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Meeting of the MAP Focal Points

Athens, Greece, 10-12 September 2013

Draft decision on the Ecosystems Approach including adopting definitions of Good Environmental Status (GES) and targets

UNEP/MAP
Athens, 2013

Note by the Secretariat

At the Conference of the Parties in 2008 (Decision IG17/6), a seven step process for the application of the Ecosystem Approach (**EcAp**) was set out with the overall aim of achieving a good environmental status (**GES**) of the Mediterranean sea by 2020.

The objectives of these seven steps have been already partially met, mainly by the Integrated Assessment of the Mediterranean Ecosystem and by the development of 11 Ecological Objectives (**EO**s) and corresponding 28 operational objectives and 61 indicators (respectively endorsed and adopted at COP18, by Decision IG 20/4)

During the biennium 2012-2013 work has been ongoing on the necessary further steps of the Ecosystem Approach application, with the overall guidance of the EcAp Coordination Group (**EcAp CG**), through (i) expert level discussion in the Correspondence Groups on GES and Targets (**COR-GEST** groups, with their five cluster specific meetings with country experts, on biodiversity and fisheries, on pollution and litter and on coast and hydrography and specifically through: (ii) working on methodologies for the determination of GES and targets for the 11 agreed Ecological Objectives; (iii) preparing a state of play analysis on the monitoring and assessment activities, gaps, (iv) ongoing work on the socio-economic assessment, (v) the SAPBIO evaluation; and ,(vi) the development of data-sharing principles for the upcoming monitoring and assessment activities of EcAp.

It is proposed that the next biennium will continue the implementation of the EcAp Roadmap, through the established system of the EcAp CG and GOR-GEST groups, with the assistance of all MAP components and additional expert-level work on monitoring and assessment (in Correspondence Groups on Monitoring and Assessment, **COR MON**), with the aim to achieve by COP19, in 2015 an agreement on: (i) an Integrated Monitoring and Assessment Programme for the Mediterranean; (ii) an update of the Integrated Assessment in line with the agreed EcAp EOs, targets and indicators; and, (iii) a proposed potential list for the EcAp Programme of Measures.

To reach these achievements, the following need to be taken into account:

- Integrated Monitoring Programme and the implementation of the Assessment Policy are closely related and they need to be developed simultaneously and in harmony;
- Best practice of other regional seas, where Integrated Monitoring and Assessment Programmes are well-established, show that the practical way to provide with interim updates the assessment reports is through fact sheets focusing on selected key issues;
- The introduction of the Integrated Monitoring and Assessment Programme will need to be gradual and adaptive, with ensuring flexibility, trans-boundary cooperation of the Contracting Parties both on sub-regional and regional level;
- Noting that Contracting Parties are already implementing, even if not necessary in the framework of EcAp, various EcAp related measures, the development of a Programme of Measures to implement EcAp requires as a first step a state of play, a gap analysis with an impact assessment, also covering socioeconomic issues, followed by a proposal of future measures addressing the identified gaps;
- Since further possible measures may need to be developed and implemented with flexibility at initial stage, it is proposed that COP19 will agree on a set of possible additional measures, that will enable early implementation, but will be streamlined at a later stage (ideally by COP 2020);
- The upcoming, planned pilot project on some selected EcAp indicators will provide very useful information, which will need to be incorporated in the relevant future steps of the EcAp process;

- Country capacities are highly differing in relation to the implementation of EcAp, thus country assessments, followed up by facilitation of trans-boundary cooperation opportunities and capacity building will be key for its success.

The Secretariat prepared the following draft decision in light of the above, in line with the relevant articles of the Barcelona Convention and its related Protocols and the Marine Strategy Framework Directive Common Implementation Strategy's Regional Sea Conventions related process.

The Secretariat is proposing Euros 607,000 to implement this Decision in the programme budget for 2014-2015 under Mediterranean Trust Fund and an additional EUR 513 000 is secured for its implementation by external source (EcAp-MED project).

Additional resources may be needed for the socio-economic assessment of possible future measures as well as for specific integrated monitoring and assessment related new tasks, such as ensuring a capable data-management system.

Draft Decision

on the Ecosystems Approach including adopting definitions of Good Environmental Status (GES) and targets

The 18th Meeting of the Contracting Parties,

Recalling the vision and the goals for the implementation of the ecosystem approach to the management of human activities adopted in decision IG. 17/6 of its 15th meeting held in Almeria, Spain (2008) providing for *"A healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse for the benefit of present and future generations"* and the seven step road-map for implementing the ecosystem approach by Mediterranean Action Plan also adopted during that meeting;

Recalling also Decision IG. 20/4 of the 17th Conference of the Parties on the ecosystem approach and *acknowledging* with satisfaction the progress achieved and work carried out in the Mediterranean with respect to the implementation of the ecosystem approach roadmap by the Ecosystem Approach Coordination Group and by the working structure established under its guidance, including the Correspondence Groups on Good Environmental Status (**GES**) and Targets;

Thanking the Secretariat and all UNEP MAP components for their efforts to implement Decision 20/4 of COP17 on the ecosystem approach, regardless their financial and human resources difficulties;

Recognizing the necessity for the Contracting Parties to fully support the implementation of the ecosystem approach roadmap and the need for substantive financial resources to support the process at regional and national levels, taking note of differences between country capacities;

Decides to:

Adopt based on Article 18 of the Barcelona Convention and on the relevant provisions from its related Protocols such as Article 7 and 8 of the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities; Article 5 of the Protocol Concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea; Articles 3, 7 and 20 of the Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean, the integrated list of Mediterranean Good Environmental Status and related targets, associated with the Operational Objectives and Indicators agreed at the 17th Meeting of the Conference of the Parties, as presented in Annex I to the present decision;

Adopt based on Article 12 and Article 18 of the Barcelona Convention the process and principles of the Integrated Monitoring Programme and the Integrated Assessment Policy, as presented in Annex II and Annex III to this decision for the next two years and further on an indicative basis, with the aim of adopting the Barcelona Convention/MAP Integrated Monitoring and Assessment Programme in 2015 at the 19th Conference of the Parties;

Adopt the data sharing principles of the Barcelona Convention/MAP as presented in Annex III of this decision;

Endorse the process to finalize the next steps of the Ecosystem Approach Roadmap, as described through the initial Ecosystem Approach Timeline in Annex IV, building on the

existing EcAp implementation structure, with the key role of the Ecosystem Coordination Group and the related expert groups on GES and on Monitoring;

Endorse the governance structure established to advance the implementation of EcAp, through the Ecosystem Coordination Group and the Correspondence Groups on GES and Targets, and future Correspondence Group on Monitoring, as presented in Annex V;

Note the progress made, regardless of human and resource constraints of the relevant UNEP MAP bodies, on measures related to the implementation of EcAp in the Mediterranean (such as the revised SAPBIO priority actions, as presented in Annex VI) and on the development of the socioeconomic analysis, aiming to complement the initial integrated assessment of the Mediterranean Seas by COP19 (Socio-Economic Work Programme for the next biennium is presented in Annex VII to this decision)

Encourage all Contracting Parties, International Organizations and International Financial Institutions, to further support the implementation of the Ecosystem Approach in the Mediterranean, noting that the next steps of the Ecosystem Roadmap will require additional human resources, technical capacity and coordination both in country and in regional level.

