

**Desk study results (tables), RSC interviews, MSCG survey, Selection of priority  
support options (tables/scores)  
ANNEX A**



**Annex A - Desk study results (tables), RSC interviews, MSCG survey, Selection of priority support options (tables/scores)**

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# 1 – Review of existing and planned RSC activities

The identification of what has been done or is being planned in each of the RSC is presented as tables below. There is one table for each of the RSC.

The table are structured around the following **key topics/themes**, which reflect the MSFD themes referred to in the Commission's proposal for the 7<sup>th</sup> EAP:

- Overarching activities, which group activities which relate to all themes
- Biodiversity (NIS, PA, Species)
- Eutrophication
- Contaminants
- Fisheries
- Marine Litter

and the following **priority areas**, defined in relation to the different components/obligations of the MSFD:

- (Initial) Assessment of the environmental status of the marine waters
- Setting priority objectives (GES/targets/indicators)
- Measures, action plan, etc.
- Monitoring
- Data collection & management (reporting)
- Stakeholder involvement
- Research
- Communication and cooperation specific to development and implementation of MSFD components

The tables are mainly based on available documents and constitute a high-level assessment of the current status of activities within each marine region. It provides the background against which to needs for support will be identified during the next steps of the project, the survey and interviews.

## 1.1. Black Sea Commission

### *List of abbreviations used*

ACCOBAMS	Agreement on the Conservation of Cetaceans in the Black Sea and Mediterranean
AG PMA	Advisory Group on Pollution Monitoring and Assessment
AG IDE	Advisory Group on Information and Data Exchange
AG CBD	Advisory Group on Conservation of Biological Diversity
BSC	Black Sea Commission
CITES	Convention on International Trade in Endangered Species
EEA	European Environment Agency
FOMLR	Advisory Group Fisheries and other Marine Living Resources
IMO	International Maritime Organization

### *Reference list*

#### **Strategic documents**

Implementation report of the Black Sea Strategic Action Plan (in preparation, 2015)

[BS-ML-SAP] – Draft Strategic Action Plan for the Management and Abatement of Marine Litter in the Black Sea Region (status unknown)

[LBD] – Draft Legally Binding Document (LBD) for fisheries and conservation of living resources of the Black Sea – It should be noted that this document is not yet legally binding as it has not yet been ratified by the parties.

[BS SAP] – 2009 Strategic Action Plan for the Rehabilitation and Protection of the Black Sea

[BLCP-SAP] – Strategic Action Plan for the Black Sea Biodiversity and Landscape Conservation Protocol, 2002

#### **Other documents**

State of the Environment Report (in preparation, 2015)

[BS WP] – 2012-2013 Work Programme of the Bucharest Commission

[2010 Final Diagnostic report] – Final “Diagnostic Report” to guide improvements to the regular reporting process on the state of the Black Sea environment, August 2010

[SoE] – State of Environment Report 2008

[TDA] – 2007 Transboundary Diagnostic Analysis Report

[2009 ML] – Marine Litter in the Black Sea Region, (UNEP/GPA, BSC) 2007

#### **Programmes**

[BSIMAP] – Black Sea Integrated Monitoring and Assessment Programme

[BSIS] – Black Sea Information System

**Projects (see Annex IV)**

[CoCoNet] – Towards Coast to Coast Networks of Marine Protected Areas

[CREAM] – Coordinating research in support of application of ecosystem approach to fisheries and management advice in the Mediterranean and Black Seas

[PERSEUS] – Policy-orientated marine Environmental Research for the Southern European Seas

[Seas-Era] – Towards Integrated Marine Research Strategy and Programmes

[SESAME] – Southern European Seas: Assessing and Modelling Ecosystem change

[EnviroGRIDS] – Building Capacity for a Black Sea Catchment Observation and Assessment System supporting Sustainable Development, 2009-2013

[MISIS] – MSFD Guiding Improvements in the Black Sea Integrated Monitoring System (MISIS project), 2012-2014.

[Baltic2Black] – Environmental monitoring of the Black Sea with focus on nutrient pollution (Baltic2Black), 2011-2013

[MONINFO] – Environmental Monitoring of the Black Sea Basin: Monitoring and Information Systems for Reducing Oil Pollution, 2009-2011

Improving Environmental Monitoring in the Black Sea, EU-UNDP, start 2013

Type of activities	Overarching	Biodiversity (NIS, MPA/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<i>(Initial) Assessment of the environmental status of the marine waters (Articles 5(2)(a) and 8 MSFD)</i>	<ul style="list-style-type: none"> <li>Main documents are the 2008 State of the Environment (SoE) Report and the 2010 Final Diagnostic Report identifying potential improvements to the regular reporting process on the state of the Black Sea Environment.</li> <li>The 2007 TDA concludes that the high priority transboundary problems in the Black Sea are eutrophication, the decline in living resources (mostly fish stocks), chemical pollution, biodiversity change, habitat destruction, alien species invasion, climate change and mesoscale variability of the circulation system.</li> <li>The third assessment of the Black Sea SoE is due in 2014</li> </ul>	<ul style="list-style-type: none"> <li>2008 SoE Report provides an overview of the state of biodiversity of the Black Sea.</li> <li>2009 BS SAP contains an overview of the state of biodiversity of the Black Sea.</li> <li>The Final "Diagnostic Report" (2010) which identifies potential improvements to the regular reporting process on the state of the Black Sea environment contains a general overview of the state of biodiversity of the Black Sea especially on the trends of arrival of Mediterranean species to the Black Sea.</li> <li>The 2009 Implementation report of BS SAP also contains information on the state of the marine environment of the Black Sea.</li> </ul>	<ul style="list-style-type: none"> <li>2008 SoE Report provides an overview of the state of eutrophication of the Black Sea. It concludes that commercially important marine living resources have been greatly affected by eutrophication.</li> <li>The 2010 Final "Diagnostic Report" which identifies potential improvements to the regular reporting process on the state of the Black Sea environment contains an overview of the state of data on eutrophication in the Black Sea.</li> </ul>	<ul style="list-style-type: none"> <li>2008 SoE Report provides an overview of the state of contaminants (including petroleum hydrocarbons, chlorinated pesticides, trace metals, radioactive pollution) of the Black Sea</li> <li>The Final "Diagnostic Report" which identifies potential improvements to the regular reporting process on the state of the Black Sea environment contains an overview of the state of available data on contaminants in the Black Sea.</li> </ul>	<ul style="list-style-type: none"> <li>2008 SoE Report provides an overview of the state of the fish fund and fish stock protection measures as an answer to overfishing</li> <li>The illegal fishing and use of destructive harvesting techniques, lack of cooperative management of fisheries in the Black Sea are recognized as the most significant threats for fish resources by the FOMLR AG (2007)</li> <li>The BS SAP contains long-term dynamics of catches of certain fish</li> <li>The Final "Diagnostic Report" (2010) contains an overview of the state of fisheries data and possible indicators for assessments.</li> </ul>	<ul style="list-style-type: none"> <li>"Marine Litter in the Black Sea region" report contains scientific information on BS ML.</li> <li>BS-ML-SAP contains scientific information on marine litter in the Black Sea region.</li> <li>The 2010 Final "Diagnostic Report" contains an overview of the status of data and information available on marine litter.</li> <li>The 2010 Final "Diagnostic Report" states that there is currently no data available for mid frequency impulsive sounds and continuous low frequency sound.</li> </ul>
<i>Setting priority objectives</i>	<ul style="list-style-type: none"> <li>The 2009 BS SAP sets four long-term</li> </ul>	<ul style="list-style-type: none"> <li>EcoQO 2: Conservation of Black Sea</li> </ul>	<ul style="list-style-type: none"> <li>EcoQO 3: Reduce eutrophication.</li> </ul>	<ul style="list-style-type: none"> <li>EcoQO 4: Ensure Good Water Quality for</li> </ul>	<ul style="list-style-type: none"> <li>The decline in fish stocks has been a high</li> </ul>	<ul style="list-style-type: none"> <li>The BSC intends to strengthen its work in</li> </ul>



