP indicators** linked to clear objectives and targets, including: governance or process, socio-economic and ecological-environmental indicators.
- Adopt a **medium/long-term perspective** to properly deal with the strategic nature of MSP and allow to plan in an anticipatory manner, implement, adapt and plan actions again over a period long enough to get concrete results.
- **Climate change** and related uncertainties should be considered in the MSP process and mainstreamed in the MSP plans. This implies: (i) the assessment of climate change impacts on the marine ecosystem and resources, (ii) the evaluation of climate change vulnerability of current and future human activities, (iii) the inclusion of mitigation actions into the MSP plan, (iv) the identification of specific actions aiming to improve the adaptation capacity of the plan and the specific measures it includes.

6.4 Cross-border cooperation and multi-scale approach to MSP

MSP should be approached at different scales (from the Mediterranean Basin to sub-national level), combining top-down and bottom-up approaches (and strategic phase with operational applications):

- Mediterranean and Western Mediterranean scales respectively addressing the basin (or regional) and sub-basin (or sub-regional) level, through cooperation among countries (both EU and non-EU Member States) in the frame of the Barcelona Convention to approach the strategic level of MSP, including:
 - Identification of elements for a common vision and related objectives;
 - Identification of priority areas (e.g. in the Western Mediterranean: Alboran Sea, Gibraltar Strait, Bonifacio Strait, Corsica Channel, Sicily Strait, Pelagos Sanctuary for the conservation of marine mammals) and issues (e.g. international maritime transport, sustainable management of fishing resources, biodiversity protection and ecosystem preservation, etc.) to be approached at a transboundary level;
 - Identification of initiatives (e.g. projects) to address transboundary areas and issues.

These scales of analysis should also start dealing with planning and management of ABNJ, being aware of the complexity of this issue.

- National scale, fully implementing the MSP process – according to common principles and coherently with the regional and sub-regional approaches – in marine areas falling within national jurisdiction.

- Sub-national and local scales, fostering MSP applications aiming to provide evidence of concrete and visible environmental, social and economic benefits of MSP, also through pilot projects (e.g. new generation of the Coastal Area Management Programme – CAMP projects). Activities at the sub-national and/or local scale should focus on priority (hot-spot) areas, such as: highly vulnerable areas, areas with major conflicts among uses, areas with high potential for synergies among uses and multi-use opportunities.

Multi-scale approach could be reflected in a multi-governance system for MSP, including a coordination mechanism at the Mediterranean level (e.g. using and adapting the experience of the Helcom-VASAB MSP Working Group created for the Baltic Sea), within the frame provided by the Barcelona Convention¹², and, if needed, at the Western Mediterranean scale, taking advantage of the well-established cooperation in the sub-basin (e.g. profiting from the West Med Maritime Initiative and the 5+5 Dialogue platform).

6.5 Integration and coordination

Efforts to identify, strengthen and/or empower mechanisms for horizontal and vertical coordination on MSP at the country level should continue and be improved. Reinforced coordination could imply:

- Define clearly responsibilities, as well as the decision making and the consultation/participatory processes. In this respect, it is necessary to map the different (national, sub-national and local) authorities involved in the process and clarify respective competences.
- Support/strengthen establishment of ecosystem-based governance setting, enabling integration of concerns and interests across sectors, between governmental levels and/or between government and stakeholders.
- Integrate sectoral policies and objectives in a single comprehensive integrated MSP process and plan per selected area. Integration among sectors is needed to go beyond sector policies, plans and regulations.
- Encourage gradual change of behaviour in a win-win perspective, at all levels.
- Place particular attention to secure integration of planning and management of the sea and land components of the coastal area.

Such an approach also requires strong coordination of sectoral policies (EU as well as the Barcelona Convention), in particular those required to deliver **the ecosystem-based approach**. Utilizing the MSP, such coordination can be delivered through the **policy level** of the MSP process but also on the **operational, planning level**, through development of different scenarios where evaluation criteria as well as consultation processes can provide pragmatic solutions to specific tensions between economic, ecological and social dimensions (Figure 9).