Request the Secretariat to:

1. Continue work on the Mediterranean Good Environmental Status (GES) and targets during the next biennium through a participatory process involving all Contracting Parties, MAP components and the scientific community, within the established EcAp governance structure of the Barcelona Convention/MAP to further specify the scope of application and technical details of the Mediterranean GES and targets so as to establish a solid basis for the development of the Integrated Monitoring and Assessment Programme;

2. Prepare in cooperation with MAP components and competent partner organizations, with the inclusion of a participatory process involving Contracting Parties and scientific community, and with a co-leadership of MEDPOL and the Coordinating Unit, a Monitoring and Assessment Methodological Guidance to be adopted by the 19th Meeting of the Contracting Parties in 2015;

3. Prepare in cooperation of MAP components and competent partner organizations, with the inclusion of a participatory process involving Contracting Parties and scientific community other technical documents necessary for an Integrated Monitoring and Assessment Programme to be agreed on by the 19th Meeting of the Contracting Parties in 2015;

4. Prepare in cooperation with MAP components and building on best practices from other Regional Sea Conventions, assessment sheets as tools to provide by 2015 updates to the State of the Mediterranean Marine and Coastal Environment Report (SOER-MED), in line with EcAp agreed Ecological Objectives;

5. Undertake a gap analysis, including a socioeconomic impact assessment of existing Barcelona Convention/MAP measures relating to the Ecosystem Approach implementation and based on this analysis, prepare in cooperation with MAP components and competent partner organizations, with the inclusion of a participatory process involving Contracting Parties and scientific community, a list of EcAp implementation related possible measures, specifically addressing trans-boundary cooperation possibilities and flexibility needs of Contracting Parties, to be agreed on by the Meeting of the Contracting Parties in 2015;

6. Ensure the implementation of this decision through the operational activities of Barcelona Convention/MAP and its integration in the next Strategic and 2-year Programme of work;

7. Continue ensuring that Barcelona Convention/MAP Regional Policies, Strategies and Action Plans become coherent with the ecosystem approach and in particular to consider systematically the EcAp indicators and timeline when coordinating work of the various MAP components, and at the same time consider all the measures adopted by the Contracting Parties under the Barcelona Convention, Protocols and Decisions, to implement the Ecosystem Approach;

8. Continue supporting the Contracting Parties in their efforts to implement the other steps of the Ecosystem Roadmap according to the agreed timeline and enhance cooperation with partners and stakeholders and other global and regional process in particular with the EU common MSFD implementation strategy;

9. Further investigate options for mobilizing resources for supporting financially the application of ecosystem approach both on regional and national levels, noting the difference in country capacities and the need of trans-boundary cooperation.

Annex I

Integrated list of Mediterranean Good Environmental Status and related targets

Table 1: GES and Targets for the Mediterranean in relation to the specific operational objectives and indicators of the agreed ecological objectives

Operational objective	Indicator	GES	Proposed Targets
1.4 Key coastal and marine habitats are not being lost	1.4.1 Potential/ observed distributional range of certain coastal and marine habitats listed under SPA protocol[1]	The habitat is present in all its natural distributional range.	**State** The ratio Natural / observed distributional range tends to 1 **Pressure** Decrease in the main human causes of the habitat decline
	1.4.2 Distributional pattern of certain coastal and marine habitats listed under SPA protocol	The distributional extent is in line with prevailing physiographic, hydrographic, geographic and climatic conditions.	**State** Decline in habitat extension is reversed and the extension of recovering habitats shows a positive trend.
	1.4.3 Condition of the habitat-defining species and communities	The population size and density of the habitat-defining species, and species composition of the community, are within reference conditions ensuring the long term maintenance of the Habitat	**State** No human induced significant deviation of population abundance and density from reference conditions[2] The species composition shows a positive trends towards reference condition over an increasing proportion of the habitat(for recovering habitats)

[1] The meeting proposed that this indicator should refer to natural distributional range instead of potential distributional range

[2] Reference conditions should be defined for the habitats to be considered under EO1

Operational objective	Indicator	GES	Proposed Targets
1.1 Species distribution is maintained (marine mammals)	1.1.1 Distributional range	Monk Seal: Monk Seal is present along all Mediterranean coasts with suitable habitats for the species.	Monk Seal: The distribution of Monk Seal remains stable or expanding and the species is recolonizing areas with suitable habitats. **Pressure/Response:** Human activities[3] having the potential to exclude marine mammals from their natural habitat within their range area or to damage their habitat are regulated and controlled. Conservation measures implemented for the zones of importance for cetaceans Fisheries management measures that strongly mitigate the risk of incidental taking of monk seals and cetaceans during fishing operations are implemented.
1.2 Population size of selected species is maintained	1.2.1 Population abundance	The species population has abundance levels allowing to qualify to Least Concern Category of IUCN.[4]	**State** Populations recover towards natural levels.
	1.2.2 Population density	Monk Seal: Number of individuals by colony allows to achieve and maintain a favourable conservation status[5]	**State** Continual recovery of population density

[3] Seismic surveys, marine noise generating activities, fishing, maritime traffic, etc.

[4] A taxon is Least Concern when it has been evaluated and does not qualify for “Critically Endangered”, “Endangered”, “Vulnerable” or “Near Threatened”

[5] To be applied at local level and not at national scale

Operational objective	Indicator	GES	Proposed Targets
1.3 Population condition of selected species is maintained	1.3.1 Population demographic characteristics (e.g. body size or age class structure, sex ratio, fecundity rates, survival/ mortality rates)	Cetaceans: Species populations are in good condition: Low human induced mortality[6], balanced sex ratio and no decline in calf production Monk Seal: Species populations are in good condition: Low human induced mortality, appropriate pupping seasonality, high annual pup production, balanced reproductive rate and sex ratio	**State** Decreasing trends in human induced mortality **Pressure/Response** Cetaceans: Appropriate measure implemented to mitigate incidental catch, prey depletion and other human induced mortality Monk Seal: Appropriate measures implemented to mitigate direct killing and incidental catches and to preclude habitat destruction.
1.1 Species distribution is maintained (birds)	1.1.1 Distributional range	The species continues to occur in all their Mediterranean natural habitat	**State** No significant shrinkage in the population distribution in the Mediterranean in all indicator species, and for colonial-breeding seabirds (i.e., most species in the Mediterranean): New colonies are established and the population is encouraged to spread among several alternative breeding sites[7].

[6] Baseline data are required.

[7] This is recommended by the conservation plans of some taxa (Audouin's G, Lesser-crested T)

Operational objective	Indicator	GES	Proposed Targets
1.2 Population size of selected species is maintained	1.2.1 Population abundance	The species population has abundance levels allowing to qualify to Least Concern Category of IUCN.[8]	No human induced decrease in population abundance. Population recovers towards natural levels where depleted. The total number of individuals is sparse enough in different spots.
	1.2.2 Population density	Population density allows to achieve and maintain a favourable conservation status	**State** Continual recovery or maintenance of population density in enough different spots to allow resilience No decrease in population density in new/ recolonized critical habitat (for recovered populations)
1.3 Population condition of selected species is maintained	1.3.1 Population demographic characteristics (e.g. body size or age class structure, sex ratio, fecundity rates, survival/ mortality rates)	Species populations are in good conditions: Natural levels of breeding success & acceptable levels of survival of young and adult birds.	Population models point to long-term maintenance of populations of all taxa, particularly those with IUCN threatened status Incidental catch mortality is at negligible levels, particularly for species with IUCN threatened status.
1.1 Species distribution is maintained (reptiles)	1.1.1 Distributional range	The species continues to occur in all its natural range in the Mediterranean , including nesting, mating, feeding and wintering sites.	**State** Turtle distribution is not significantly affected by human activities Turtles continue to nest in all known nesting sites **Pressure/Response** Protection of nesting turtle nesting sites. Human activities[9] having the potential to exclude

[8] A taxon is Least Concern when it has been evaluated and does not qualify for “Critically Endangered”, “Endangered”, “Vulnerable” or “Near Threatened”

[9] Uncontrolled use of turtle nesting sites, fishing, maritime traffic, etc.