Type of activities	Overarching	Biodiversity (NIS, MPA/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<i>(GES/targets/indicators)</i> <i>(Articles 5(2)(a), 9 and 10 MSFD)</i>	<p>ecosystem quality objectives for the Black Sea.</p> <ul style="list-style-type: none"> <li>Each EcoQO is accompanied by management targets, which are classified according to their priority. The specific targets have estimated target dates for completion in Annex. Also potential uncertainties for implementation are identified.</li> <li>For all MSFD descriptors, apart from marine litter, indicators have been identified in the BS SAP and in the 2010 Final Diagnostic Report.</li> </ul>	<p>Biodiversity and Habitats.</p> <ul style="list-style-type: none"> <li>For biodiversity, a high-priority target is the consideration of the establishment or expansion of MPAs.</li> <li>The 2009 BS SAP and the 2010 Final "Diagnostic Report" contain indicators in the area of biodiversity, including MPAs.</li> </ul>	<ul style="list-style-type: none"> <li>For example, a specific target for eutrophication is to improve the use of regulatory instruments for reducing pollution from agriculture.</li> <li>The 2009 BS SAP and the 2010 Final "Diagnostic Report" contain indicators in the area of eutrophication.</li> </ul>	<p>Human Health, Recreational Use and Aquatic Biota.</p> <ul style="list-style-type: none"> <li>The 2009 BS SAP and the 2010 Final "Diagnostic Report" contain indicators in the area of contaminants.</li> </ul>	<p>priority transboundary issue of the Black Sea to be handled (TDA 2007)</p> <ul style="list-style-type: none"> <li>EcoQO 1: Preserve commercial marine living resources.</li> <li>The 2009 BS SAP and the 2010 Final "Diagnostic Report" contain indicators in the area of fisheries.</li> </ul>	<p>regards to waste management in coastal areas (2009 BS SAP)</p> <ul style="list-style-type: none"> <li>EcoQO 2: Conservation of Black Sea Biodiversity and Habitats.</li> <li>For marine litter, a specific target is the amendment of national waste strategies and national coastal zone management plans with the aim of marine litter minimisation (2009 BS SAP).</li> <li>The Draft Strategic Plan on Marine Litter, BS-ML-SAP, contains principles, objectives and actions for the management of the ML problem in the region.</li> </ul>
<i>Measures, action plan, etc.</i> <i>(Articles 5(2)(b), 13, 14 and 15 MSFD)</i>	<ul style="list-style-type: none"> <li>The BS SAP requires Contracting Parties to develop or incorporate into existing national plans (Black Sea National Action Plans or National Environmental Action Plans) activities in accordance with the</li> </ul>	<ul style="list-style-type: none"> <li>A Strategic Action Plan (BLCP-SAP) was prepared for the implementation of the biodiversity Protocol, including targets/dates and a work plan. A List of Species of Black Sea Importance and a List of Species Whose</li> </ul>	<ul style="list-style-type: none"> <li>BS SAP calls for negotiation for a progressive series of stepwise reductions of nutrient loads, until agreed Black Sea water quality objectives in terms of eutrophication are met. Strategies for the</li> </ul>	<ul style="list-style-type: none"> <li>The BS SAP calls for negotiation of a progressive series of stepwise reductions of pollutants, until agreed Black Sea water quality objectives are met.</li> <li>On-going work on the</li> </ul>	<ul style="list-style-type: none"> <li>The LBD (which is not yet in force) requires parties to determine the size of its allowable catch. The LBD list gears and methods prohibited for fishing. The parties will establish the Black Sea Fisheries</li> </ul>	<ul style="list-style-type: none"> <li>The "Marine litter in the Black Sea region" report (2007) proposes a set of actions to deal with marine litter. A Marine Litter Action Plan, containing specific measures and timetables (BS-ML-SAP), has been drafted</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPA/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>targets agreed in the BS SAP 2009.</p> <ul style="list-style-type: none"> <li>The BLCF-SAP requires the CPs to provide for implementing measures in their national relevant strategies, plans &amp; programmes and related policies, where appropriate and necessary national action plans shall be developed.</li> </ul>	<p>Exploitation Shall Be Regulated, have been developed and are updated every five years.</p> <ul style="list-style-type: none"> <li>The AG CBD drafts recommendations and documents concerning regional policies, strategies and actions for conservation of biological diversity. Furthermore, it assists the CPs in implementing regionally relevant provisions of the CBD, CITES, ACCOBAMS.</li> <li>The LBD (not yet in force) requires parties to adopt measures for the sustainable management of the living resources; take measures to restore depleted population to a sustainable level and measures to prevent introduction of NIS</li> </ul>	<p>reduction of nutrients are to be adopted for the Danube River.</p>	<p>list of hot-spots in the Black Sea region.</p>	<p>Commission and Scientific and Technical Committee which will deal with issues listed in the LBD.</p>	<p>and widely used in the preparation of BS SAP 2009.</p> <ul style="list-style-type: none"> <li>BS-ML-SAP contains proposals for improvements in regards to marine litter.</li> </ul>
<p><i>Monitoring (Articles 5(2)(a) and 11 MSFD)</i></p>	<ul style="list-style-type: none"> <li>BSIMAP, the integrated monitoring and assessment programme for the Black Sea, requires the Contracting Parties to monitor various</li> </ul>	<ul style="list-style-type: none"> <li>BSIMAP deals specifically with the protection of biodiversity.</li> <li>Data on biodiversity collected in BSIS</li> </ul>	<ul style="list-style-type: none"> <li>BSIMAP deals specifically with eutrophication.</li> <li>Data on nutrients collected in BSIS.</li> <li>The Final "Diagnostic</li> </ul>	<ul style="list-style-type: none"> <li>BSIMAP deals specifically with contamination by hazardous substances.</li> <li>Data on contaminants and pollution in general collected in</li> </ul>	<ul style="list-style-type: none"> <li>BSIMAP deals specifically with the protection of fish stocks.</li> <li>Data on fisheries collected in BSIS</li> </ul>	<ul style="list-style-type: none"> <li>BSIMAP deals specifically with marine litter.</li> <li>The Final "Diagnostic Report" (2010) noted that marine litter is not part of regular</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPA/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>aspects and foresees a common methodology as well as the preparation of common reporting templates. It also foresees BS-wide monitoring projects. The MSFD descriptors are particularly identified as areas of priority concern.</p> <ul style="list-style-type: none"> <li>• BSIMAP is due to be updated in 2013 (BS WP)</li> <li>• The choice of parameters to monitor in BSIMAP is related to the main environmental problems considered in the Black Sea region and re-evaluated every 10 years based on BSC reports, such as TDA and SoE</li> <li>• BSIS is the online database where nationally reported data is collected.</li> <li>• An Advisory group on monitoring, AG PMA, is in charge of the regional coordination of monitoring and for regional monitoring</li> </ul>	<ul style="list-style-type: none"> <li>• The Final "Diagnostic Report" (2010), which identified potential improvements to the regular reporting process on the state of the Black Sea environment contains an overview of monitoring results regarding the biodiversity of the Black Sea. It identifies specific areas where biodiversity monitoring is still insufficient and concluded that the suggested parameters and frequency for monitoring are not always followed by the Contracting Parties.</li> </ul>	<p>Report" (2010) contains overview of monitoring results regarding the eutrophication of the Black Sea. It identifies specific areas where monitoring of eutrophication is still insufficient. Overall the parameters and frequency of monitoring are not always followed by the Contracting Parties.</p>	<p>BSIS.</p> <ul style="list-style-type: none"> <li>• The Final "Diagnostic Report" (2010) contains overview of monitoring results regarding the contaminants of the Black Sea. It identifies specific areas where monitoring on contaminants is still insufficient, such as hazardous substances in biota or oil discharges at sea. Overall, the parameters and frequency of monitoring are not always followed by the Contracting Parties.</li> </ul>	<ul style="list-style-type: none"> <li>• The Final "Diagnostic Report" (2010) which identified potential improvements to the regular reporting process on the state of the Black Sea environment contains overview of monitoring results regarding the fish fund of the Black Sea. It concluded that monitoring of the fisheries indicators which are also MSFD indicators is well reported, though there is a need for harmonization of stock assessments of most fish.</li> </ul>	<p>monitoring, but was the object of one assessment.</p>

Type of activities	Overarching	Biodiversity (NIS, MPA/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	pilot projects for all priority areas.					
<i>Data collection &amp; management (reporting)</i>	<ul style="list-style-type: none"> <li>• The BSIS collects nationally reported data. Before being added to BSIS, a quality control of data is carried out by AG IDE.</li> <li>• The CP submit national action plans on implementation (Black Sea National Action Plans and National Environmental Action Plans) to the BS Commission.</li> <li>• SoE report 2008 concludes that the limitation in the systematically collected data and indicators, made a conclusive inference on the real state of the ecosystem of the Black Sea difficult. There are consequently still major data gaps to be addressed in the Black Sea.</li> <li>• AG IDE is responsible for QA/QC of data submitted to BSIS and dissemination of information about SoE</li> </ul>	<ul style="list-style-type: none"> <li>• BSIS collects data in the fields of, inter alia, conservation of biodiversity.</li> <li>• The Black Sea Commission has standardized regional methodologies for the collection and analysis of plankton and zoobenthos samples.</li> </ul>	<ul style="list-style-type: none"> <li>• BSIMAP contains sampling, storage, analytical techniques, assessment methodologies and reporting formats as well as QA/QC procedures for the collection of data on eutrophication.</li> </ul>	<ul style="list-style-type: none"> <li>• BSIS collects data in the fields of, inter alia, contamination by hazardous substances.</li> <li>• Guidelines for reporting oil spills and Guidelines for oil spill exercises under the Black Sea Contingency plan have been drafted, tested and submitted for approval by the BS Commission (2009 BS SAP)</li> <li>• BSIMAP contains sampling, storage, analytical techniques, assessment methodologies and reporting formats as well as QA/QC procedures for the collection of data on hazardous substances</li> <li>• AG PMA is, inter alia, responsible for development of a regional database on the pollution and its impacts on the Black Sea ecosystem and human health;</li> </ul>	<ul style="list-style-type: none"> <li>• BSIS collects data in the fields of, inter alia, fisheries.</li> <li>• BSIMAP contains sampling, storage, analytical techniques, assessment methodologies and reporting formats as well as QA/QC procedures, including for fisheries.</li> <li>• The 2009 report on the implementation of the BS SAP identified the lack of a common reporting system on fishing activities in the Black Sea as a major bottleneck.</li> </ul>	<ul style="list-style-type: none"> <li>• The official dumping sites reported to the BSC are presented as of 2006 in the BS SAP</li> <li>• BSIMAP has sampling, storage, analytical techniques, assessment methodologies and reporting formats as well as QA/QC procedures, including for marine litter.</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPA/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>of the Black Sea, relevant data and BSC demonstration materials to the public via Internet.</p> <ul style="list-style-type: none"> <li>• Under the MoU BSC/EEA, investigation of possibility of ensuring the regular flow of data/information between the two institutions.</li> <li>• The Diagnostic Report II being prepared within MISIS provides information on the national monitoring data bases and assessment tools within three partner countries.</li> </ul>					
<i>Stakeholder involvement</i>	<ul style="list-style-type: none"> <li>• The BS SAP notes that full public involvement is required at all levels in order to successfully implement the Bucharest Convention.</li> <li>• Specific stakeholder conferences have been organised. But related information is not publically accessible.</li> <li>• The Black Sea NGO Network has observer</li> </ul>	<ul style="list-style-type: none"> <li>• The 4th Bi-annual scientific conference has a specific session dealing with biodiversity and ecosystem functioning.</li> </ul>	<ul style="list-style-type: none"> <li>• The 4th Bi-annual scientific conference has a specific session dealing with pollution and eutrophication.</li> </ul>	<ul style="list-style-type: none"> <li>• The 4<sup>th</sup> Bi-annual scientific conference has a specific session dealing with pollution and eutrophication.</li> </ul>	<ul style="list-style-type: none"> <li>• The 4<sup>th</sup> Bi-annual scientific conference has a specific session dealing with socio-economic impacts on the marine environment, in particular fishing.</li> </ul>	<ul style="list-style-type: none"> <li>• The 4<sup>th</sup> Bi-annual scientific conference has a specific session dealing with marine litter.</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPA/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>status in the BSC.</p> <ul style="list-style-type: none"> <li>• Black Sea Day (31 October) hosts different stakeholder activities each year.</li> <li>• Bi-annual scientific conferences are organised. The 4th one in 2013 will deal with 'Black Sea- Challenges towards Good Environmental Status'.</li> </ul>					
<i>Research</i>	<ul style="list-style-type: none"> <li>• Various research projects have been carried in the region, co-funded by the EU and other organisations.</li> </ul>	•		•		•
<i>Communication and cooperation specific to development and implementation of MSFD components (Article 5(2) MSFD)</i>	<ul style="list-style-type: none"> <li>• The 2009 report on the implementation of the BS SAP notes that mechanisms of cooperation were further developed since 2002, not only between the Black Sea states, but with many organisations. Specific MoUs have been concluded, such as, for example, EEA, IMO.</li> <li>• AG IDE is responsible for i.a. dissemination of the information about SoE of the Black</li> </ul>	<ul style="list-style-type: none"> <li>• The LBD encourages regional cooperation in research and assessment of all marine living resources.</li> </ul>		<ul style="list-style-type: none"> <li>• Mechanisms for mutual assistance, under which the competent national authorities of the parties will co-operate in order to co-ordinate and integrate their response to marine pollution incidents was established.</li> </ul>	<ul style="list-style-type: none"> <li>• The LBD requires parties to cooperate in making a decision on the size of allowable long-term catch of shared stocks on the basis of the best scientific evidence.</li> </ul>	<ul style="list-style-type: none"> <li>• No international cooperation projects dealing in particular with marine litter have been identified.</li> <li>• Within the Black Sea region, a Memorandum of Understanding On the Development of Regional Activity on Marine Litter in the Black Sea within the framework of the Strategic Action Plan on Rehabilitation and Protection of the Black</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPA/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>Sea, relevant data and BSC demonstration materials to the public through the Internet facility.</p> <ul style="list-style-type: none"> <li>• AG PMA is i.a. responsible for maintaining a comprehensive information flow between the stakeholders of the parties, the general public included.</li> <li>• BS WP mentions a project 'Support to the BSC for implementation of the Marine Strategy' with a 2012 deadline (need further information).</li> </ul>					Sea sets out a framework for cooperation between the Black Sea countries on marine litter.