¹² Taking into account that in the Mediterranean not all the countries are Member States of the EU (thus with comparable legislation), but all are Parties to the Barcelona Convention, which is an international legal instrument and therefore less binding than the EU law.

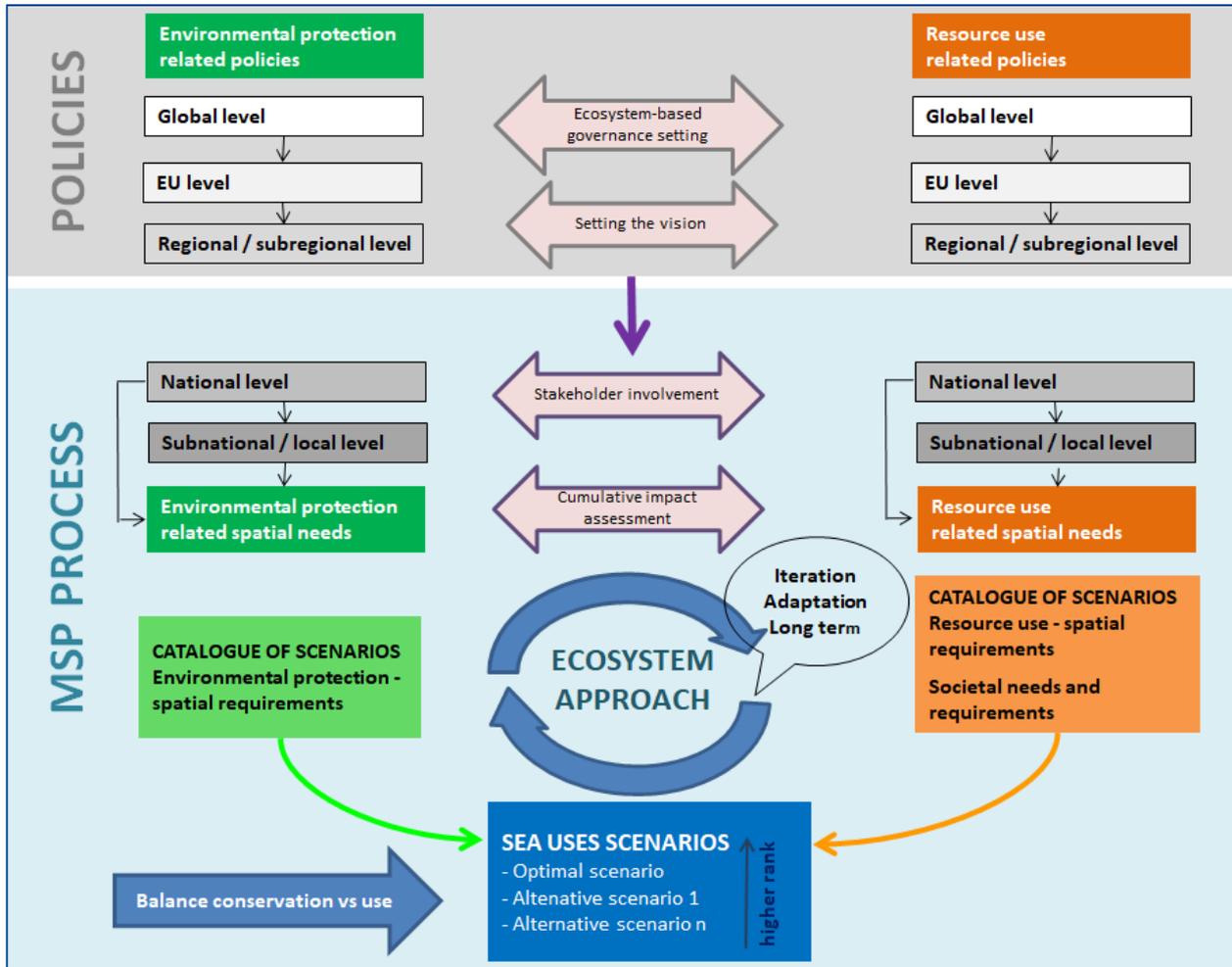


Figure 9: Schematic representation of the proposed path for policies coordination through MSP process, in the framework of the ecosystem-based approach