Operational objective	Indicator	GES	Proposed Targets
			marine turtles from their range area are regulated and controlled.
1.2 Population size of selected species is maintained	1.2.1 Population abundance	The population size allows to achieve and maintain a favourable conservation status	**State** No human induced decrease in population abundance Population recovers towards natural levels where depleted.
1.3 Population condition of selected species is maintained	1.3.1 Population demographic characteristics (e.g. body size or age class structure, sex ratio, fecundity rates, survival/ mortality rates)	Low mortality induced by incidental catch [10], Favourable sex ratio and no decline in hatching rates	**Response** Measures to mitigate incidental catches in turtles implemented
	1.4.2 Distributional pattern of certain coastal and marine habitats listed under SPA protocol	Increasing distribution of nesting sites	The species recovers historical nesting sites

[10] Baseline data are required.

Operational objective	Indicator	GES	Proposed Targets
2.1 Invasive non-indigenous species introductions are minimized	2.1.1. Spatial distribution, origin and population status (established vs. vagrant) of non-indigenous species	Introduction and spread of NIS linked to human activities[11] are minimised, in particular for potential IAS	**State** The number of species and abundance of IAS introduced as a result of human activities[12] is reduced. **Pressure/Response** - Improved management of the main human related pathways[13] and vectors of NIS introduction (Mediterranean Strategy for the management of ballast waters, early warning systems, etc.) - Action plans developed to address high risk NIS, should they appear in the Mediterranean.
	2.1.2 Trends in the abundance of introduced species, notably in risk areas	Decreasing abundance of introduced NIS in risk areas	**State** Abundance of NIS introduced by human activities[14] is reduced to levels giving no detectable impact
2.2. The impact of non-indigenous particularly invasive species on ecosystems is limited	2.2.1 Ecosystem impacts of particularly invasive species	No decrease in native species abundance, no decline of habitats and no change in community structure that have been generated by IAS via competition, predation or any other direct or indirect effect.	**Pressure/Response** Impacts of NIS reduced to the feasible minimum
	2.2.2 Ratio between non-indigenous invasive species and	Stable or decreasing proportion of NIS in the different habitats	**State** To be set upon species choice and their related impact degree of the invasive upon the

[11] Excluding introduction through the Suez Canal

[12] Excluding introduction through the Suez Canal

[13] Excluding introduction through the Suez Canal

[14] Excluding introduction through the Suez Canal

Operational objective	Indicator	GES	Proposed Targets
	native species in some well-studied taxonomic groups		indigenous ones, taking into account the role of Climate Change in accelerating the establishment of NIS populations.
5.1 Human introduction of nutrients in the marine environment is not conducive to eutrophication	5.1.1 Concentration of key nutrients in the water column[15]	Concentrations of nutrients in the euphotic layer are in line with prevailing physiographic, geographic and climate conditions	**State** 1. Reference nutrients concentrations according to the local hydrological, chemical and morphological characteristics of the un-impacted marine region [16] 2. Decreasing trend of nutrients concentrations in water column of human impacted areas, statistically defined
			Pressure 1. Reduction of BOD emissions from land based sources 2. Reduction of nutrients emissions from land based sources
	Concentrations of nutrients in the euphoticlayer are in line with prevailing physiographic, geographic and climate conditions	Natural ratios of nutrients are kept	

[15] Indicators in bold have been selected for agreement at COP18 (Istanbul, December 2013) mainly for data availability

[16] Thresholds to be set in the future, subject to decision of Contracting Parties

Operational objective	Indicator	GES	Proposed Targets
5.2 Direct effects of nutrient over-enrichment are prevented	5.2.1 Chlorophyll-a concentration in the water column	Natural levels of algal biomass in line with prevailing physiographic, geographic and climate conditions	**State** 1. Chl-a concentrations in high-risk areas below thresholds[17] 2. Decreasing trend in chl-a concentrations in high risk areas affected by human activities
	5.2.2 Water transparency where relevant	Clear water in line with prevailing physiographic, geographic and climate conditions	**State** 1. Secchi disk depth above threshold in risk areas 2. Increasing trend of transparency in areas impacted by human activities
5.3 Indirect effects of nutrient over-enrichment are prevented	5.3.1 Dissolved oxygen near the bottom, i.e. changes due to increased organic matter decomposition, and size of the area concerned*[18]	Bottom water fully oxygenated in line with prevailing physiographic, geographic and climate conditions	**State** 1. Dissolved oxygen concentrations in high-risk areas above local threshold[19] 2. Increasing trend in dissolved oxygen concentrations in areas impacted by human activities

[17] Thresholds to be set in the future, subject to decision of Contracting Parties

[18] Monitoring to be carried out where appropriate

[19] Thresholds to be set in the future, subject to decision of Contracting Parties

Operational objective	Indicator	GES	Proposed Targets
7.1 Impacts to the marine and coastal ecosystem induced by climate variability and/or climate change are minimized	7.1.1 Large scale changes in circulation patterns, temperature, pH, and salinity distribution	Ecosystems healthy enough to cope with the expected climate change and existing and future anthropogenic impacts	Anthropogenic additional impacts which may alter ecosystems' adaptive capacity are reduced in order to maintain and improve ecosystem health
	7.1.2 Long term changes in sea level		
7.2 Alterations due to permanent constructions on the coast and watersheds, marine installations and seafloor anchored structures are minimized	7.2.1 Impact on the circulation caused by the presence of structures	With new structures in place, nearshore wave- and current patterns maintain as natural as possible.	Marine and shore based structures planned, constructed and operated in a way to maintain the natural wave and current pattern as much as possible
	7.2.2 Location and extent of the habitats impacted directly by the alterations and/or the circulation changes induced by them: footprints of impacting structures	Negative impacts are minimal with no influence on the larger scale coastal and marine system	Planning of structures takes into account all possible mitigation measures in order to minimize the impact on coastal and marine ecosystem and its services integrity and cultural/historic assets
7.3 Impacts of alterations due to changes in freshwater flow from watersheds, seawater inundation and coastal freatic intrusion, brine input from desalination plants and seawater intake and outlet are minimized	7.3.3 Changes in key species distribution due to the effects of seawater intake and outlet	Water circulation in coastal and marine habitats, and changes in the levels of salinity and temperature are within thresholds, to maintain natural/ecological processes	Site specific tolerable limits of key species in immediate proximity of seawater intake and outlet structures are considered while planning, constructing and operating such infrastructure

Operational objective	Indicator	GES	Proposed Targets
8.1 The natural dynamic nature of coastlines is respected and coastal areas are in good condition	8.1.1 Areal extent of coastal erosion and coastline instability	Coastal resilience maintained and improved; and coastal uses made adaptable to coastal erosion	Impacts of coastal erosion caused by man made factors anticipated and prevented through coastal erosion management allowing for natural fluctuation of the coast and minimizing coastal erosion risk
	8.1.2 Changes in sediment dynamics along the coastline	Long term sediment dynamics is within natural patterns	Disturbance in sediment inflows reduced through improved Integrated River Basin Management and coastal sand management practices
	8.1.4 Length of coastline subject to physical disturbance due to the influence of manmade structures	Physical disturbance to sandy coastal areas induced by human activities should be minimized	Negative impacts of human activities on sandy coastal areas are minimized through appropriate management measures
9.1 Concentration of priority[20] contaminants is kept within acceptable limits and does not increase	9.1.1 Concentration of key harmful contaminants[21] in biota, sediment or water	Level of pollution effects are below a determined threshold defined for the area and species	**State** Concentrations of specific contaminants below EACs or below reference concentrations[22] Decreasing trend in contaminants concentrations in sediment and biota from human impacted areas, statistically defined **Pressure** Reduction of

[20] Priority contaminants as listed under the Barcelona Convention and LBS Protocol