## 1.2. HELCOM

### Abbreviations

BEAT	HELCOM Biodiversity Assessment Tool
BMW Convention	International Convention on the Control and Management of Ships' Ballast Water and Sediments (BWM Convention)
BSPA	Baltic Sea Protected Area
CHASE	HELCOM Hazardous Substances Status Assessment Tool
COMBINE	HELCOM COMBINE Monitoring Programme
HEAT	HELCOM Eutrophication Assessment Tool
HELCOM GEAR	HELCOM Group for the Implementation of the Ecosystem approach
HELCOM MONAS	HELCOM Group for Monitoring and Assessment
HOLAS	HELCOM Integrated Assessment Tool
ICES	International Council for the Exploration of the Sea
MORS	Monitoring of radioactive substances in the Baltic Sea
NIP	National Implementation Programme
PLC-Air	HELCOM Pollution Load Compilation Air
PLC-Water	HELCOM Pollution Load Compilation Water
PLC-5	Fifth Baltic Sea Pollution Load Compilation
PLC-5.5	Revised Fifth Baltic Sea Pollution Load Compilation
RSC	Regional Sea Convention

### Reference list:

#### Strategic documents:

- [HELCOM HOLAS] HELCOM Initial Holistic Assessment of Ecosystem Health of the Baltic Sea (2010)
- [HELCOM BIO] HELCOM Integrated Thematic Assessment on biodiversity and nature conservation in the Baltic Sea (2009), HELCOM 2009, BSEP 116B.
- HELCOM Integrated Thematic Assessment of the effects of nutrient enrichment in the Baltic Sea region (2009), HELCOM 2009, BSEP 115B.
- HELCOM Integrated Thematic Assessment of Hazardous Substances in the Baltic Sea (2010), HELCOM 2010, BSEP 120B.
- HELCOM Integrated Thematic Assessment on Maritime Activities (2010), HELCOM 2010, BSEP 122.
- Towards an ecologically coherent network of well-managed Marine Protected Areas – Implementation report on the status and ecological coherence of the HELCOM BSPA network (2010), HELCOM 2010, BSEP 124B
- HELCOM Red List of Baltic Breeding Birds (2012), HELCOM 2012



- [BSAP] Baltic Sea Action Plan (2007)

**Projects:**

- [CORESET] Development of HELCOM Core Set Indicators
- [HELCOM CORE EUTRO] Workshop on development of core eutrophication indicators
- [HELCOM TARGREV] Review of the ecological targets for eutrophication of the HELCOM BSAP (2010-2011)
- [ALIENS2] Study on biological survey protocols and target species selection (2012)
- [HELCOM FISH-PRO] Continuation of the Baltic-wide assessment of coastal fish communities in support of an ecosystem-based management (2011-2013)
- [HELCOM BASE] The BASE Project (2012 – 2014)
- [HELCOM COMPASS] Comprehensive Policy Actions and Sustainable Solutions for Agriculture in the Baltic Sea Region
- [HELCOM BALTFIMPA] Managing Fisheries in Baltic Marine Protected Areas
- [HELCOM COHIBA] Control of hazardous substances in the Baltic Sea region – COHIBA
- [HELCOM RED LIST] Project for elaboration of HELCOM Red List of Species and Habitats/Biotopes