6.6 Stakeholders involvement

Existing stakeholder involvement initiatives or platform should be reinforced and become common and formalised practices rather than a stand-alone experience. In case of major gaps and weakness, new initiatives should be put in place. Improving stakeholder involvement and encouraging their future engagement should imply:

- Establishment of substantial links to the MSP process;
- Involvement of legitimate stakeholders representing relevant categories (public authorities at different levels, research institutions, civil society, business sectors, etc.);
- Involvement of key actors that can really contribute to the various steps of the MSP process;
- Visibility of the real added-value of the involvement process;
- Transparent, open and inclusive information sharing;
- Coherence with other involvement processes (e.g. ICZM, SEA, EcAp or MSFD) also to avoid excessive pressure on the same stakeholder arena, or unnecessary overload on the coordinating authorities.

6.7 Uptake of the project-based initiatives and MSP practices

Uptake of valuable project results by formal MSP processes should be strengthened to capitalize developed knowledge and tools. This can imply:

- Identify gaps and needs in the Western Mediterranean and continue developing cross-border MSP related projects, **progressively building on previous projects' results** as experienced in the Adriatic-Ionian region (PlancCoast, Shape, Adriplan, and Supreme). Use this projects' chain to deliver knowledge, tools, methodologies, and contents useful for the formal MSP processes.
- **Improve uptake of project results and outputs by formal MSP processes**, e.g. through dedicated workshops, direct support from project to formal MSP processes, identification, description and sharing of MSP practices (tools, guidelines, methodologies, pilot plans, studies, etc.).
- Strengthen links with the EU MSP Platform, aiming to support EU countries in implementing the MSP Directive, primarily by **sharing knowledge and practices**. Mechanisms to improve transfer of knowledge and practices should be reinforced.

6.8 Data availability and accessibility

Data availability and accessibility are key enabling elements for a knowledge-based, transparent and conscious process of marine space planning. However, efforts on data gathering should be properly targeted on real MSP needs to avoid the process taking too much time and using too many resources. Suggestions for this issue are:

- **Identify the specific gaps that might hamper MSP** and that require specific actions. Some specific knowledge areas might merit particular attention, as for example use of socio-economic data in the MSP process that still need improvement, indeed not only in the Western Mediterranean sub-basin. Information gap related to fish stock and fishery impact is another example.
- **Focus on the collection of data and information, which are really essential for MSP**. The updating process of the national monitoring and assessment programmes which is in progress, in line with IMAP, will significantly contribute to the collection and reporting of quality-assured and regionally comparable data.
- Take into consideration any form of **"good quality" knowledge**. This comes primarily from scientific sources and institutionalized monitoring activities and datasets, but should also capitalize private sources of data. **Quality check** of data and information used in the MSP process must be however ensured, in particular regarding the formal MSP process, which required formal and standard-compliant data. Data validation could also be required, depending on the context. Involvement of legitimate stakeholder can help in sharing good sources of data.
- Improve **transparent access to accurate and complete information**. Harmonization and updating of relevant data and information are needed, to both supporting cross-border cooperation and vertical-horizontal coordination within countries.
- **Move from data and knowledge to information really useful for the planning and decision-making process required by MSP**. Spatial-based tools are particularly useful to this end. A number of tools are already available and have been applied in the Mediterranean and other marine regions; their use needs to become more operational and widely diffused among planners involved in formal MSP processes. A closer and interactive collaboration between

planners and scientists is required. Other tools should be further developed, also to address future challenges, in order to come against the planning needs of decision makers, e.g. tools to select appropriate sites for offshore renewable energy installations.