[21] Use for further work on reference conditions ERL for sediments taking into account specifics of the Mediterranean

[22] Thresholds to be set in the future, subject to decision of Contracting Parties

Operational objective	Indicator	GES	Proposed Targets
			contaminants emissions from land based sources
9.2 Effects of released contaminants are minimized	9.2.1 Level of pollution effects of key contaminants where a cause and effect relationship has been established	Concentrations of contaminants are not giving rise to pollution effects	**State** Contaminants effects below threshold[23]
9.3 Acute pollution events are prevented and their impacts are minimized	9.3.1 Occurrence, origin (where possible), extent of significant acute pollution events (e.g. slicks from oil, oil products and hazardous substances) and their impact on biota affected by this pollution	Non-occurrence of pollution events	**State** 1. Decreasing trends in the concentrations of oil in the water column and the occurrence of tar balls on the beach **Pressure** 1. Decreasing trend in the occurrences of pollution events 2. Decreasing trend in the operational releases of oil and other contaminants from coastal, maritime and off-shore activities
9.4 Levels of known harmful contaminants in major types of seafood do not exceed established standards	9.4.1 Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels in commonly consumed seafood[24]	Concentrations of contaminants are within the regulatory limits for consumption by humans	**State** Concentrations of contaminants are within the regulatory limits set by legislation

[23] Thresholds to be set in the future, subject to decision of Contracting Parties

[24] Traceability of the origin of seafood sampled should be ensured

Operational objective	Indicator	GES	Proposed Targets
	9.4.2 Frequency that regulatory levels of contaminants are exceeded	No regulatory levels of contaminants in seafood are exceeded	**State** Decreasing trend in the frequency of cases of seafood samples above regulatory limits for contaminants
9.5 Water quality in bathing waters and other recreational areas does not undermine human health	9.5.1 Percentage of intestinal enterococci concentration measurements within established standards	Concentrations of intestinal enterococci are within established standards	**State** Increasing trend in the percentage of intestinal enterococci concentrations within established standards
	9.5.2 Occurrence of Harmful Algal Blooms within bathing and recreational areas	No occurrence of HABs	**State** Decreasing trend in the frequency of the occurrence of HABs
10.1 The impacts related to properties and quantities of marine litter in the marine and coastal environment are minimized	10.1.1 Trends in the amount of litter washed ashore and/or deposited on coastlines, including analysis of its composition, spatial distribution and, where possible, source	Number of marine litter items on the coastline do not have negative impacts on human health, marine life and ecosystem services	**State** Decreasing trend in the number of marine litter items deposited on the coast

	10.1.2 Trends in amounts of litter in the water column, including microplastics, and on the seafloor	Number of marine litter items in the water surface and the seafloor do not have negative impacts on human health, marine life, ecosystem services and do not create risk to navigation	**State** Decreasing trend in the number of marine litter items in the water surface and the seafloor
10.2 Impacts of litter on marine life are controlled to the maximum extent practicable	10.2.1 Trends in the amount of litter ingested by or entangling marine organisms, especially mammals, marine birds and turtles[25]		Decreasing trend in the cases of entanglement or/and a decreasing trend in the stomach content of the sentinel species.

In relation to EO1:

Please note that the second COR-GEST group meeting (Rabat, 2 July, 2013) recommended for the following points:

<u>Habitats to be considered</u>:

Biocoenosis of infralittoral algae (facies with vermetids or trottoir),

Hard beds associated with photophilic algae,

Meadows of the sea grass Posidonia oceanica,

Hard beds associated with Coralligenous biocenosis and semi dark caves,

Biocoenosis of shelf-edge detritic bottoms (facies with *Leptometra phalangium*),

Biocoenosis of deep-sea corals,

Seeps and biocoenosis of bathyal muds (facies with *Isidella elongata*).

[25] Marine mammals, marine birds and turtles included in the regional action plans of the SPA/BD Protocol.

Natural monuments listed by the Marine Vegetation Action Plan[26]: Barrier reefs of Posidonia, organogenic surface formations, terraces (platforms with vermitids covered by soft algae) and certain Cystoseira belts.

Upwelling areas, fronts and gyres.

This is an indicative list, the meeting recommended that the habitats to be considered should be identified in the integrated monitoring for each of the four Mediterranean subregions.

Marine mammal Species to be considered (in alphabetical order):

- *Balaenoptera physalus*	Fin whale
- *Delphinus delphis*	Common dolphin
- *Globicephala melas*	Long-finned pilot whale
- *Monachus monachus*	Monk Seal
- *Physeter macrocephalus*	Sperm whale
- *Stenella coeruleoalba*	Striped dolphin
- *Tursiops truncatus*	Bottlenose dolphin

Bird species to be considered: (in alphabetical order):

Calonectris diomedea (Scopoli, 1769)

Chroicocephalus genei (Breme, 1839)

Hydrobates pelagicus (Linnaeus, 1758)

Larus audouinii (Payraudeau, 1826)

Phalacrocorax aristotelis (Linnaeus, 1761)

Puffinus mauretanicus (Lowe, PR, 1921)

Puffinus yelkouan (Brünnich, 1764)

Sterna bengalensis (Lesson, 1831)

Sterna nilotica (Gmelin, JF, 1789)

Sterna sandvicensis (Latham, 1878)

[26] The Action Plan for the conservation of marine vegetation in the Mediterranean Sea has been adopted by the Eleventh Ordinary meeting of the Contracting Parties to the Barcelona Convention and its Protocols (Malta, 27-30 October 1999).

Additional Note of the Secretariat:

Considering the landward limit of the coastal zone covered by the ICZM Protocol, terrestrial habitats/species would need to be considered under the EcAp process. To this end the lists of species in the Annexes to the SPA/BD Protocol and the Reference List of habitats adopted by the Parties should be amended to become further meaningful for the coastal terrestrial habitats/species. This would ensure that the two protocols apply the ecosystem approach in an integrated manner.

Similarly, for the coastal ecosystems and landscapes related to EO8 and in particular for to land-use change, landscape types and fragmentation of habitats additional technical and scientific efforts should be made to be able to implement the EcAp in its entire scope as required by the ICZM Protocol in Articles 3, 5 (d), 6 (c), 10, 11 and 18.2.

Annex II

Process and principles of the UNEP MAP Integrated Monitoring Programme and the UNEP MAP Integrated Assessment Policy

A. Overarching principles of the UNEP MAP Integrated Monitoring Programme

Adequacy (overarching principle 1)

The Integrated Monitoring Programme should be able to provide all the data needed to assess whether GES has been achieved or maintained, the distance from and progress towards GES, and progress towards achieving environmental targets and should provide the data to calculate/estimate the relevant criteria and indicators adopted in the ECAP process.

Coordination and coherence (overarching principle 2)

The Integrated Monitoring Programme should, as much as possible follow agreed monitoring approaches. Ideally, member states would monitor a common regional set of elements, following agreed frequencies, comparable spatial resolution and agreed sampling methods in a coordinated manner. Joint specifications and use of other observation data in the region, such as satellite imagery, also could contribute to coordination. Ultimately, coherent monitoring programmes will facilitate the application of coherent mitigation measures so that measures taken by one Member State would facilitate and not prevent the achievement of GES in other Member States.

Data architecture and interoperability (overarching principle 3)

A coherent integrated monitoring programme would ideally result in the collection of data for a regional set of common parameters. In order to achieve common datasets and interoperability of data, data sources will need to ensure that they are capable to deliver data using the same interface format. To achieve common data sets and to avoid duplication of work, existing databases and data flows at international or regional level should be taken into account, which already provide a pool of regionally interoperable data.