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<p><i>(Initial) Assessment of the environmental status of the marine waters (Articles 5(2)(a) and 8 MSFD)</i></p>	<ul style="list-style-type: none"> <li>• HELCOM HOLAS, identifying the overall status of the Baltic Sea, combined pressures and possible solutions. All pressures are ranked by means of an index, namely the Baltic Sea Pressure Index and related to ecosystem by the Baltic Sea Impact Index (2010). The status of the marine environment of the Baltic Sea is presented using maps.</li> <li>• A specific integrative assessment tool (HOLAS) was developed for the preparation of the Initial Holistic Assessment in order to aggregate information and to define the overall health status of the Baltic Sea ecosystem.</li> </ul>	<ul style="list-style-type: none"> <li>• The status of biodiversity appears to be unsatisfactory in most parts of the Baltic Sea (HELCOM HOLAS).</li> <li>• Integrated thematic assessment on biodiversity and nature conservation in the Baltic Sea (2009)</li> <li>• Agreement to carry out various specific assessments to increase knowledge on protection of Baltic Sea marine habitats, communities and species. On-going complete classification of threat status of marine habitats/biotopes (according to IUCN criteria) and species by 2013, including production of species fact sheets (RED LIST project), the development of detailed landscape maps, and others.</li> <li>• Development of a specific assessment tool for biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>• HELCOM Initial Holistic Assessment of Ecosystem Health of the Baltic Sea. The assessment showed that despite of important reductions of nutrients over the past years, eutrophication is still the major problem in the Baltic Sea. Shipping was identified as a marked source of atmospheric nitrogen deposition.</li> <li>• Integrated thematic assessment of the effects of nutrient enrichment in the Baltic Sea region, aiming to document the eutrophication status of the Baltic Sea and to identify which additional measures are required to reach the ecological objective (2009)</li> <li>• Development of specific assessment tool for eutrophication (HEAT), used for the development of Integrated Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• HELCOM Initial Holistic Assessment of Ecosystem Health of the Baltic Sea. The assessment showed that only very few areas in the Baltic Sea are unaffected by hazardous substances. Radioactive substances are still a concern but recent concentrations are at the pre-Chernobyl levels. Illegal oil spills from shipping included in the assessment.</li> <li>• Integrated thematic assessment of hazardous substances in the Baltic Sea: one comprehensive compilation of recent data on hazardous substances integrated using an assessment tool rather than separate substance assessments. (2010)</li> <li>• The Integrated thematic assessment on Maritime Activities addresses pollution and impacts of shipping.</li> </ul>	<ul style="list-style-type: none"> <li>• HELCOM Initial Holistic Assessment of Ecosystem Health of the Baltic Sea. The assessment identified commercial fishing as one of the top three main pressures for the unfavourable status of the Baltic marine environment.</li> <li>• Baltic-wide assessment of coastal fish communities in support of an ecosystem-based management. (HELCOM FISH-PRO)</li> <li>• Development of a generic decision support tool on impacts of fishing practices and gears on species and habitats (BALTFIMPA project)</li> </ul>	<ul style="list-style-type: none"> <li>• HELCOM Initial Holistic Assessment of Ecosystem Health of the Baltic Sea. For marine litter, the assessment notes that no comprehensive information on occurrence, sources and impacts of marine litter in the Baltic Sea is available.</li> <li>• Also the Integrated Assessment on Maritime Activities concludes that the magnitude of the problem of marine litter is somewhat smaller in the Baltic Sea.</li> <li>• HELCOM HOLAS states that most of the Baltic marine area is impacted at least by a level of noise that has been estimated to mask the communication of animals. Noise levels causing an avoidance reaction in mobile organisms are likely to occur only in areas with construction</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
		<p>(BEAT), used for development of Integrated Assessment Reports.</p> <ul style="list-style-type: none"> <li>• HELCOM BIO notes that the BSPA network is adequate in terms of the size of most sites designated but its geographical coverage and distribution is not adequate.</li> <li>• 2010 assessment of ecological coherence of the network of the Baltic Sea Protected Areas (BSEP 124B).</li> </ul>	<p>Reports.</p> <ul style="list-style-type: none"> <li>• PLC 5 and 5.5 assess the water and airborne input of nutrients and their sources (up to 2010). PLC-6 has started.</li> <li>• Regional nutrient reduction scheme to bring down the nutrient loads to the ecologically acceptable level has been established, including the provisional country-wise nutrient reduction targets (currently being updated for adoption in 2013)</li> </ul>	<ul style="list-style-type: none"> <li>• PLC 5 and 5.5 assess the water and airborne input of selected hazardous substances nutrients and their sources (up to 2010). PLC-6 has started.</li> <li>• Screenings and assessments of the occurrence and effects of a subset of the selected hazardous substances took place as of 2008.</li> <li>• Screening of the sources of selected substances via HELCOM projects</li> <li>• Establishment of chemical product registers</li> <li>• Development of specific assessment tool for hazardous substances (CHASE), used for the development of Integrated Assessment Reports.</li> </ul>		<p>works, such as the cable between Helsinki and Tallinn in the Gulf of Finland or in wind farm construction sites, for example, in Kemi in the Bothnian Bay and Malmo in the Sound.</p>
<p>Setting priority objectives (GES/targets/indicators) (Articles 5(2)(a), 9 and 10 MSFD)</p>	<ul style="list-style-type: none"> <li>• The 2007 Baltic Sea Action Plan (BSAP) is based on a clear set of 'general goals' followed by 'ecological</li> </ul>	<ul style="list-style-type: none"> <li>• The BSAP sets ecological objectives for biodiversity. The primary goal is 'a favourable</li> </ul>	<ul style="list-style-type: none"> <li>• The BSAP sets ecological objectives to combat eutrophication. The primary goal is a Baltic</li> </ul>	<ul style="list-style-type: none"> <li>• The BSAP sets ecological objectives to combat contamination. The primary goal is 'a Baltic</li> </ul>	<ul style="list-style-type: none"> <li>• No primary goal was adopted for fisheries only.</li> <li>• Two ecological objectives in relation</li> </ul>	<ul style="list-style-type: none"> <li>• No specific core indicators have so far been developed for marine litter. In 2007, a HELCOM project</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>objectives' and indicators with targets defined to reflect a jointly agreed vision of 'a healthy marine environment, with diverse biological components functioning in balance, resulting in a good ecological status and supporting a wide range of sustainable human activities'. The development of core indicators is part of the CORESET project.</p>	<p>conservation status of Baltic Sea biodiversity'. This includes ecological objectives of natural marine and coastal landscapes, thriving and balanced communities of plants and animals, as well as viable populations of species</p> <ul style="list-style-type: none"> <li>• Development of core Indicators with region-specific reference values and targets by 2013, in relation to biodiversity. (CORESET project)</li> <li>• BSAP target is to have an ecologically coherent and well-managed network of Baltic Sea Protected Areas (BSPAs), Natura 2000 areas and Emerald sites in the Baltic Sea by 2010</li> <li>• Preliminary indicators are designated BSPAs, Natura 2000 and Emerald site area as percentage of total sub-region area;</li> <li>• Percentage of endangered and threatened habitats/</li> </ul>	<p>Sea unaffected by eutrophication with ecological objectives of concentration of nutrients close to natural levels, 'clear water', natural levels of algal blooms, natural distribution and occurrence of plants and animals.</p> <ul style="list-style-type: none"> <li>• Development of an agreement on core Indicators with target values, reflecting good ecological and environmental status of the Baltic marine environment, for eutrophication. (CORE EUTRO activity and HELCOM HOD 2012)</li> </ul>	<p>Sea undisturbed by hazardous substances' with the ecological objectives concentrations of hazardous substances close to natural levels, all fish safe to eat, healthy wildlife and radioactivity at pre-Chernobyl level.</p> <ul style="list-style-type: none"> <li>• Development of core indicators with targets has been agreed upon in order for the ecological objectives to be operational by 2013, in relation to hazardous substances. (CORESET Project)</li> </ul>	<p>to biodiversity particularly relate to fisheries: namely 'that habitats, including associated species, show a distribution, abundance and quality in line with prevailing physiographic, geographic and climatic conditions' and 'a water quality that enables the integrity, structure and functioning of the ecosystem to be maintained or recovered'.</p> <ul style="list-style-type: none"> <li>• The BSAP requires the development of indicators with region-specific reference values and targets for coastal fish.</li> <li>• Development of core indicators with targets in relation to biodiversity and contamination are developed within the CORESET Project.</li> </ul>	<p>looked into marine litter in the Baltic Sea and concluded it was not a major concern</p> <ul style="list-style-type: none"> <li>• No specific objectives with regard to marine noise have been provided</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
		biotopes' surface covered by the BSPAs in comparison to their distribution in the Baltic Sea				
Measures, action plan, etc. (Articles 5(2)(b), 13, 14 and 15 MSFD)	<ul style="list-style-type: none"> <li>Measures and action plans are core activities of HELCOM, and these are discussed and decided in majority of the groups, including involving sectorial administrations (fisheries maritime transport, agriculture).</li> <li>The BSAP identifies the actions needed to achieve the objectives within a given timeframe for the main environmental priorities for the Baltic Sea: combating eutrophication, curbing inputs of hazardous substances, ensuring maritime safety and response capacity to accidents at sea, and halting habitat destruction and the ongoing decline in biodiversity.</li> <li>BSAP Implementation is followed regularly by</li> </ul>	<ul style="list-style-type: none"> <li>Preparation of national implementation programmes by each of the RSC Contracting Parties identifying the measures taken to achieve the ecological objectives relating to biodiversity. (NIPs evaluated in 2013)</li> <li>Specific projects on key priority areas financed by HELCOM, such as the BASE project focusing on Russia.</li> <li>Joint development and evaluation of marine spatial planning principles based on the Ecosystem Approach</li> <li>Further designation of marine Natura 2000 and Emerald sites, where appropriate, as HELCOM Baltic Sea Protected Areas (BSPAs) and designation of</li> </ul>	<ul style="list-style-type: none"> <li>Agreement on a set of actions by 2016 to reduce the input of nutrients from land-based sources.</li> <li>HELCOM moreover provides support via specific projects, such as the PURE project on the urban reduction of eutrophication or the COMPAS project on sustainable solutions for agriculture in the Baltic Sea Region</li> <li>Preparation of national implementation programmes by each of the RSC Contracting Parties identifying the measures taken to achieve the ecological objectives in relation to eutrophication. (NIPs evaluated in 2013)</li> <li>In the BSAP and as a follow-up: specific recommendations, regulations (updated</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of recommendations in the BSAP dealing with the specific sources of hazardous substances and bans/restrictions on the discharges of certain substances in the Baltic Sea</li> <li>Preparation of national implementation programmes by each of the RSC Contracting Parties identifying the measures taken to achieve the ecological objectives in relation to hazardous substances. (NIPs evaluated in 2013)</li> <li>Specific projects on key priority areas financed by HELCOM, such as the BASE project.</li> <li>The sources and inputs of the hazardous substances or substance groups of the HELCOM BSAP,</li> </ul>	<ul style="list-style-type: none"> <li>BSAP Agreement to develop and implement management measures for fisheries.</li> <li>HELCOM provides support via various specific projects, such as the BALTFIMPA project on managing fisheries in Baltic Marine Protected areas</li> <li>Preparation of national implementation programmes by each of the RSC Contracting Parties identifying the measures taken to achieve the ecological objectives in relation to biodiversity, which includes fisheries</li> </ul>	<ul style="list-style-type: none"> <li>HELCOM requirement for all ships to deliver all ship-generated waste, including garbage to reception facilities before leaving the port. The Contracting Parties have agreed that ships should not be charged for using such reception facilities, under the "no-special-fee" system. Marine litter caught in fishing nets is covered by the "no-special-fee" system. No other specific requirements have been foreseen, though every Contracting party can include relevant information on measures dealing with marine litter in their national implementation programme</li> <li>Follow-up measures foreseen for the</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>the groups under the HELCOM umbrella. In addition, one specific group - HELCOM GEAR has a role to coordinate efforts for the streamlined implementation of the MSFD and BSAP</p> <ul style="list-style-type: none"> <li>• Since 2007, a Ministerial Meeting took place in 2010 (which decided on establishing HELCOM as a regional coordination platform for MSFD in the Baltic) and the 2013 Ministerial meeting will be held to assess the progress in HELCOM BSAP implementation and decide on further measures/actions as necessary.</li> </ul>	<p>additional BSPAs. Work to establish and implement management plans for MPA's.</p> <ul style="list-style-type: none"> <li>• HELCOM HOLAS states that the management measures, particularly the regulation of human pressures with negative impacts in the marine protected areas, need to be significantly improved to achieve a network of protected areas that provides efficient protection to the valuable features of the Baltic Sea nature.</li> </ul>	<p>legally-binding Annex III to the Helsinki Convention on agriculture) and actions aiming to cut nutrient load from waterborne and airborne inputs</p>	<p>which are not very well known, have been studied by COHIBA project and it has developed recommendations for measures to reduce these substances.</p>		<p>HELCOM ministerial Meeting 2013.</p> <ul style="list-style-type: none"> <li>• Underwater noise is not covered by measures or action plans.</li> </ul>
<p><i>Monitoring (Articles 5(2)(a) and 11 MSFD)</i></p>	<ul style="list-style-type: none"> <li>• 2005 HELCOM Monitoring and Assessment Strategy defining indicators, thematic assessments and holistic assessments as key components of the strategy. One comprehensive</li> </ul>	<ul style="list-style-type: none"> <li>• Biodiversity is a key component of the HELCOM Monitoring and Assessment Strategy.</li> <li>• The HELCOM Baltic Sea Action Plan Index keeps track of the actions relating to biodiversity set out in</li> </ul>	<ul style="list-style-type: none"> <li>• Eutrophication is a key component of the 2005 HELCOM Monitoring and Assessment Strategy.</li> <li>• The HELCOM Baltic Sea Action Plan Index keeps track of the actions relating to eutrophication set out</li> </ul>	<ul style="list-style-type: none"> <li>• Contamination by hazardous substances is a key component of the 2005 HELCOM Monitoring and Assessment Strategy. For example, the screening of sources of hazardous substances, as required by the</li> </ul>	<ul style="list-style-type: none"> <li>• The impacts from fisheries are also part of the 2005 HELCOM Monitoring and Assessment Strategy. An extract of the HELCOM BSAP Index deals specifically with fisheries across the BSAP themes. It tracks</li> </ul>	<ul style="list-style-type: none"> <li>• No specific provisions with regard to marine litter have been provided. In 2007, a HELCOM project looked into marine litter in the Baltic Sea and concluded it was not a major concern for the Baltic Sea.</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>monitoring strategy was chosen in order to explain and link pressures, impacts, management approaches.</p> <ul style="list-style-type: none"> <li>• The HELCOM Baltic Sea Action Plan Index keeps track of the actions set out in the BSAP, responsible actors for implementation, deadlines and status. The Index is regularly updated.</li> <li>• Various monitoring programmes exist within HELCOM, dealing with monitoring of specific issues.</li> <li>• HELCOM MONAS is the group responsible for Monitoring and Assessment within HELCOM. It coordinates monitoring activities, develops monitoring methodologies, ensures quality of data, checks the implementation of HELCOM recommendations and</li> </ul>	<p>the BSAP, responsible actors for implementation, deadlines and status. The Index is regularly updated. For example, the designation of BSPAs is partly accomplished.</p> <ul style="list-style-type: none"> <li>• BSAP agreement to continuously monitor the conservation status of biodiversity and the effectiveness of nature protection measures and periodically evaluate whether the targets of the BSAP have been met using indicator-based assessments.</li> <li>• HELCOM HABITAT compiles information on the ecosystems and habitats providing breeding grounds, shelter and food sources for the Baltic Sea plant and animal species as well as information on threatened and endangered species.</li> <li>• The CORESET Project concluded that monitoring of the</li> </ul>	<p>in the BSAP, responsible actors for implementation, deadlines and status. The Index is regularly updated. For example, the adoption of national programmes to achieve nutrient reductions is partly accomplished.</p> <ul style="list-style-type: none"> <li>• The HELCOM COMBINE programme sets out a common monitoring methodology for the monitoring of eutrophication.</li> </ul>	<p>BSAP is currently in progress.</p> <ul style="list-style-type: none"> <li>• The HELCOM Monitoring strategy consists of various data collection programmes, such as the Pollutant Load programmes (PLC-Air and PLC-Water) and the Monitoring of Radioactive substances programme (MORS) and HELCOM COMBINE, all monitoring contamination by hazardous substances.</li> </ul>	<p>progress in the implementation of activities related to fisheries and identifies responsible actors for implementation.</p> <ul style="list-style-type: none"> <li>• HELCOM HABITAT compiles information on the fish populations and their habitats in the Baltic Sea.</li> </ul>	<ul style="list-style-type: none"> <li>• A 2010 Ministerial Decision agrees to take further steps to carry out national and coordinated monitoring of marine litter and sources of litter.</li> <li>• No specific provisions with regard to the monitoring of underwater noise</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>provides technical support for the implementation of the BSAP.</p> <ul style="list-style-type: none"> <li>A new HELCOM Monitoring and Assessment Strategy is being finalised by HELCOM MORE project for adoption. It emphasises cost-efficiency, using of modern monitoring and assessment techniques, increased cooperation and resource sharing by the Contracting Parties. It also takes into account the requirements of MSFD.</li> <li>Monitoring programmes are under revision, to provide the data especially for the core indicators.</li> </ul>	<p>proposed core indicators for biodiversity is patchy and therefore one of the main tasks of the biodiversity expert group is considered to be the description of what monitoring would be needed for the proposed core indicators.</p> <ul style="list-style-type: none"> <li>A HELCOM Phytoplankton Expert Group (HELCOM PEG) and the Zooplankton Expert Network (HELCOM ZEN) have been for phytoplankton monitoring and quality assurance, respectively, under HELCOM COMBINE.</li> <li>Baseline surveys of alien species in ports on-going to support the implementation of BWMC (HELCOM ALIENS project).</li> </ul>				
<i>Data collection &amp; management (reporting)</i>	<ul style="list-style-type: none"> <li>In 2004, the Helsinki Commission adopted a 'Data and Information Strategy'. The strategy requires data reporting in an</li> </ul>	<ul style="list-style-type: none"> <li>NIPs present national measures taken to meet the BSAP biodiversity targets.</li> <li>Various data sources were used for the</li> </ul>	<ul style="list-style-type: none"> <li>NIPs present national measures taken to meet the BSAP eutrophication targets.</li> <li>The HELCOM Monitoring strategy</li> </ul>	<ul style="list-style-type: none"> <li>NIPs present national measures taken to meet the BSAP targets relating to hazardous substances.</li> <li>The HELCOM</li> </ul>	<ul style="list-style-type: none"> <li>NIPs present national measures taken to meet the BSAP fisheries targets.</li> <li>A variety of specific projects collect data in</li> </ul>	<ul style="list-style-type: none"> <li>The 2007 HELCOM Project "Assessment of the marine litter problem in the Baltic region and priorities for response"</li> </ul>



Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>electronic format and in a way that enables its use for indicator-development. The data collection takes place through the HELCOM monitoring and assessment programmes funded by the Contracting Parties, in a harmonised manner with international and EU systems. The data is handled by independent data centres and quality controlled.</p> <ul style="list-style-type: none"> <li>The HELCOM Map and Data Service presents GIS data on the Baltic Sea. It allows users to obtain data on pollutant loads, monitoring, accidents, etc. It applies the INSPIRE compliant standards to ensure interoperability (e.g. some data layers linked to and displayed by EEA).</li> <li>Contracting Parties are required to submit National Implementation Programmes (NIPs)</li> </ul>	<p>preparation of the integrated assessment report on biodiversity, including external sources, national data as well as HELCOM projects.</p> <ul style="list-style-type: none"> <li>The HELCOM BIO Project (2008) developed a prototype tool for assessment of biodiversity in the Baltic Sea as well as conceptual models and researched key species. Other specific data collection projects look into issues of specific interest. For example ALIENS 2 deals with biological survey protocols and target species selection.</li> <li>The Integrated Assessment identified data gaps, for example, on benthic flora and fauna and the mapping of marine landscapes. Also the Integrated Assessment on Maritime Activities notes that monitoring of alien species is not currently part of the monitoring</li> </ul>	<p>consists of various data collection programmes, such as HELCOM COMBINE, which deals specifically with the collection of data on eutrophication. These data are quality controlled in accordance with the programme guidelines.</p> <ul style="list-style-type: none"> <li>The Integrated assessment showed, for example, that data from certain regions is scarcer than from others. It also recommended improving data on reference conditions, starting with a catalogue of reference conditions and research on natural variations. Moreover, it recommends requiring annual reporting on eutrophication.</li> <li>HELCOM EUTRO CORE is making the assessment of eutrophication operational.</li> </ul>	<p>Monitoring strategy consists of various data collection programmes, such as the Pollutant Load programmes (PLC-Air and PLC-Water) and the Monitoring of Radioactive substances programme (MORS). Also HELCOM COMBINE collects data on contamination. These data are quality controlled in accordance with the programme guidelines.</p> <ul style="list-style-type: none"> <li>PLC-5, PLC-5.5 and PLC-6 compile the pollutant load data for the Baltic Sea in order to track progress towards the targets (2012). The on-going project (PLC PLUS) aims to update the PLC database and enable open access to the data.</li> <li>Data on illegal oil spills from ships reported regularly, as well as on shipping pollution accidents.</li> <li>The Integrated</li> </ul>	<p>relation to fisheries, such as FISH-PRO.</p>	<p>collected data to assess the extent of marine litter in the Baltic Sea.</p> <ul style="list-style-type: none"> <li>HELCOM Recommendation for the Harmonization of methods of sampling and reporting the amount and type of marine litter on the beach within the Baltic Sea region, and a Survey form for reporting marine litter, in order to get more harmonized data from different initiatives in the future.</li> <li>HELCOM GEAR (2/2012) identified the lack of comparable and reliable data as a major gap in marine litter issues in the Baltic Sea.</li> </ul>