- **Create/strengthen platforms (SDI, Web-portal, etc.) to enable data/information/tool sharing and accessibility**, i.e. MSP data platforms at the country and basin/sub-basin scale, capitalizing existing experiences at the Mediterranean level (e.g. SDIMED geoportal or PEGASO SDI) or in other sub-region (SHAPE Atlas and ADRIPLAN data portal for the Adriatic-Ionian region). Marine and maritime data sharing need to be optimised across the two shores of the Western Mediterranean sub-basin.
- Secure that these platforms also contain **land data** or are integrated with other platforms containing land data.

6.9 Tools for Environmental assessment of MSP

Strategic Environmental Assessment (SEA) is an important integral part of the preparation of the MSP plan, providing a mechanism for the strategic consideration of environmental effects of the plan, assessment of different planning alternatives and identification and evaluation of mitigation measures. SEA is an important tool for implementing EcAp in MSP as it provides a framing for the evaluation of effects on species, habitats and ecosystems. It follows that SEA is a process to be implemented in close connection and in parallel to the MSP plan elaboration, as it should be used to ensure the plan environmental sustainability. Indeed, SEA aims to provide a clear input to the MSP plan. To this end, the SEA process should start at the very beginning of the MSP process and the two should be implemented in an interactive manner.

The SEA process includes the preparation of an environmental report, the carrying out of public consultations, the taking into account of the environmental report and the results of the consultations in decision-making and the provision of information on the decision. The following elements should be considered when implementing SEA:

- Actual availability of knowledge and methods of assessment, focusing on really needed information and highlighting critical gaps.
- Availability and actual applicability of operational tools that can support SEA implementation during the MSP process, as for example: cumulative impact tool, conflict analysis tools, checklist toolbox, guidelines, model to analyse spatial distribution of maritime activities and related effects, etc.
- Content and level of detail in the MSP plan, that should enable the level of environmental assessment required.
- Stage in the decision-making process related to the MSP plan.
- Interest of the public, ensuring proper consultation within the SEA process, coherently and in coordination with stakeholder engagement for the MSP plan elaboration.
- Related to previous points, the extent to which certain matters are more appropriately assessed within a more detailed **Environmental Impact Assessment (EIA)**, which is often required for the licensing of specific projects and activities after a Marine Spatial Plan has entered into force. SEA has an important role in guiding EIAs because the challenges in reconciling issues at the EIA scale require a more strategic approach.

At general level, two more aspects should be stressed:

- A transboundary SEA process, including transboundary consultation, should be activated when the implementation of an MSP plan is expected to have significant transboundary environmental effects.
- SEA should not only assess impact on the sea, but consider also impacts of maritime activities on land, based on most relevant LSI identified.

For EU Member States, it is worth pointing out that any MSP plan likely to have a significant effect on a Natura 2000 site shall undergo an **appropriate assessment** to determine its implications for the site, and specifically the habitats and species it hosts.

