





## 1. Introduction

The application of the Ecosystem Approach (EcAp) for the management of the marine environment in the Mediterranean Sea, while promoting new concepts and approaches, should build on existing instruments and on already agreed objectives under the relevant Conventions and other Multilateral Agreements. In this context, the EcAp Coordination Group recommended during its First Meeting (Athens, 29-30 May 2012) "to prepare an inventory of already identified objectives / targets existing under protocols, strategies, action plans, protected areas and other areas of ecological significance, biennial implementation plans, other treaties, etc. to serve as a foundation for discussion of targets and GES. Priority should be given to what has been agreed under the Barcelona Convention".

The present document presents the targets regarding Biodiversity and Fisheries adopted within the framework of Global, Regional and other Multilateral Agreements applicable to the Mediterranean Sea.

## 2. Existing instruments of relevance for Biodiversity and Fisheries

### Global relevant instruments

The **United Nations Convention on the Law of the Sea (UNCLOS, 1982)**: Its main objective is to establish a legal order for the seas and oceans that promotes their peaceful uses, the equitable and efficient utilization of their resources, the conservation of their living resources, and the study, protection and preservation of the marine environment. Part VII of UNCLOS is dedicated to the protection and preservation of the marine environment. It includes provisions related to pollution prevention, wise use of living resources and the control of introduction of alien species.

The **Convention on Biological Diversity (CBD, 1992)**: its objectives are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. Its Strategic Plan for Biodiversity for the 2011-2020 period includes twenty targets grouped in five strategic goals. Many of these targets are of relevance for the marine biodiversity.

The **Convention on Wetlands of International Importance especially as Waterfowl Habitat. (Ramsar Convention, 1971)**. Its mission is "the conservation and wise use of all wetlands through local, regional and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world". Some of its provisions are relevant to the marine biodiversity since marine areas whose water depth at low tide does not exceed six metres are considered wetlands by the Ramsar Convention. The Ramsar Convention has a Strategic Plan covering the period 2009-2015, it is built around five goals with targets to achieve by 2015.

The **International Convention for the Control and Management of Ships Ballast Water & Sediments (2004)**. It is aimed at preventing and eliminating the transfer of harmful aquatic organisms and pathogens through the control and management of ships' ballast water and sediments.

The **Code of Conduct for Responsible Fisheries**: To promote long-term sustainable fisheries, the Twenty-eighth Session of the FAO Conference (October, 1995) adopted the Code of Conduct for Responsible Fisheries. The Code provides principles and standards applicable to the conservation, management and development of all fisheries. Among its

objectives, the code aims at promoting the protection of living aquatic resources and their environments and coastal areas.

The **Convention on the Conservation of Migratory Species of Wild Animals (CMS)** aims to conserve terrestrial, aquatic and avian migratory species throughout their range. It was adopted in 1979. The CMS acts as framework Convention under the umbrella of which regional Agreements may be concluded to address the conservation of a species or a group of species in a particular region. In this context two Agreements of relevance to Mediterranean marine species were adopted:

- Agreement for the conservation of Cetaceans of the Mediterranean Sea, Black Sea and Contiguous Atlantic Area (ACCOBAMS)
- The Agreement for the conservation of African-Eurasian Migratory Waterbirds (AEWA)

#### Regional Conventions/Agreements

The **Convention for the Protection of the Mediterranean Sea against Pollution (Barcelona Convention, 1976)**. Ensuring the sustainable management of natural marine resources and protecting natural heritage are among the main objective of the Barcelona Convention. One of its protocols is the Protocol Concerning Specially Protected Areas and Biological diversity in the Mediterranean (1995). The Protocol invites Parties to:

- protect, preserve and manage in a sustainable and environmentally sound way areas of particular natural or cultural value, notably by the establishment of specially protected areas;
- protect, preserve and manage threatened or endangered species of flora and fauna.

Within the framework of the implementation of the Barcelona Convention and its SPA/BD Protocol, the Contracting Parties adopted a series of Action Plans for the conservation of species and habitats. They also adopted an action plan to address the issue of non-indigenous species. The adopted Action Plans are:

- Action Plan for the management of the Mediterranean Monk Seal (1985)
- Action Plan for the conservation of Mediterranean Marine Turtles (1989)
- Action Plan for the conservation of cetaceans in the Mediterranean Sea (1991)
- Action Plan for the conservation of marine vegetation in the Mediterranean Sea (1999)
- Action Plan for the conservation of bird species listed in Annex II of SPA/BD Protocol (2003)
- Action Plan for the Conservation of cartilaginous fishes (Chondrichthyans) in the Mediterranean (2003)
- Action Plan concerning Species Introductions and Invasive Species in the Mediterranean Sea (2003)
- Action Plan for the Conservation of the Coralligenous and other Calcareous Bio-Concretions in the Mediterranean Sea (2008)

In 2003, the Contracting Parties adopted the Strategic Action Plan for the conservation of marine and coastal biodiversity in the Mediterranean (SAP BIO). Its main objective was to provide a logical base for implementing the SPA/BD. SAP BIO included a series of objectives and targets to address the main issues identified as a major hindrance to the conservation of marine and coastal biodiversity.