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	<p>with the measures taken to implement the BSAP. The NIPs will be evaluated in 2013. On the basis of this evaluation, additional measures will be decided.</p> <ul style="list-style-type: none"> <li>• HELCOM monitoring data handling procedures are under development and the development related to the MSFD will be acknowledged.</li> <li>• All documents from HELCOM meetings are public as well as in principle all data collected within HELCOM framework.</li> </ul>	programmes.		<p>assessment identified data gaps and recommendations. It concluded, for example, that the regional coverage of the monitoring of concentrations of hazardous can be strengthened and that the PLC programmes should be extended to cover additional substances.</p> <ul style="list-style-type: none"> <li>• HELCOM CORESET II is preparing for making the assessment of and hazardous substances operational.</li> </ul>		
<i>Stakeholder involvement</i>	<ul style="list-style-type: none"> <li>• Yearly stakeholder conference on the implementation of the BSAP addressing the various topics covered by the BSAP and status of implementation.</li> <li>• Obligation in the BSAP for contracting parties to report every year to HELCOM about information campaigns carried out to implement the BSAP.</li> </ul>	<ul style="list-style-type: none"> <li>• The yearly stakeholder conference on the implementation of the BSAP deals with the implementation of aspects relating to biodiversity.</li> <li>• Obligation in the BSAP for contracting parties to report every year to HELCOM about information campaigns carried out to implement the BSAP.</li> </ul>	<ul style="list-style-type: none"> <li>• The yearly stakeholder conference on the implementation of the BSAP deals with the implementation of aspects relating to eutrophication.</li> <li>• Obligation in the BSAP for contracting parties to report every year to HELCOM about information campaigns carried out to implement the BSAP</li> </ul>	<ul style="list-style-type: none"> <li>• The yearly stakeholder conference on the implementation of the BSAP deals with the implementation of aspects relating to hazardous substances.</li> <li>• Obligation in the BSAP for contracting parties to report every year to HELCOM about information campaigns carried out to implement the BSAP</li> </ul>	<ul style="list-style-type: none"> <li>• The yearly stakeholder conference on the implementation of the BSAP deals with the implementation of aspects relating to fisheries.</li> <li>• Specific stakeholder conference on sustainable fisheries in the Baltic Sea (March 2013)</li> <li>• Obligation in the BSAP for contracting parties</li> </ul>	<ul style="list-style-type: none"> <li>• The yearly stakeholder conference on the implementation of the BSAP deals with the implementation of aspects relating to marine litter, though these are less important in the Baltic Sea.</li> <li>• Obligation in the BSAP for contracting parties to report every year to HELCOM about information campaigns</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<ul style="list-style-type: none"> <li>Website that links to the Geographic Information system, showing progress towards achieving a healthy Baltic Sea.</li> <li>All HELCOM meetings are open for HELCOM stakeholders (around 50 organizations – NGO's sectors, interests groups etc., are Observers to HELCOM and have access to and participate in meeting under HELCOM).</li> </ul>		<ul style="list-style-type: none"> <li>HELCOM Agriculture and Environment Forum</li> </ul>		<ul style="list-style-type: none"> <li>to report every year to HELCOM about information campaigns carried out to implement the BSAP.</li> <li>HELCOM Fisheries/Environment Forum</li> </ul>	<ul style="list-style-type: none"> <li>carried out to implement the BSAP</li> <li>A public awareness programme of the negative impacts of marine litter was organised. Within this programme conference on marine litter is organised in 2013.</li> </ul>
<i>Research</i>	<ul style="list-style-type: none"> <li>Some research projects take place within HELCOM, sometimes co-funded e.g. by the EU or by other organisations, such as the Nordic Council. For example, HELCOM MORE reviews the existing monitoring programmes within HELCOM.</li> <li>HELCOM relies on and cooperates with institutes delivering scientific advice (for instance BNI delivers the modelling and</li> </ul>	<ul style="list-style-type: none"> <li>BSAP agrees on the promotion of research aiming at developing additional methods for the assessment of, and reporting on, the impacts of fisheries on biodiversity;</li> <li>HELCOM BIO (2008) collected data and prepared the Integrated Assessment on Biodiversity. It assessed the status of Baltic Sea biodiversity, developed models for illustrating linkages between state, impacts, pressures and</li> </ul>	<ul style="list-style-type: none"> <li>TARGREV (2010-2011) reviews the ecological targets for eutrophication of the BSAP and reviews in particular the scientific basis.</li> <li>HELCOM EUTRO-PRO aimed at providing the scientific basis for the Integrated Assessment of eutrophication and at the development of models for the assessment.</li> </ul>	<ul style="list-style-type: none"> <li>BSAP Agrees on research with regard to technologies, response mechanisms, etc. in case of accidents at sea, oil pollution</li> <li>Control of Hazardous substances in the Baltic Sea Region (COHIBA 2009-2012) included research activities in relation to sources, inputs, pathways and cost-effective management options for hazardous substances of special concern</li> </ul>	<ul style="list-style-type: none"> <li>BSAP agrees on the promotion of research aiming at developing additional methods for the assessment of, and reporting on, the impacts of fisheries on biodiversity;</li> <li>Managing fisheries in Baltic Marine Protected Areas (BALTFIMPA) analyzed possible conflicts between fisheries and conservation projects in BSPAs.</li> <li>A research-oriented expert network was set up on monitoring</li> </ul>	<ul style="list-style-type: none"> <li>No ongoing research on marine litter in the Baltic Sea was identified.</li> <li>No on-going research on noise in the Baltic Sea was identified.</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	calculation of the nutrient reduction targets).	<p>root causes. It also demonstrated distribution of key habitats and species.</p> <ul style="list-style-type: none"> <li>• ALIENS2 aims to develop the knowledge base on invasive species.</li> <li>• Various ongoing projects aim at improving monitoring of phytoplankton</li> <li>• A 2008-2013 project deals with the elaboration of a HELCOM Red List of Species and Habitats/Biotopes</li> </ul>		<ul style="list-style-type: none"> <li>• Specific analyses concerned, for example, new opportunities for usage of dispersants (2008)</li> <li>• 2008 Screening of selected hazardous substances in the Eastern Baltic Marine Environment</li> </ul>	and protecting of coastal fish and lamprey species (HELCOM FISH) to improve knowledge about occurrence, distribution, population and threats to coastal fish and lamprey species and to assist in the development of indicators.	
<i>Communication and cooperation specific to development and implementation of MSFD components (Article 5(2) MSFD)</i>	<ul style="list-style-type: none"> <li>• HELCOM GEAR is the HELCOM Group for the Implementation of the Ecosystem Approach aiming to implement the BSAP and the EU MSFD for those parties that are EU Member States</li> <li>• Other HELCOM Groups work together with several international organisations. For example, HELCOM MOMAS works with the Co-operative Programme for the</li> </ul>	<ul style="list-style-type: none"> <li>• A specific implementation group deals with nature protection and biodiversity aspects, i.e. HELCOM HABITAT</li> <li>• BSAP encourages the organisation of awareness raising campaigns on the implementation of the BSAP. Contracting parties are required to report on the campaigns organised.</li> <li>• Agreement by the Contracting Parties to</li> </ul>	<ul style="list-style-type: none"> <li>• A specific implementation group deals with the impacts of land-based pollution and a the HELCOM AGRI/ENV FORUM which aims to enhance the dialogue between agriculture and environmental authorities of the Contracting Parties on sustainable agriculture practices with the least impact on the environment of the Baltic Sea</li> </ul>	<ul style="list-style-type: none"> <li>• HELCOM LAND and HELCOM MARITIME, organise cooperation with regard to the major sources of hazardous substances into the Baltic Sea</li> <li>• BSAP encourages the organisation of awareness raising campaigns on the implementation of the BSAP. Contracting parties are required to report on the campaigns organised. BSAP agrees to</li> </ul>	<ul style="list-style-type: none"> <li>• HELCOM FISH/ENV FORUM is the platform for dialogue between fisheries and environmental authorities on marine biodiversity and sustainable fisheries</li> <li>• BSAP encourages the organisation of awareness raising campaigns on the implementation of the BSAP. Contracting parties are required to report on the campaigns organised.</li> </ul>	<ul style="list-style-type: none"> <li>• BSAP encourages the organisation of awareness raising campaigns on the implementation of the BSAP. Contracting parties are required to report on the campaigns organised.</li> <li>• Public awareness programme of the negative impacts of marine litter</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>Monitoring and Evaluation of Long-range Transmission of Air Pollutants in Europe (CLRTAP/EMEP), the International Council for the Exploration of the Sea (ICES), the European Environmental Agency (EEA), and the International Atomic Energy Agency (IAEA).</p> <ul style="list-style-type: none"> <li>• HELCOM representatives participate in CIS meetings for implementation of the MSFD.</li> <li>• HELCOM Baltic Sea Environment Fact Sheets are used to provide information on the most recent state of the Baltic marine environment.</li> <li>• HELCOM ad-hoc groups can be established (as projects) in order to ensure cooperation on more specific topics.</li> </ul>	<p>ratify by 2010, or at the latest by 2013, the International Convention on the Control and Management of Ships' Ballast Water and Sediments (BWM Convention)</p> <ul style="list-style-type: none"> <li>• HELCOM Baltic Sea Environment Fact Sheets, for example, on phytoplankton biomass and species succession.</li> <li>• Joint HELCOM/VASAB, OSPAR and ICES workshop on Multi-Disciplinary Case Studies of Maritime Spatial Planning. (2011)</li> </ul>	<ul style="list-style-type: none"> <li>• BSAP encourages the organisation of awareness raising campaigns on the implementation of the BSAP. Contracting parties are required to report on the campaigns organised.</li> <li>• Baltic Impulse, a cluster of projects aiming to foster implementation of the results of other HELCOM projects, includes the aim to intensify exchange of experiences and ideas and further development of cooperation through cluster partner workshops. Cluster A of discussion focuses on reducing nutrient pollution, prevention of phosphorus and nitrogen leaching as well as phosphorus recycling.</li> <li>• HELCOM Baltic Sea Environment Fact Sheets, for example, on Nitrogen depositions in the Baltic Sea</li> </ul>	<p>develop cooperation with ECHA for a mutual information exchange on hazardous substances</p> <ul style="list-style-type: none"> <li>• Baltic Impulse, a cluster of projects aiming to foster implementation of the results of other HELCOM projects, includes the aim to intensify exchange of experiences and ideas and further development of cooperation through cluster partner workshops. Cluster B of discussion focuses on the environmentally sound management of hazardous substances.</li> <li>• Cooperation with the Nordic Council on hazardous substances in the 2008 Screening of selected hazardous substances in the Eastern Baltic Marine Environment.</li> <li>• HELCOM Baltic Sea Environment Fact Sheets, for example, on cadmium</li> </ul>	<p>BSAP agreement to establish an international co-operation network to agree on guidelines to promote the ecosystem-based management of coastal fisheries in the Baltic region;</p>	

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
				concentrations in fish		

### 1.3. OSPAR

#### Abbreviations:

QSR	Quality Status Report
ICG	Intersessional Correspondence Groups
BDC	Biodiversity Committee
EIHA	Environmental Impacts of Human Activities Committee
HASEC	Hazardous Substances and Eutrophication Committee
ICG-MSFD	Intersessional Correspondance Group for the Implementation of the MSFD
ICG-COBAM	Intersessional Correspondance Group – Coordination of Biodiversity Assessment and Monitoring
ICES	International Council for the Exploration of the Sea
JAMP	Joint Assessment and Monitoring Programme
OSPAR EACs	Environmental Assessment Criteria
WFD EQSs	Water Framework Directive - Ecological Quality Standards
EcoQOs	Ecological Quality Objectives
CEMP	OSPAR Coordinated Environmental Management Programme