References

- Addis D. (2012). The protection and preservation of the marine environment. Under the patronage of I.C.E.F. – International Court for the Environment Foundation.
- Addis D. (2014). The Italian EPZ as a tool for the implementation of the Barcelona RSC. Project MARSAFENET IS1105 COST ACTION, EU COST Program.
- Aguilar-Manjarrez, J., Soto, D. & Brummett, R. (2017). Aquaculture zoning, site selection and area management under the ecosystem approach to aquaculture. A handbook. Report ACS18071. Rome, FAO, and World Bank Group, Washington, DC. 62 pp. Includes a USB card containing the full document (395 pp.).
- Borja A., Elliott M., Carstensen J., Heiskanen A.S., van de Bund W. (2010). Marine Management – Towards an Integrated Implementation of the European Marine Strategy Framework and the Water Framework Directives. *Marine Pollution Bulletin* 60 (12): 2175.
- Cinnirella, S., R. Sardà, J. Suárez de Vivero, R. Brennan, A. Barausse, J. Icely, T. Luisetti, D. March, C. Murciano, A. Newton, T. O'Higgins, L. Palmeri, M. Palmieri, P. Raux, S. Rees, J. Albaigés, N. Pirrone, and K. Turner (2014). Steps toward a shared governance response for achieving Good Environmental Status in the Mediterranean Sea. *Ecology and Society* 19 (4): 47.
- COM(2012) 494 final. Communication from the Commission: Blue Growth opportunities for marine and maritime sustainable growth.
- EUNETMAR (2014). Study to support the development of sea basin cooperation in the Mediterranean, the Adriatic and Ionian and the Black Sea. Report 4. Study carried out on behalf of the European Commission Directorate-General for Maritime Affairs and Fisheries, contract number MARE/2012/07 – Ref. n.2, September 2014.
- HELCOM-VASAB (2016). Guideline for the implementation of ecosystem-based approach in Maritime Spatial Planning (MSP) in the Baltic Sea area.
- MEDPAN-RAC/SPA (2016). The 2016 status of marine protected areas in the Mediterranean. Main findings.
- Mourmouris A., Le Visage Ch., Grimes S., Ramieri E. (2016). The way to a Regional Framework for ICZM in the Mediterranean, 2017-2021. Background Document”. PAP/RAC.
- Piante C., and D., Ody (2015). Blue Growth in the Mediterranean Sea: The Challenge of Good Environmental Status. MedTrends Project. WWF-France. 192 pages.
- Platjouw F. M. (2016). Environmental law and the ecosystem approach: maintaining ecological integrity through consistency in law. Routledge. New York.
- Plan Bleu (2014). Economic and social analysis of the uses of the coastal and marine waters in the Mediterranean, characterization and impacts of the Fisheries, Aquaculture, Tourism and recreational activities, Maritime transport and Offshore extraction of oil and gas sectors. Technical Report, Plan Bleu, Valbonne.
- Ramieri E., E. Andreoli, A. Fanelli, G. Artico, R. Bertaggia (2014). Methodological handbook on Maritime Spatial Planning in the Adriatic Sea. Final report of SHAPE project WP4 “Shipping towards maritime spatial planning”.
- Rouillard J., Lago M., Abhold K., Röschel L., Kafyeye T., Mattheiß V. and Klimmek H. (2018). Protecting aquatic biodiversity in Europe: How much do EU environmental policies support ecosystem-based management? *Ambio*, 47 (1): 15-24.
- SPA/RAC website: www.rac-spa.org

UNEP/MAP (2012). State of the Mediterranean Marine and Coastal Environment, UNEP/MAP – Barcelona Convention, Athens, 92 pp.

UNEP/MAP (2013). Ecosystem Approach in the Mediterranean under the Barcelona Convention.

UNEP/MAP (2015). Implementation of the Ecosystem Approach in the Mediterranean.

UNEP/MAP (2015). The Mediterranean Action Plan. Barcelona Convention and its Protocols. Overview.

UNEP/MAP (2017). 2017 Mediterranean Quality Status Report. Thematic decision of the 20th Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean and its Protocols.

Qiun W. & Jones P. J. S. (2013). The emerging policy landscape for marine spatial planning in Europe. *Marine Policy* 39: 182–190.

Zerkavi (2015). Introducing Maritime Spatial Planning Legislation in the EU: Fishing in Troubled Waters? *Maritime Safety and Security Law Journal*, 1/2015, pp. 95-114.

Annex 1: Barcelona Convention legal background

In general

The Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (BARC) provides, under:

(i) Art. 1,

that “the geographical coverage of the Convention is the Mediterranean Sea Area as the maritime waters of the Mediterranean Sea proper.”

(ii) Art. 4 on general obligations,

that “The Contracting Parties shall individually or jointly take all appropriate measures in accordance with the provisions of this Convention and those Protocols in force to which they are party 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.”

(iii) Article 4.3 (c) and (d)

that “the obligation to undertake an environmental impact assessments procedure for activities, under their jurisdiction or control, likely to cause a significant adverse impact on the marine environment including in other States or areas beyond the limits of national jurisdiction.”

In particular, in relation to:

1. Prevention, response and control of all kinds of marine pollution the reference is to

(i) BC, Article 8 on pollution from land-based sources

“The Contracting Parties shall take all appropriate measures to prevent, abate, combat and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area and to draw up and implement plans for the reduction and phasing out of substances that are toxic, persistent and liable to bioaccumulate arising from land-based sources”.