The concept of adaptive monitoring programme (overarching principle 4)

New or previously unknown pressures, evolution of socioeconomic activities worsening pressures may emerge in a marine and coastal areas and/or existing pressures may decrease or be eliminated. The frequency, intensity and the whole of monitoring programmes may need adjustment to better respond to a changing situation. The ECAP implementation follows 6 years cycles but more frequent adjustment of monitoring programmes may be needed.

Consideration of the differences in scientific understanding for each Ecological Objective (overarching principle 5).

It is widely acknowledged that for some ecological objectives the level of scientific knowledge is more developed than for others. E.g. contaminants and eutrophication are already addressed, to some extent, by the existing regulations and some specifications exist on what GES is for these ecological objectives. For some ecological objectives such as noise and coastal ecosystems and landscapes much less knowledge exists and they have not been previously addressed or they have been addressed in a different context. The limited knowledge for some ecological objectives should trigger specific monitoring efforts, starting from investigative monitoring that will be built on the state of the art scientific developments.

The use of risk-based approach and where appropriate the precautionary principle (overarching principle 6)

Resources are never infinite and are usually very limited. In order to achieve the successful implementation of the EcAp Roadmap in a cost-efficient manner, areas that are under higher pressures and the biota that are known to be more sensitive should be identified, should be monitored more frequently. Furthermore, increased monitoring effort may be needed in areas that are close to the boundary of GES in order to increase confidence in assessment and, consequently, in the decision to take measures.

The precautionary principle requires that measures should be taken even in areas where there is uncertainty if the status is good or less than good. This uncertainty may be due to limited understanding of what GES is for certain areas. The implications of the precautionary principle in monitoring are that these areas of uncertain status may require research.

B. Overarching principles of the UNEP MAP Integrated Assessment Policy

Consistency (Overarching Principle 1)

The Integrated Assessment Policy should achieve:

- assessment methodologies and assessment products, including socioeconomic aspects are consistent across the Mediterranean;
- environmental targets and assessment products are mutually compatible;
- monitoring methods are consistent so as to facilitate comparability of monitoring results, and by doing so,
- relevant trans boundary impacts and trans boundary features are taken into account;
- assessment results become a principal tool for evaluating the status of the marine and coastal environment, the achievement (or not) of the GES and targets agreed, as well as the effectiveness of implementation of the regional plans and other adopted measures.

EcAp as a framework for the Integrated Assessment (Overarching Principle 2)

The designing and establishing an Integrated Policy of Assessments should be for all of UNEP/MAP policies and Action Plans, based on the agreed ECAP ecological objectives and respective criteria, indicators and what constitutes Good Environmental Status;

Cyclical assessment (Overarching Principle 3)

The Integrated Policy of Assessments should use a common tentative time frame and assessment products and the identification of synergies to be established between the different policies and Action Plans in order to periodically assess the status of the Mediterranean environment, ensure efficient science-policy interface and meet the relevant ecological objectives and progress in their implementation in a coherent and consistent manner with the EcAp cycle.

Co-operation of Contracting Parties (Overarching Principle 4)

Additionally to a regional level Integrated Monitoring and Assessment Programme, it will be key for the Contracting Parties to establish trans-boundary and sub-regional cooperations, both in order to ensure cost-efficiency and adequacy of data-collection and assessment. This will require joint cooperation arrangements for sub-regional assessments as need to be,

including the development of scientific assessment and quality assurance tools and setting out the necessary details of cooperation between Contracting Parties on (monitoring and) assessment requirements.

C. Process for achieving a MAP Integrated Monitoring Programme and Assessment Programme by 2015

Following the EcAp Roadmap Contracting Parties have committed to achieve good environmental status by 2020, which will require ways to measure the status of the Mediterranean waters in a qualitative manner.

In order to do so other Regional Seas are carrying out periodic Quality Status Reports, building on an integrated monitoring and assessment activities.

The following outlined process and timeline (included in an integrated manner in the updated EcAp timeline) thus aims the achievement of an Integrated Monitoring and Assessment Programme by COP19 in 2015 and the development of a Quality Status Report (QSR), covering all agreed Ecological Objectives by 2023. The QSR will be developed in close consultation with the Contracting Parties and the scientific community, using the existing governance structure

Building on the achievements of the 2011 Integrated Assessment Report, ongoing monitoring and assessment work in UNEP/MAP, as well as on the common set of GES and targets for the 11 Environmental objectives, on the ongoing socio-economic work, next to the principles described above, in points A-B, the achievement of the overall aims need to be gradual, with the following major steps:

1- Biennium 2014-2015: Essential Technical Groundwork

- Biennium 2014-2015 is dedicated for the essential technical groundwork, such as the development of Monitoring and Assessment Guidelines (methodological, technical issues, scope, feasibility, quality control, cost-effectiveness, common indicators) with the full involvement of national experts and the scientific community and all UNEP MAP components.

- Regarding monitoring, it needs to be noted, that initial assessment of country capacities will be key for the later 2016-2017 initial implementation and this activity should already start as well in 2014-2015;

- Both regarding assessment and monitoring it needs to be noted that data availability differs greatly in relation to the different EOs;

- For monitoring a practical way to address this issue is the differentiation between monitoring activities to start with (investigative, ie. more data gathering or operational) in 2016, with also enabling adaptation of the programme after the initial phase;

- For the integrated assessment, assessment fact sheets provide an opportunity to assess data on a biannual basis in relation to specific EOs (starting 2013-2015), with focusing on EOs, where data is mature enough, with the overall aim to cover all EOs by 2021 on a biannual basis (fact sheets covering new EOs, where data has not been available before and updating fact sheets, which cover areas where new data, developments makes this necessary), with the overall aim to be able to produce the QSR by the 3rd EcAp cycle in 2023;

- The Barcelona Convention/MAP data management system needs to be strengthened in order for functioning Integrated Monitoring and Assessment Programme;

2. Biennium 2016-2017: Start of new EcAp cycle and implementation

- From 2016 onwards, as the new EcAp cycle starts, both the implementation of measures and integrated monitoring and assessment starts (with the next biannual assessment fact sheets being prepared as well by 2017);
- The integrated monitoring and assessment programme is to run on a 2 year initial basis in order to assess the effectiveness of the programmes, perform further gap analysis and establish needs for adaptation;
- The Conference of the Parties will address co-operation and coordination needs to cover gaps still existing

3. Biennium 2018-2019: Continue implementation, address gaps

- In the biennium 2018-2019 there will be a need for further evaluation activities, addressing gaps, together with continued implementation and capacity building.
- By the latter part of 2018 some initial data will be available, which would provide information able to feed into further Assessment Sheets (developments and updates).
- COP 21 (in 2019) will be in the position to assess the achievements of the initial monitoring and agree on adaptation needs as well as specific cyle for the next phase of the Integrated Monitoring (and assessment) Programme.

4. Biennium 2020-2021

- In the Biennium 2020-2021,the key task will be to evaluate the state of achievement of GES in the Mediterranean region (noting overall aim of achieving GES in the region by 2020);
- By COP22 (in 2021) Assessment Fact Sheets should be covering all agreed Ecological Objectives, serving as a good base for the preparation of the Quality Status Report by 2023.

CYCLES IN AN INTEGRATED MANNER:

2016-2021: Second Ecosystem Approach(EcAp) cycle under the Barcelona Convention

2016-2021: First EcAp monitoring cycle in the Mediterranean (with 2016-2019 initial cycle, after which possible adaptation)

2015-2017-2019-2021: Assessment Fact Sheets (updating the first Initial Assessment), by 2021- all EOs covered by Fact Sheets and with 2nd State of Environment Report in 2017

2023: First Mediterranean Quality Status Report, after which following 6 year cycle (to be determined by parties)

MSFD TIMELINE KEY STEPS:

2014-2015: Monitoring Programme finalised for implementation (2014), progress report on marine protected areas (2014); assessment report on monitoring programmes (2015), programme of measures established (end of 2015);

2016-2017: Entry into operation programmes of measures (2017), draft review of initial assessment, set of characteristics of GES and comprehensive set of environmental targets and associated indicators for public consultation

2018-2019: Brief Interim Progress Report within 3 years of each programme of measures

2020-2021: Achieving GES (2020), assessing it and new cycle (possible review of MSFD key elements)

Please see for further details on the timeline of this process Table 1 of Annex III of this decision.