The **General Fisheries Commission for the Mediterranean (GFCM)** is one of the Regional Fisheries Management Organizations (RFMOs). It was established in 1949 by an Agreement

under the provisions of Article XIV of the FAO constitution. The Agreement was amended in 1963 and 1976 and 1997. The GFCM has an area covering the entire Mediterranean Sea and the Black Sea. A total of 23 countries are Members to GFCM (22 Mediterranean countries, 2 Black Sea countries and Japan) along with the European Union.

The **International Convention for the Conservation of Atlantic Tunas (ICCAT)** was signed 1966 with the objective of ensuring the conservation of tunas and tuna-like species in the Atlantic Ocean and adjacent seas, including the Mediterranean. For certain species, ICCAT sets catch limits (TACs: Total Allowed Catches) based on stock assessments. ICCAT addresses also fishery environmental issues such as bycatch in endangered species (Turtles, Birds, cetaceans, etc.)

The **Agreement on the Conservation of Cetaceans in the Black Sea Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS)** was adopted in 1996 with the main objective of reducing threats to cetaceans in Mediterranean and Black Sea waters and improving the knowledge of these species. The Agreement includes a Plan of Action covering activities aimed achieving and maintaining a favourable conservation status for cetaceans.

The **Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)** is an intergovernmental treaty dedicated to the conservation of migratory waterbirds and their habitats across Africa, Europe, the Middle East, Central Asia, Greenland and the Canadian Archipelago. The Mediterranean Sea is fully covered by the AEWA Agreement area. The Agreement has an Action Plan made of actions for the protection of species and their habitats and for the management of human activities having the potential to threaten the species covered by the Agreement.

## European framework

The EU Biodiversity Strategy to 2020 : In May 2011, the European Commission adopted a new strategy aimed at stopping the loss of biodiversity and improving the state of Europe's species, habitats and ecosystems. The strategy was built towards the following vision: "By 2050, European Union biodiversity and the ecosystem services it provides – its natural capital – are protected, valued and appropriately restored for biodiversity's intrinsic value and for their essential contribution to human well-being and economic prosperity, and so that catastrophic changes caused by the loss of biodiversity are avoided". The Strategy has the following headline target for 2020: "Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss". The achievement of this headline target being based on six main targets:

- Fully implement the **Birds and Habitats Directives**
- Maintain and restore ecosystems and their services
- Increase the contribution of agriculture and forestry to biodiversity
- Ensure the sustainable use of fisheries resources
- Combat Invasive Alien Species
- Step-up action to tackle the global biodiversity crisis

The elaboration of the Strategy benefited from the lessons learned from the implementation of the 2006 EU Biodiversity Action Plan and the related Commission's Communication.

Communication from the Commission - Halting the loss of biodiversity by 2010 - and beyond - Sustaining ecosystem services for human well-being: The Communication was issued in 2006 and had the following ten objectives:

- To safeguard the EU's most important habitats and species.
- To conserve and restore biodiversity and ecosystem services in the wider EU countryside.
- To conserve and restore biodiversity and ecosystem services in the wider EU marine environment.
- To reinforce compatibility of regional and territorial development with biodiversity in the EU.
- To substantially reduce the impact on EU biodiversity of invasive alien species and alien genotypes.
- To substantially strengthen effectiveness of international governance for biodiversity and ecosystem services.
- To substantially strengthen support for biodiversity and ecosystem services in EU external assistance.
- To substantially reduce the impact of international trade on global biodiversity and ecosystem services.
- To support biodiversity adaptation to climate change.
- To substantially strengthen the knowledge base for conservation and sustainable use of biodiversity, in the EU and globally.

### 3. Inventory of existing targets in relation to Biodiversity, Non-indigenous species, Harvest of commercially exploited fish and shellfish, Marine food webs and Sea-floor integrity

The targets included in the following tables were identified through the analysis of official documents adopted within the framework of the International and Regional Agreements/Instruments presented in the Section 2 above. Many of these Agreements provide for measures without setting qualitative or quantitative targets.

**Ecological Objective 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.

Instrument		Target
SPA/BD Protocol	SAPBIO	<ul style="list-style-type: none"> <li>- GIS-based mapping of sensitive habitats by 2008</li> <li>- Increase (50%) by 2012 the surface area covered by MPAs</li> <li>- Set up a representative Mediterranean network of marine and coastal protected areas by 2012</li> <li>- Control and regulate the urban development of coastal area, land use planning and aquaculture practices within a wider management plan by 2010</li> <li>- Legal regulation of recreational activities by 2008</li> </ul>
	SDF	- Inventory of sites of conservation interest using the Standard Data-entry Form and the List of reference Habitat Types