(ii) Even if not directly applicable, it is also related the application of the Protocol for the protection of the Mediterranean Sea against pollution from land-based sources and activities (LBS Protocol, adopted in 1996 and entered into force 11 May 2008).

(iii) BC, Article 11 on pollution resulting from the transboundary movements of hazardous wastes and their disposal

“The Contracting Parties shall take all appropriate measures to prevent, abate and to the fullest possible extent eliminate pollution of the environment which can be caused by transboundary movements and disposal of hazardous wastes, and to reduce to a minimum, and if possible eliminate, such transboundary movements”.

(iv) the Protocol concerning the prevention of pollution of the Mediterranean Sea by transboundary movements of hazardous wastes and their disposal (Hazardous Wastes Protocol, Adopted in 1996 entered into force 19 January 2008).

- Art. 1 on Definitions, letter k) which states that area under the national jurisdiction of a State (referred for example to Article 5) means also marine area within which a State exercises administrative and regulatory responsibilities in accordance with international law in regard to the protection of human health or the environment.

- Art. 5 on general obligation which states that all appropriate measures shall be taken to: prevent, abate and eliminate pollution which can be caused by transboundary movements and disposal of hazardous wastes; to reduce to a minimum or eliminate the generation of hazardous wastes; to reduce to a minimum or eliminate the transboundary movement of hazardous wastes, even banning their import; to prohibit the export and transit of hazardous wastes to developing countries; to cooperate to prevent illegal traffic.

Concerning all the cases cited as a list of the included kinds of marine pollution:

2. Pollution from ships and ballast tanks **the reference is to**

(i) BC, Article 6 on pollution from ships where is stated that:

“The Contracting Parties shall take all measures in conformity with international law to prevent, abate, combat and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area caused by discharges from ships and to ensure the effective implementation in that Area of the rules which are generally recognized at the international level relating to [NDR, and enhance] the control of this type of pollution”.

(ii) *The Protocol concerning cooperation in preventing pollution from ships and, in cases of emergency, combating pollution^[SEP] of the Mediterranean Sea (Prevention and Emergency Protocol, adopted in 2002 and entered into force 17 March 2004)*

- Article 1 specifies that the geographical coverage to which the Protocol applies is the area of the Mediterranean Sea (including also EEZ/FZ/EPZ/EFPZ).

Shipping continues to play a leading role in assuring energy security, offering a more flexible resource than pipelines, and giving power utilities more control over energy flow. An important point is that the range of energy options available must meet the rigorous requirements of energy security.

- Article 15 provides that in conformity with generally accepted international rules and standards and the global mandate of the International Maritime Organization, the Parties shall individually, bilaterally or multilaterally take the necessary steps to assess the environmental risks of the recognized routes used in maritime traffic and shall take the appropriate measures aimed at reducing the risks of accidents or the environmental consequences thereof.

3. Pollution by dumping of waste **the reference is to:**

(i) BC, Article 5 on pollution caused by dumping from ships and aircraft or incineration at sea

“The Contracting Parties shall take all appropriate measures to prevent, abate and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area caused by dumping from ships and aircraft or incineration at sea”.

(ii) *The Protocol for the Prevention and Elimination of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea (Dumping Protocol, adopted in 1995^[SEP] but not yet in force. The 1976 Dumping Protocol is in force since 1978.*

4. Pollution as a result of exploration and exploitation of the sea-bed and subsoil **the reference is to:**

(i) BC, Article 7 on pollution resulting from exploration and exploitation of the continental shelf and the seabed and its subsoil:

“The Contracting Parties shall take all appropriate measures to prevent, abate, combat and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area resulting from exploration and exploitation of the continental shelf and the seabed and its subsoil”.

(ii) *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 (Offshore Protocol, adopted in 1994 and entered into force on 24 March 2011).*

- Art. 2 on the geographical coverage to which the Protocol applies, specifying that is the Mediterranean Sea Area including the continental shelf and the seabed and its subsoil.