ANNEX III

Timeline to implement the next steps of the Ecosystem Approach Roadmap

Table 1. EcApTimeline for 2014-2017

Activity	Details	Time
Integrated Monitoring and Assessment Programme	Agreement on principles and process of an Integrated Monitoring Programme and of an Integrated Assessment Policy;	by COP 18
	Additional, integrated COR GEST meetings, to give recommendations on EO specific monitoring and assessment needs, next to further necessary specifications in relation to targets/common indicators;	By April 2014
	Coordination and consultation within MAP system and with other regional bodies, based on which Secretariat to prepare draft Monitoring and Assessment Methodological Guidance (to be discussed in Correspondence Groups on Monitoring)	By April 2014
	Organization of Correspondence Group on Monitoring (COR MON) meetings (Three Clusters), to address methodology, scope, assessment follow-up and related technical details.	First round of consultations May-June 2014, second round Sept-December 2014, third round February-May 2015
	Monitoring and assessment country capacities are assessed by the Secretariat	2015-2017
	Secretariat prepares Fact Sheets on specific EOs, issues, to update the Integrated Assessment Report	April 2015
	Integrated Monitoring and Assessment Programme to be discussed by EcAp Cor Group	May/June 2015
	Integrated Monitoring and Assessment Programme agereed on Updated Integrated Assessment Report endorsed	COP19
	New EcAp Cycle starts	
	Integrated Monitoring starts in an initial phase (cycle: 2016-2022, initial phase until 2019)	January 2016

Activity	Details	Time
	Secretariat prepares draft Second State of Environment Report draft based on Fact Sheet updates and discusses it, together with other assessment related matters, in COR-MON Groups	By Feb 2017
	Public Consultation of the Second State of Environment Report	Feb-May 2017
	EcAp CorGroup to discuss the Second State of Environment Report and outcomes of public consultation	May-July 2017
	Endorsement of the Second State of Environment Report (and possibly recommendations adopted for MED QSR 2023)	By Sept 2017 COP20
Economic and Social Analysis	Regional Scale Analysis	Draft December 2013, final July 2014
	Guidelines for National Analysis	Draft December 2013, Final by July 2014
	Correspondence Group on Economic and Social Analysis (COR ESA)	April 2013, October 2013 (online), May 2014
The development of Good Environmental Status and Targets	Approves Integrated List of GES and targets	By COP18 (December 2013)
	Additional Integrated COR GEST Meetings, to give recommendations on monitoring and assessment needs to COR MONs in relation to the different EOs/GES (address specific requirements regarding scope, interlinkages of targets/indicators, based on data-availability investigative or operational monitoring needs, as well as environmental assessment criteria, background/reference conditions, threshold values, along with more elaboration of GES)	By April 2014
Developing and reviewing relevant measures for implementation of EcAp	Secretariat's gap analysis on existing measures and specific analysis by Plan Bleu on socioeconomic impacts of possible measure, in order to develop an "a la carte" menu of additional possible measures and transboundary cooperation options on further implementation of EcAp in the Mediterranean region and in its sub-regions	By February 2015
	EcAp Cor Group to discuss the Secretariat's Analysis and agree on a flexible, initial list of possible additional measures, building on current	By May/June 2015

Activity	Details	Time
	ones (Framework for the Programmes of Measures)	
	Agreement on a Menu a la Carte for future EcAp Programmes of Measures	COP19
	Next EcAp cycle starts	*2016*
	Secretariat capacity-building activities on implementation of measures, as well as facilitating trans-boundary cooperation	2016-2017
	Secretariat to prepare report on initial implementation of the EcAp programmes of measures/work of the Framework of Programmes of Measures	By July 2017
	EcAp CorGroup to review implementation efforts, gaps in EcAp programmes of measures	By Sept 2017
	Agreement on Programmes of Measures for further EcAp implementation	COP20
Public Awareness-raising	Secretariat to prepare guidance on public awareness raising/communication strategy for EcAp	By December 2016
	Public consultation of Second State of Environment Report	May-July 2017
	EcAp Cor Group to review public awareness raising process/communication strategy	By Sept 2017
Pilot implementation for testing the indicators and targets	Identification of site Initiation of the process, inception meeting, defining workplan, implementation.	In 2014-2015 Biennium

Annex IV

Data-sharing principles of the Barcelona Convention/MAP

Background

Data sharing is an indispensable mean to achieve better policies in areas such as environment and other public-interest priorities. By improving data sharing and the subsequent continuous availability of that information, researchers and policy-makers can react with timely and well-informed decision-making to national, regional or global issues of governmental and societal concern.

It is important to follow the major global and regional trends with regard to the establishment of environmental information systems based on data sharing principles, taking into account relevant existing systems, such as those developed and operated by UNEP, GEO/GEOSS and EC/EEA, as appropriate.

In 2005, the 15th CP meeting addressed in details the need for establishing a coherent overall MAP information system as a tool to support decision making at regional and national levels, promote access to information and public participation in accordance with Article 12 of the Barcelona Convention.

Since 2005, substantive progress had been achieved with regard to creation of information system infrastructures for several MAP components, a process that is under continuous development and strengthening. The need for establishing a policy to manage information and knowledge generated within MAP was already subject of discussion with parties in the case of the MEDPOL information system and MAP reporting system.

The establishment of a shared MAP information system data-sharing principles on the basis of which it should operate, including its interaction with the MAP Components information system as well as a UNEP MAP data/information sharing policy are also key for the application of the Ecosystem Approach **(EcAp**) and will need to be further specified, in light of the technical needs of the future Integrated Monitoring and Assessment Programme of the Barcelona Convention.

UNEP MAP Data-Sharing Principles

The following principles about the handling of data at Barcelona Convention/MAP aim to ensure that data are handled in a consistent and transparent manner, as follows**:**

1. **the Shared Environmental Information System (SEIS):**
    - Information should be managed as close as possible to its source;
    - Information should be collected once, and shared with others for many purposes;
    - Information should be readily available to public authorities and enable them to easily fulfill their legal reporting obligations;
    - Information should be readily accessible to end-users, primarily public authorities at all levels from local to regional, to enable them to assess in a timely fashion the state of the environment and the effectiveness of their policies, and to design new policy;
    - Information should also be accessible to enable end-users, both public authorities and citizens, to make comparisons at the appropriate geographical scale (e.g. countries, cities, catchments areas) and to participate meaningfully in the development and implementation of environmental policy;

- Information should be fully available to the general public, after due consideration of the appropriate level of aggregation and subject to appropriate confidentiality constraints, and at national level in the relevant national language(s); and;
- Information sharing and processing should be supported through common, free open source software tools.

2. **the Group on Earth Observations (GEO), which has defined the following Data Sharing Principles:**
   - there will be full and open exchange of data, metadata and products shared within GEOSS, recognizing relevant international instruments and national policies and legislation;
   - all shared data, metadata and products will be made available with minimum time delay and at minimum cost;
   - all shared data, metadata and products being free of charge or no more than cost of reproduction will be encouraged for research and education.