#### Reference list:

#### Documents

- [STRAT] Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2010–2020
- [QSR 2010] Quality Status Report 2010
- [FCG] Finding Common ground– Towards regional coherence in implementing the Marine Strategy Framework Directive in the North-East Atlantic region through the work of the OSPAR Commission, OSPAR Commission, 2012.
- [EcoQO] OSPAR system of ecological quality objectives
- [AM-BD] MSFD Advice Manual and background document on Biodiversity
- [AM-C] MSFD Advice document on Good environmental status - Descriptor 8:Contaminants, OSPAR Commission, Hazardous substances series, 2012
- [AM-EU] MSFD Advice Manual and Background document on Good Environmental Status – descriptor 5: Eutrophication (OSPAR Commission, Eutrophication series, 2012
- [AM- ML] MSFD Advice document on Good environmental status – descriptor 10: Marine litter (OSPAR Commission, Biodiversity series, 2012)
- [INVT] Identification of ecological monitoring parameters to assess Good Environmental Status of marine waters – An inventory in all OSPAR Contracting Parties that implement the MSFD, 2011 (OSPAR Commission, Biodiversity Series)

**Projects:**

- HARMONY – Development and demonstration of MSFD tools for harmonization of the initial assessment in the eastern parts of the Greater North Sea sub-region (2010-2012)
- MEECE - "Marine Ecosystem Evolution in a Changing Environment" (2008-2012). (all 4 conventions)
- ODEMM – Options for Delivering Ecosystem-Based Marine Management (2010-2013)
- KnowSeas - "Knowledge-based Sustainable Management for Europe's Seas" (2009-2013).
- STAGES - Science and Technology Advancing Governance of Good Environmental Status).
- DEVOTES - DEvelopment Of innovative Tools for understanding marine biodiversity and assessing good Environmental Status.



Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<p><i>(Initial) Assessment of the environmental status of the marine waters</i> <i>(Articles 5(2)(a) and 8 MSFD)</i></p>	<ul style="list-style-type: none"> <li>The OSPAR Quality Status Report (QSR) 2010 with underlying assessments reports provides overarching summary of environmental state across the Region/subregions. This provides a basis to ensure (sub)regional coherence in initial assessments. The QSR identifies for each of the topics addressed what the main problems are, what has been done, whether it worked, how it affects the status and what the next steps are.</li> <li>A socio-economic analysis (ICG SEA) will provide a basis for detailed coordination of the socio-economic elements of the MSFD assessments. [FCG]</li> </ul>	<ul style="list-style-type: none"> <li>The OSPAR QSR 2010 deals with biodiversity. It notes that all OSPAR regions have threatened or declining species and that better monitoring of marine biodiversity is required.</li> <li>The OSPAR QSR 2010 deals quite extensively with marine parks. It notes that the goal of an ecologically coherent network of well-managed MPAs by 2010 will not be met across the entire OSPAR area. Fuller use should be made of the potential of the MPA network to protect species, habitats and ecological processes beyond those covered by Natura 2000 sites, including those on the OSPAR List, and in areas not covered by Natura 2000, especially beyond the coasts and in areas beyond national jurisdiction.</li> <li>The MSFD Advice</li> </ul>	<ul style="list-style-type: none"> <li>The OSPAR QSR 2010 deals with eutrophication. The report notes that nutrient levels have decreased, but the objective of no eutrophication by 2010 will not be reached.</li> <li>Subject to on-going discussion on the MSFD implementation, HASEC suggests that a qualitative description of the region might be sufficient for the purposes of the MSFD and that the GES descriptor 5 and associated actions are directed to those areas affected by eutrophication.</li> </ul>	<ul style="list-style-type: none"> <li>The OSPAR QSR 2010 deals with contaminants. It notes that while concentrations of certain substances have decreased, problems remain in many coastal areas.</li> <li>The tools developed through CEMP to assess the status of hazardous substances provide a good framework for EU MS to assess whether concentrations of contaminants are at levels not giving rise to pollution effects, and can be used as a coordinated starting point for MS to determine characteristics, targets and indicators for GES (descriptor 8). The CEMP provides a common framework for the collection of marine monitoring data and the results indicate status and trends in pollution. [AM-C]</li> </ul>	<ul style="list-style-type: none"> <li>The OSPAR QSR 2010 deals with fisheries. It notes that fishing has large impacts on marine ecosystems despite improvements in management. Fishing is identified as a key pressure of marine biodiversity in the North East Atlantic.</li> </ul>	<ul style="list-style-type: none"> <li>The OSPAR QSR 2010 deals with marine litter. It notes that many activities increase the amount of litter in the North East Atlantic, while the cumulative impacts of such pressures are still unclear.</li> <li>Noise has been identified as a biodiversity stressor but research is needed to understand the impact. Some MS regulations concerning sound already exist.</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
		<p>Manual and background document on Biodiversity (AM-BD) notes that OSPAR ensures that:</p> <p>a) Assessment methodologies are consistent across the North-East Atlantic;</p> <p>b) Environmental targets are mutually compatible;</p> <p>c) Monitoring methods are consistent to facilitate comparable results;</p> <p>d) Relevant transboundary impacts and transboundary features are covered;</p> <p>e) Environmental targets and indicators and assessments of environmental status will cover specific sub-regional/sub-divisional environmental characteristics.</p> <ul style="list-style-type: none"> <li>By 2013 the OSPAR COM will agree an overall process for assessing marine biodiversity and ecosystem functioning, develop and agree by</li> </ul>		<ul style="list-style-type: none"> <li>OSPAR can provide existing data streams that may be relevant to link with pressures (Annex III, table 2 MSFD). [AM-C]</li> </ul>		