- Art. 3 on general undertakings stating that it shall be taken *“all appropriate measures to prevent, abate, combat and control pollution resulting from (i.e. offshore) activities (i.e. activities concerning exploration and/or exploitation of the resources in the protocol Area), inter alia by ensuring that the best available techniques,*

environmentally effective and economically appropriate, are used for this purpose, ensuring that all necessary measures are taken so that activities do not cause pollution”.

More provisions concerns: the prohibition both of discharging sewage from installations (Art. 11) and of disposal into the Protocol Area of specified products and materials (Art. 12); the removal of any installation which is abandoned or disused (Art. 20); restrictions or conditions when granting authorizations for Mediterranean Specially Protected Areas of the SPA/BD Protocol (i.e. environmental impact assessment and the elaboration of special provisions on monitoring, removal of installations and prohibition of any discharge) (Art. 21).

5. Pollution of atmospheric origin
the reference is mainly to:

(i) *BC, Article 8 on pollution from Land-Based Sources*

“The Contracting Parties shall take all appropriate measures to prevent, abate, combat and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area and to draw up and implement plans for the reduction and phasing out of substances that are toxic, persistent and liable to bioaccumulate arising from land-based sources. These measures shall apply also to pollution from land-based sources transported by the atmosphere”.

6. Protection of marine mammals and biodiversity
the reference is mainly to:

(i) *BC, Article 10 on the conservation of Biological Diversity*

“The Contracting Parties shall, individually or jointly, take all appropriate measures to protect and preserve biological diversity, rare or fragile ecosystems, as well as species of wild fauna and flora which are rare, depleted, threatened or endangered and their habitats, in the area to which this Convention applies”.

(ii) *the Protocol concerning specially protected areas and biological diversity in the Mediterranean (SPA/BD Protocol, adopted in 1995 and entered into force on 12 December 1999).*

- Article 2 on geographical coverage which applies in *“the area of the Mediterranean Sea as delimited in Article 1 of the Convention”*, including the seabed and its subsoil.

- Article 5 on the possibility to establish Specially Protected Areas in:

- a) the marine and coastal zones subject to the sovereignty or jurisdiction of the Parties (*included EEZ/FZ/EPZ/EFPZ*) and
- b) zones partly or wholly on the high seas, for which the Contracting Parties shall adopt cooperative measures to ensure the protection and conservation of the site, and the drawn up of a *“List of Specially Protected Areas of Mediterranean Importance” (SPAMI List)*, that may include sites which:
 - i) are of importance for conserving the components of biological diversity in the Mediterranean;
 - ii) contain ecosystems specific to the Mediterranean area or the habitats of endangered species;
 - iii) are of special interest at the scientific, aesthetic, cultural or educational levels.



This document was prepared by the Priority Actions Programme Regional Activity Centre (PAP/RAC) in the framework of the project “Supporting Implementation of Maritime Spatial Planning in the Western Mediterranean Region” (SIMWESTMED).

PAP/RAC is established in 1977 in Split, Croatia, as a part of the UN Environment Mediterranean Action Plan (UN Environment/ MAP). PAP/RAC’s mandate is to provide assistance to support Mediterranean countries in the implementation of the Barcelona Convention and its Protocols, and in particular of the Protocol on Integrated Coastal Zone Management in the Mediterranean. PAP/RAC is oriented towards carrying out the activities contributing to sustainable development of coastal zones and strengthening capacities for their implementation. Thereby, it co-operates with national, regional and local authorities, as well as with a large number of international organisations and institutions.

Following the emerging need to introduce MSP in the entire Mediterranean Region, the 20th Meeting of the Contracting Parties to the Barcelona Convention (COP 20, Tirana, Albania, 2017) adopted the *Conceptual Framework for Marine Spatial Planning*. Therefore, MSP was introduced within the Barcelona Convention System, as the main tool/process for the implementation of ICZM in the marine part of the coastal zone, thus contributing to the balance between environmental, social and economic dimensions of sustainable development.