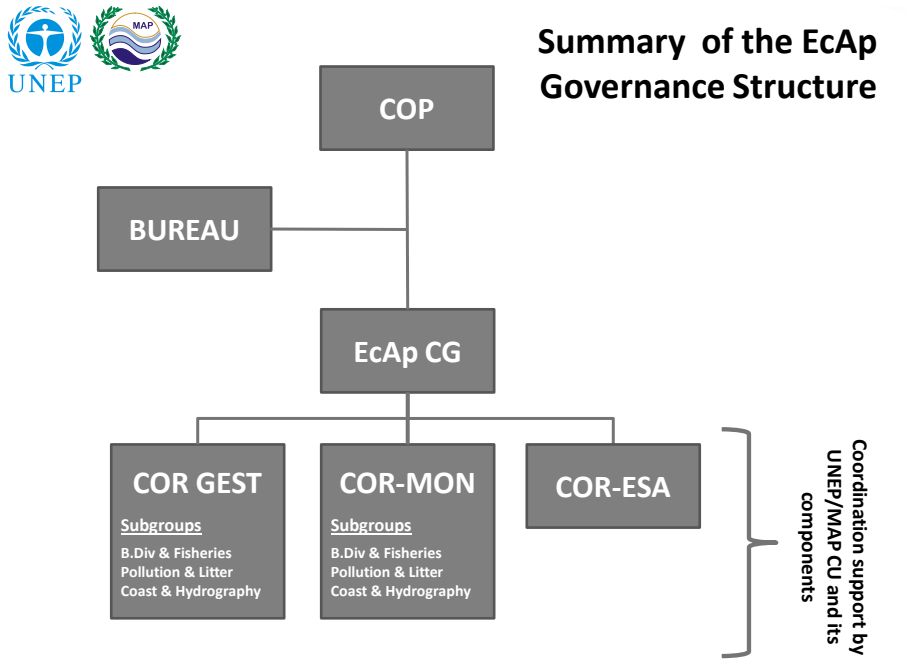
3. **The Global Monitoring for Environment and Security (GMES), which establishes a full, open and free data policy.**

With noting, that the objectives of these data principles are to support, promote and enable the EcAp implementation process:

a) full, and open access to all kinds of data, metadata and services;
b) where possible, recognizing and respecting the national policies and legislation and the variety of licensings and intellectual property;
c) to share data, metadata and services available with minimum time delay and free of charge or no more than cost of reproduction;
d) the use, re-use and re-combination of data from different sources in different frameworks and media than those for which they were originally commissioned;
e) the protection of the integrity, transparency, and traceability in environmental data, analysis and forecasts;
f) the implementation of SEIS, GMES and GEOSS data sharing principles.

Annex V

EcAp Governance Structure



The established governance structure of the Ecosystem Approach (**EcAp**), in accordance with IG.20/4 is as follows:

The EcAp Coordination Group (**EcAp CG**) integrates and gives guidance to the work under the Barcelona Convention:

a) On the delivery of the ecosystem approach, making sure that all elements for its implementation are taken into account, weighting of priorities and resource implications; and

b) Coordinating UNEP/MAP's facilitation role, in support of Contracting Parties in their implementation of EcAp.

Three Correspondence Groups are formed in the process of application of EcAp in the Mediterranean and to support EcAP Coordination Group:

1. The Correspondence Group on GES and Targets (**COR GEST**) composed of national experts designated by the Contracting Parties, and coordinated by the UNEP/MAP components and the Coordinating Unit, works to ensure efficient coverage and in-depth discussions and analysis of all Ecological Objectives (**EO**s) in 3 clusters: 1) Pollution and litter (EOs 5, 9, 10 and 11); 2) Biodiversity and Fisheries (EOs 1, 2, 3, 4 and 6); and 3) Coast and Hydrography (EOs 7 and 8).

2. The Correspondence Group on Monitoring (**COR MON**) composed of national experts designated by the Contracting Parties, and coordinated by UNEP/MAP Coordinating Unit and MED POL, working to ensure efficient coverage and in-depth discussions and analysis regarding integrated monitoring and assessment, with reference to the

outcomes of CORGEST, in 3 clusters mirroring the COR GEST working arrangements.

3. The Correspondence Group on Economic and Social Analysis (**COR ESA**) is composed of national experts designated by the Contracting Parties and invited experts, and coordinated by UNEP/MAP Coordinating Unit and BP/RAC. It develops a socio economic analysis of marine ecosystems uses, focusing on priority sectors such as fisheries, aquaculture, maritime transport, recreational activities, and oil industry and offshore.

Annex VI

SAP BIO implementation: Priority Actions

Harmonising the SAPBIO with the Aichi Strategic Plan and the EcAp process requires that:

- the priority actions identified in SAPBIO be streamlined with the Aichi Strategic Goals and the eleven Mediterranean Ecological Objectives adopted by the Contracting Parties;
- the SAPBIO targets be reoriented to match those to be adopted by the Contracting Parties for the Ecological Objectives.

Most of the issues of relevance for the marine and coastal biodiversity covered by the Aichi Strategic Plan are also addressed by SAPBIO. However the compared analysis of both instruments shows that the following issues from the Aichi Strategic Plan deserve to be addressed by priority actions under SAPBIO:

- The economic value of services provided by the ecosystems and its mainstreaming into national policies. In this connection the Aichi Strategic Plan attaches great importance to awareness-creation amongst the decision-makers and recommends that awareness raising activities about the value of biodiversity and the services provided by the ecosystems be undertaken targeting high-level decision-makers, including governments and parliamentarians.

- The preservation of traditional knowledge and practices of local communities of relevance for the conservation and sustainable use of biodiversity. In this context Target 18 stipulates that, by 2020, such traditional practices should be respected and fully taken into account.

It is proposed that the SAPBIO be oriented during the period 2013-2020 towards achieving the five Strategic Goals of the Strategic Plan for Biodiversity 2011-2020 adopted within the framework of the CBD. The proposed Priority Actions presented in the following Table are grouped according to the proposed five Strategic Goals. They derive from both the Priority Action Categories I to VII of the SAPBIO (adopted in 2003) and the additional Priority Actions linked to climate change (adopted on November 2009) complemented/amended to adapt them to the Strategic Goals.

Three Priority Actions (items 9, 13 and 28 of the SAPBIO adopted in 2003) and 6 Priority Actions (items 2, 6, 7, 10, 13 and 14 of the SAPBIO climate change addendum adopted in 2009) were not inserted in the new updated version because already covered by similar Priority Action/s deriving from other initiatives or because already achieved.

Two Priority Actions (items 4 and 8 of the SAPBIO adopted in 2003) were maintained but updated according to new developments and countries implementation status.

In addition some of the Priority Actions deriving from the Aichi Strategic Plan, from the Mediterranean Ecological Objectives, from the Roadmap (Antalya 2012) and from the work done at Mediterranean level for the identification of the Ecologically or Biologically Significant Areas (EBSAs) were inserted in the Priority Actions for SAPBIO 2013-2020.