<p>CBD</p>	<p>Strategic Plan for Biodiversity 2011-2020</p>	<ul style="list-style-type: none"> <li>- By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced (Target 5)</li> <li>- By 2020, at least 17 per cent of terrestrial and inland water areas, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes. (Target 11)</li> </ul>
<p>EU Framework</p>	<p>EU Biodiversity Strategy to 2020</p>	<ul style="list-style-type: none"> <li>- To halt the deterioration in the status of all habitats covered by EU nature legislation and achieve a significant and measurable improvement in their status so that, by 2020, 100% more habitat assessments (compared to 2010 assessments) show an improved conservation status (through the implementation of the Habitats and Birds Directives)</li> <li>- By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems</li> </ul>
<p>GFCM</p>		<ul style="list-style-type: none"> <li>- Contracting Parties and Cooperating non-contracting Parties of GFCM should develop mechanisms to ensure that incidental taking of <b>seabirds</b> in fishing activities is monitored, recorded and kept to the lowest level as possible in particular for species under the Annex II of the SPA/BD protocol of the Barcelona Convention (REC.CM-GFCM/35/2011/3).</li> <li>- Contracting Parties and Cooperating non-contracting Parties of GFCM should ensure the implementation of fisheries management measures that strongly mitigate or eliminate the risk of incidental taking of sea <b>turtles</b> in fishing operations and/or the mortality associated with those incidental takings.</li> <li>- Contracting Parties and Cooperating non-contracting Parties of GFCM shall ensure the implementation of fisheries management measures that strongly mitigate the risk of incidental taking of <b>monk seals</b> during fishing operations (REC.CM-GFCM/35/2011/5).</li> <li>- Contracting Parties and Cooperating non-contracting Parties of the GFCM shall take actions to study, monitor, prevent, mitigate and, to the extent possible, eliminate incidental taking of <b>cetaceans</b> during fishing operations (REC. GFCM/36/2012/2).</li> </ul>

**Ecological Objective 2:** Non-indigenous species introduced by human activities are at levels that do not adversely alter the ecosystem.

Instrument		Target
SPA/BD Protocol	SAPBIO	Reinforce control and mitigation of the introduction and spread of alien species by 2006.
	Action Plan concerning Species Introductions and Invasive Species in the Mediterranean Sea	There is no specific target set under the Action Plan. However, the implementation calendar includes 20 actions to be undertaken within a three-years period of time starting from the adoption of the Action Plan by the Contracting Parties.
CBD	Strategic Plan for Biodiversity 2011-2020	By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment (Target 9).
EU framework	Commission Communication on Biodiversity (2006)	By 2010 and beyond, a comprehensive EU strategy should be developed for the prevention and control of invasive alien species; as well as specific actions including an early warning system.
	EU Biodiversity Strategy to 2020	- By 2020, Invasive Alien Species (IAS) and their pathways are identified and prioritised, priority species are controlled or eradicated, and pathways are managed to prevent the introduction and establishment of new IAS.

**Ecological Objective 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

Instrument		Target
SPA/BD Protocol	SAPBIO	<ul style="list-style-type: none"> <li>- Attain the protection of 20 % of the coast as marine fishery reserves by 2012</li> <li>- Maintain or restore fishery stocks to levels that can produce the maximum sustainable yield with the aim of achieving these goals for depleted stocks on an urgent basis and where possible not later than 2015</li> <li>- Urgently develop and implement national plans of action, to put into effect the FAO international plans of action, in particular the international plan of action for the management of fishing capacity by 2005 and the international plan of action to prevent, deter and eliminate illegal, unreported and unregulated fishing by 2004</li> <li>- Establish effective monitoring, reporting and enforcement, and control of fishing vessels, including by flag states, to further the international plan of action to prevent, deter and eliminate illegal, unreported and unregulated fishing</li> </ul>



Instrument		Target
CBD	Strategic Plan for Biodiversity 2011-2020	- By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits (Target 6)
EU	Commission Communication on Biodiversity (2006)	- By 2010 and beyond, optimising the use of available measures under the reformed Common Fishery Policy, notably to restore fish stocks, reduce impacts on non-target species and reduce damages to marine habitats
	EU Biodiversity Strategy to 2020	- Achieve Maximum Sustainable Yield (MSY) by 2015. - Achieve a population age and size distribution indicative of a healthy stock, through fisheries management with no significant adverse impacts on other stocks, species and ecosystems, in support of achieving Good Environmental Status by 2020, as required under the Marine Strategy Framework Directive.
ICCAT		The total allowable catches (TACs) for Bluefin Tuna in the Eastern Atlantic and Mediterranean shall be set at 13.400 t annually, effective beginning in 2013 and thereafter, until such time the TAC is changed following the advice of SCRS (Standing Committee on Research and Statistics) (Recommendation 12-03 BFT).

**Ecological Objective 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.

No specific target found in relation to Ecological Objective 4

**Ecological Objective 6:** Sea-floor integrity is maintained, especially in priority benthic habitats.

Instrument		Instruments
CBD	Strategic Plan for Biodiversity 2011-2020	- By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning (Target 10)
EU	Commission Communication on Biodiversity (2006)	- By 2010 and beyond, optimising the use of available measures under the reformed Common Fishery Policy, notably to restore fish stocks, reduce impacts on non-target species and reduce damages to marine habitats