Proposed Strategic Goals and Priority Actions for consideration by relevant bodies for the period 2014-2020, in accordance with their competences and mandates for the conservation of Mediterranean marine and coastal biodiversity

Strategic Goals	Priority Actions
A. Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society	1) Establish a regional programme for the monitoring of the socio-economic impact of changes in biodiversity (III) 2) Mitigate the direct impact of international trade in endangered species (III) 3) Strengthen national capacities to integrate the values of biodiversity in strategies and planning processes for development and poverty alleviation at national and local levels. (A) 4) Identify subsidises and other incentive schemes that are harmful to or may have adverse effects on marine and coastal biodiversity and implement measures to have them gradually reduced, eliminated or phased out. The inventory is to be performed at the national level and also at the international or bilateral aid systems.(A) 5) Interlink Integrated Coastal Zone Management and Climate Change (CC) Impacts on Biodiversity (I-CC) 6) Set national bodies/committees, (I-CC), develop a regional programme of training/capacity building and a multilateral monitoring programme (II-CC) on issues dealing with CC and Biodiversity (I-CC)
B. Reduce the direct pressures on biodiversity and promote sustainable use	7) Assess the potential impact of climate change and rise in sea level on Mediterranean coastal and marine biodiversity (III) 8) Control and mitigate the introduction and spread of alien and invasive species (III) including a regional early warning system for the identification of invasive species as a tool for managing pathways -except Suez Canal- and preventing introduction and establishment of invasive species (A) 9) Control and mitigate coastal urbanization and construction of coastal infrastructure (III) 10) Control and mitigate the effect of changes in land use (III) 11) Promote eco- and soft tourism, control and mitigate impact of recreational activities (III) 12) Assess and elaborate strategies to prevent the environmental impact of sources of pollution (III) 13) Control and regulate aquaculture practices (III) 14) Develop pilot projects for the application to the marine environment of spatial planning of activities (aquaculture, tourism, fishing, etc.). (A) 15) Mitigate adverse impact of fisheries on biodiversity (III) 16) Ensure that: - commercially exploited fish and shellfish species are within biologically safe limits, exhibiting a population age and size distribution that is indicative of a healthy stock (EO3) - Sea-floor integrity is maintained, especially in sensitive substrates and priority benthic habitats (EO6 mod)

C. Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity	17) Update, coordinate and enforce legislation to conserve biodiversity (II) and reinforce legislation on coastal land use by adapting it to CC predictions (I-CC) 18) Develop actions to conserve threatened and endangered (coastal and marine) Mediterranean species (II) 19) Protect marine and coastal sites of particular interest (II), especially those containing underrepresented habitats and species in the existing MPA network (for instance, deep-sea habitats 20) Identify and designate new coastal and marine protected areas including in Ecologically or Biologically Significant Areas (EBSAs) 21) Encourage the implementation of the "Roadmap: Towards a comprehensive, ecologically representative, effectively connected and efficiently managed network of Mediterranean marine protected areas (MPAs) by 2020" (R)
D. Enhance the benefits to all from biodiversity and ecosystem services	22) Develop awareness raising programmes targeting the general public and decision makers on the economic value of biodiversity, ecosystem services (A) and protected areas (R) 23) Identify and implement measures for the preservation of knowledge, scientific information, innovations and practices of local communities relevant for the conservation and sustainable use of biodiversity and their customary use (A mod) 24) Promoting pilot actions to safeguard, rehabilitate and improve sustainability of artisanal fisheries (A mod) 25) Improve the integration of Marine and Coastal Protected Areas into their social and economic context (R) 26) Promote, in Marine and Coastal Protected Areas and in their surrounding zones, the development of new sustainable income generating opportunities for local populations taking into account MPA objectives and zoning (R)

E. Enhance implementation through participatory planning, knowledge management and capacity-building	27) Make a complete and integrated inventory using standardized methodologies (by sub-region) of Mediterranean coastal, wetland, and marine sensitive habitats (I-mod) and of more endangered sites and areas by CC in coastal and marine zones (II CC) 28) Establish monitoring programmes for endangered and threatened species and habitats (I- mod) and for species communities and habitats potentially affected by CC (I-CC mod) 29) Promote the adequate monitoring and survey of the effectiveness of marine and coastal protected areas (I) 30) Verify the suitability of the biological indicators already developed within the EcAp and European Directive on Marine Strategy to assess the ecological health of sensitive habitats and species, and to evaluate the effectiveness of management measures within SAPBIO(I mod) 31) Improve and coordinate research on biodiversity (IV) 32) Improve taxonomic expertise in the region (IV) 33) Coordinate and develop common tools to implement National Action Plans (NAPs) (V) 34) Facilitate the access to information for managers and decision-makers, as well as stakeholders and the general public (VI) 35) Promote public participation, within an integrated management scheme (VI) 36) Develop international collaboration in order to enhance regional public awareness (VII) 37) Organise coordinated Mediterranean-level campaigns focusing on specific regional biodiversity issues (addressed both to specific stakeholders and to the general public) (VII) 38) Prepare National CC and CC/Biodiversity Strategies and Action Plans (I-CC) 39) Implement a regional awareness raising programme on CC and Biodiversity (IV-CC).

(I) to (VII) indicate the Priority Actions deriving from the Categories I to VII of the SAPBIO adopted in 2003
(I-CC) to (IV-CC) indicate the Priority Actions deriving from the Categories I to IV of the SAPBIO addendum adopted in 2009
(A) indicates the Priority Actions deriving from the Aichi Strategic Plan
(EO) indicates the Priority Actions deriving from the Mediterranean Ecological Objectives
(R) indicates the Priority Actions deriving from "Roadmap: Towards a comprehensive, ecologically representative, effectively connected and efficiently managed network of Mediterranean marine protected areas (MPAs)
(mod) indicates modified

Annex VII

Socio-Economic Work Programme for the next biennium

Plan Bleu/RAC has contributed to the Initial Integrated Assessment of the Mediterranean Sea, by a section on "The economic value of sustainable benefits rendered by the Mediterranean marine ecosystems". This exploratory study proposes a first initial value of sustainable services rendered by the Mediterranean marine and coastal ecosystems for human well-being, while clarifying the exercise limitations.

Through an economic and social assessment (**ESA**) Contracting Parties are enabled to establish a common understanding and standards with regard to the analysis to be undertaken in link with the following steps of the EcAp's roadmap, e.g. consideration of socioeconomic effects of chosen targets; cost effectiveness analysis of measures, economic incentives to support Good Environmental Status (GES) and exceptions where costs are disproportionate.

Specific Objectives of the ESA work are:

- Prepare an economic and social analysis at regional and sub-regional scale of selected human activities using the Mediterranean Sea and its coastal zone, including the costs of degradation for human wealth in the absence of the implementation of the relevant actions plans and programmes of measures aiming to achieve or maintain GES (as indicated in the EcAp Roadmap, step 7).

- Develop Guidance document and Pilot cases for national ESA adapted to interested Mediterranean countries providing support for their own analysis.

Besides these operational objectives, the ESA work also includes coordination and facilitation of the work of the COR ESA Group.

It has to be noted, that the achievement or the maintenance of GES will require the development of relevant action plans and programmes at regional and national levels. Most of the measures to be enforced in order to achieve or maintain GES in national waters should be decided at the national level, what requires convincing national policy makers about the potential socioeconomic impacts and benefits of these measures, in terms of socioeconomic assessment of the uses of the coastal and marine ecosystems and cost of degradation at regional and national scale.

Beyond the regional ESA carried out within this action, it is important to encourage the Contracting Parties to perform their national ESA, in order to contribute at national level to the implementation of the EcAp overarching goal.

1. Timeline of the on-going and planned ESA work

Month/ Events	09/2012	04/2013	07/2013	10/2013	12/2013	05/2014	07/2014
Actions	Start date				18th COP		End Date
Regional scale analysis	Study start		Progress Report to be submitted to EcAp CG		Provisional report by COP 18		Final Report submitted to CP 19
Guidelines for National analysis		Start	Progress Report to be submitted to EcAp CG		Provisional report by COP 18		Final Report submitted to COP 19
COR ESA		COR ESA First meeting		Intermediate consultation before 18th COP		COR ESA Intermediate Meeting	COR ESA continuation submitted to COP19c
Related Work Pilot case ESA (In the framework of the ReGoKo project)			Selection of consultants	Start of the Pilot cases; Morocco, Tunisia, Lebanon		End of the Pilot case	Final reports on Pilot cases submitted to COP 19

2. Next steps

The next steps of the Economic and social analysis actions within EcAp beyond the activities provided by the timeline above would concern:

- Updating of socioeconomic analysis in form of Factsheets and preparation of the SOER 2017 for the next cycle.

- Assessment of the socioeconomic impacts of the coordinated programmes of measures.