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
		2014 a coordinated monitoring programme for the ongoing assessment of the environmental status with regard to biodiversity and ecosystem functioning in the OSPAR maritime area. [AM-BD]				
Setting priority objectives (GES/targets/indicators) (Articles 5(2)(a), 9 and 10 MSFD)	<ul style="list-style-type: none"> <li>The Strategy of the OSPAR Commission for the protection of the North-East Atlantic (2010-2012) sets out the strategic objectives for the protection of the marine environment of the North-East Atlantic. For each of the strategic objectives, specific operational objectives are described in the thematic strategies.</li> <li>Establishment of Ecological Quality Objectives (EcoQOs) taking account of scientifically sound environmental assessments stemming from the Ecosystem Approach in the same way as the linkage in</li> </ul>	<ul style="list-style-type: none"> <li>The strategic objectives of the OSPAR Commission are: to halt and prevent by 2020 further loss of biodiversity in the OSPAR maritime area, to protect and conserve ecosystems, and to restore, where practicable, marine areas which have been adversely affected; [STRAT].</li> <li>The strategic objectives of OSPAR in relation to MPAs are to have by 2012: <ul style="list-style-type: none"> <li>By 2012 a network of MPAs that is ecologically coherent, includes sites representative of all biogeographic regions in the OSPAR maritime</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The strategic objectives of the OSPAR Commission are: to combat eutrophication in the OSPAR maritime area, with the ultimate aim to achieve and maintain a healthy marine environment where anthropogenic eutrophication does not occur; [STRAT]</li> <li>OSPAR's MSFD Advice Document on Eutrophication Approaches was developed to determine GES, set environmental targets and select indicators for MSFD descriptor 5. [FCG]</li> <li>Although there is a good degree of commonality across</li> </ul>	<ul style="list-style-type: none"> <li>The strategic objectives of the OSPAR Commission are: to prevent pollution of the OSPAR maritime area by continuously reducing discharges, emissions and losses of hazardous substances, with the ultimate aim to achieve concentrations in the marine environment near background values for naturally occurring substances and close to zero for manmade synthetic substances; [STRAT]</li> <li>OSPAR MSFD Advice Document on Contaminants Approaches was developed to determine GES, set</li> </ul>	<ul style="list-style-type: none"> <li>The strategic objectives of the OSPAR Commission are: to ensure integrated management of human activities in order to reduce impacts on the marine environment, taking into account the impacts of, and responses to, climate change and ocean acidification; [STRAT]</li> <li>Although there is a fair degree of coherence and commonality in the approaches adopted and coverage of MSFD descriptor 3, there are differences in the determinations of GES and associated targets. [FCG]</li> <li>The EcoQO 'safe fish</li> </ul>	<ul style="list-style-type: none"> <li>OSPAR MSFD Advice document on GES 10 - Marine Litter Properties and quantities of marine litter do not cause harm to the coastal and marine environment [FCG]</li> <li>There is a good degree of coordination and coherence with respect to the determination of GES and associated targets and indicators for Descriptor 10. There is also strong alignment with regard to proposed targets for beach litter and most CPs are likely to put forward a specific target for reduction in litter on coastlines based on the OSPAR</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>the MSFD between the initial assessment (Art.8) and the determination of GES (Art.9). [FCG]</p> <ul style="list-style-type: none"> <li>• The work of the OSPAR Committees BDC, EIHA and HASEC contributed to the development of 'OSPAR MSFD Advice documents' for each of the MSFD GES descriptors (except 3, 9, 11). [FCG]</li> <li>• OSPAR Advice Documents (which are non-binding; living documents) use OSPAR expertise to set out common approaches for expressing GES and methodologies for developing targets and indicators. [FGC]</li> <li>• OSPAR (in cooperation with ICES) developed EcoQOs for the North Sea. They function both as indicators (to provide specific issues for monitoring) and objectives (against which to measure progress). [EcoQo-NS]</li> </ul>	<p>area, and is consistent with the CBD target for effectively conserved marine and coastal ecological regions;</p> <ul style="list-style-type: none"> <li>• By 2016 a network of MPAs which is well managed (i.e. coherent management measures have been set up and are being implemented for such MPAs that have been designated up to 2012);OSPAR's MSFD Advice Manual on Biodiversity Approaches was developed to determine GES, set environmental targets and select indicators for MSFD descriptors 1, 2, 4 and 6. [FCG]</li> <li>• Advice Manual (Biodiversity) provides practical advice on methodologies to be applied for determining GES, setting environmental targets and indicators for MSFD Biodiversity descriptors. [AM-BD]</li> <li>• Advice Manual: discusses six broadly-</li> </ul>	<p>the proposed approaches of the CP for descriptor 5, some differences in threshold setting remain. [FCG]</p> <ul style="list-style-type: none"> <li>• The Eutrophication Strategy will be implemented with the objective to minimise human-induced eutrophication and achieve and maintain by 2020 that all parts of the OSPAR maritime area have the status of non-problem area. [STAT, para 1.2]</li> <li>• An EcoQO is 'a marine environment where eutrophication does not occur'. The 5 specific EcoQOs cover winter nutrients, phytoplankton chlorophyll a, phytoplankton indicator species, oxygen and benthos. [EcoQo-NS]</li> <li>• The OSPAR 'Common Procedure' for the identification of the eutrophication status of the OSPAR maritime area provides a</li> </ul>	<p>environmental targets and select indicators for MSFD descriptor 8 [FCG]</p> <ul style="list-style-type: none"> <li>• There is a good degree of coordination and alignment on the determination of GES and associated targets and indicators for Descriptor 8. Ambition levels are well aligned, in particular with respect to the use of OSPAR EACs and WFDs EQS. [FCG]</li> <li>• The Hazardous Substances Strategy will be implemented with the objective to move to the targets of the cessation of discharges, emissions and losses of hazardous substances by 2020. [STAT, para 1.2]</li> <li>• The EcoQO aims to limit the input of mercury and organochlorines into the marine environment. This objective is evaluated by measuring the level of mercury and</li> </ul>	<p>stocks' seeks to maintain safe levels of fish species management of fisheries based on the precautionary principle. The EcoQO is based on the system of evaluations of the status of commercial fish stocks used in practical fisheries management. In addition, the EcoQO on 'restore large fish' is measured by the average length of fish in the catch per year using selected fish species. [EcoQo-NS]</p>	<p>Beach Litter Monitoring Guidelines. With the exception of Germany - currently no CPs proposes to develop a target on micro-particles in this cycle.</p> <ul style="list-style-type: none"> <li>• The objectives to halt and prevent biodiversity loss by 2020 covers measures to reduce marine litter – such as: to establish regionally coordinated targets for marine litter by 2012, based on an evaluation of progress made and available data; to establish a coordinated monitoring programme by 2014; and promotion of research to improve the evidence base with respect to impact of litter, including micro-particles, on the marine environment [STAT, para 1.2 (d) and J.]</li> <li>• The EcoQO aims to diminish litter in the marine environment. This objective is</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
		<p>defined biodiversity components relevant for the biodiversity Descriptors (grouped into sections on species and habitats). It looks at the application of the principles for setting targets and indicators, using the Commission Decision 2010/447/EU (criteria and methodological standards on GES). The advice can be used to assess the individual biodiversity Descriptors (1, 2, 4 and 6). [AM-BD]</p> <ul style="list-style-type: none"> <li>• Descriptor 1: Based on an inventory of MS' draft indicators 39 potential common indicators have been identified for functional species groups and some predominant habitats. In addition, lists of species and habitats containing 'listed' species and habitats under the Birds and Habitats Directives and OSPAR, as well as common species and</li> </ul>	<p>framework for assessing eutrophication and should, according to HASEC be used as the basis for determining characteristics, targets and indicators for GES descriptor 5 in the N-E Atlantic. [AM-EU]</p>	<p>organochlorines in seabird eggs. In addition, an EcoQo aims to decrease the impact of TBT containing antifouling paints. This is measured by the development of imposex in dog whelks and other sea snails (which are used as indicators because of their extreme sensitivity). [EcoQo-NS]</p>		<p>evaluated by measuring plastic particles in fulmar stomachs. In addition, an EcoQo on 'Litter on the beach' is currently being developed. [EcoQO-NS]</p> <ul style="list-style-type: none"> <li>• Standard setting is difficult for the indicators of marine litter as, amongst others, CPs are in different stages of monitoring and no baseline has yet been established. [AM-ML]</li> <li>• OSPAR for their target to prevent further biodiversity loss by 2020 states that it will endeavour to keep the introduction of energy, including underwater noise, at levels that do not adversely affect the marine environment in the OSPAR maritime area;</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
		<p>habitats, have been developed in order to promote consistency among MS. [FCG –on-going work]</p> <ul style="list-style-type: none"> <li>• Descriptor 2: Two potential common indicators have been defined, both in need of further development (on-going work)</li> <li>• Several objectives to halt and prevent biodiversity loss by 2020 (such as on development of MPAs, limitation of NIS, habitat protection) are established in the Strategy 2012-2020.</li> <li>• The EcoQO aims to maintain healthy populations of seals. In addition, EcoQos are developed on ‘Seabird population trends as an index of seabird community health’ as well as ‘Restoring and/or maintaining the quality and extent of threatened and/or declining habitats in the North Sea as shown on the OSPAR</li> </ul>				

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
		List'. [EcoQo-NS]				
Measures, action plan, etc. (Articles 5(2)(b), 13, 14 and 15 MSFD)	<ul style="list-style-type: none"> <li>The implementation of the OSPAR Convention and its strategies is takes place through the adoption of decisions, which are legally binding on the Contracting Parties, recommendations and other agreements.</li> <li>Contracting Parties are required to report on what they have done to implement their obligations and commitments. The OSPAR Commission then evaluates what has been achieved.</li> </ul>	<ul style="list-style-type: none"> <li>OSPAR supports implementation of Ecosystem Approach to management of human activities [STAT, para, 4.4]</li> <li>Specific decisions have been adopted within OSPAR with a view to achieving the strategic objectives in relation to biodiversity. Parties are required to report what they have done to implement these requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Specific decisions have been adopted to achieve the strategic objectives in relation to eutrophication. Parties are required to report what they have done to implement these requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Specific decisions have been adopted to achieve the strategic objectives in relation to hazardous substances as well as to pollution from offshore oil and gas activities. Parties are required to report what they have done to implement these requirements.</li> <li>A List of Chemicals for Priority Action has been agreed, and these chemicals evaluated to determine the risks they pose, what actions are needed to address those risks, and what monitoring strategies are required to evaluate the status of the NE- Atlantic with respect to those chemicals of key concern. Most of the chemicals on Annex X of Directive 2000/60/EC which EU Member States have to consider under the MSFD, are also on the</li> </ul>	<ul style="list-style-type: none"> <li>Specific decisions have been adopted to achieve the strategic objectives in relation to the impacts of human activities on the marine environment, including fisheries. Parties are required to report what they have done to implement these requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Specific decisions have been adopted to achieve the strategic objectives in relation to impacts of human activities on the marine environment, including marine litter. Parties are required to report what they have done to implement these requirements.</li> <li>For the management of specific human pressures OSPAR will consider, identify and implement appropriate measures for the reduction of the adverse effects of underwater noise on the marine environment. [STRAT]</li> <li>In regards to offshore activities OSPAR will further assess the impact of underwater noise from the offshore oil and gas industry in light of EU criteria and methodological standards for good environmental status and, as appropriate,</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
				OSPAR list. [AM-C]		<p>develop guidance on best practice for its mitigation [STRAT]</p> <ul style="list-style-type: none"> <li>OSPAR should increase efforts to develop, review and apply mitigation measures to reduce the impacts of underwater noise and develop guidance on best environmental practices (BEP) and best available techniques (BAT) for mitigating noise emissions and their environmental impacts.</li> </ul>
<p><i>Monitoring</i> (Articles 5(2)(a) and 11 MSFD)</p>	<ul style="list-style-type: none"> <li>STRAT identifies monitoring and assessment, as well as adaptive management, as essential elements for implementing the Ecosystem Approach.</li> <li>The OSPAR Commission will use its Joint Assessment and Monitoring Programme (JAMP) (OSPAR Agreement 2010-14) to develop the means to review progress achieved through this Strategy in order to assess from</li> </ul>	<ul style="list-style-type: none"> <li>By 2013 the OSPAR COM will agree an overall process for assessing marine biodiversity and ecosystem functioning, and develop and agree by 2014 a coordinated monitoring programme for the ongoing assessment of the environmental status with regard to biodiversity and ecosystem functioning in the OSPAR maritime area. [AM-BD][STRAT]</li> <li>To support ICG-</li> </ul>	<ul style="list-style-type: none"> <li>The OSPAR Commission will ensure that the regional monitoring and assessment requirements of the MSFD are fulfilled by the Eutrophication Monitoring Programme and the Common Procedure for the identification of the eutrophication status of the OSPAR maritime area [STAT, para]</li> <li>The eutrophication monitoring</li> </ul>	<ul style="list-style-type: none"> <li>OSPAR established a well-coordinated framework with agreed monitoring programmes and associated assessment criteria to focus work on those chemicals which will complement relevant activities made in other frameworks (e.g. HELCOM, the Water Framework Directive). [AM-C]</li> <li>OSPAR developed assessment criteria to measure progress</li> </ul>	<ul style="list-style-type: none"> <li>No specific monitoring programmes deal with fisheries in particular, but other monitoring requirements deal with fish stocks and the impacts of fisheries, e.g. JAMP or the specific assessment of marine biodiversity and ecosystem functioning.</li> </ul>	<ul style="list-style-type: none"> <li>There are no established monitoring programmes on marine litter [AM-ML]</li> <li>Several countries collect data on beach litter and OSPAR has a database with many data. Due to a huge variability it is a problem to find a proper statistical way to assess data.</li> </ul>



Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>time to time whether any changes to the Strategy are needed.</p> <ul style="list-style-type: none"> <li>Contracting Parties will cooperate under the JAMP in carrying out monitoring programmes and in undertaking joint assessments of the overall quality status of the maritime area, its regions and sub-regions to support the implementation of the Ecosystem Approach. [STRAT]</li> <li>OSPAR is preparing to revise JAMP over 2013-2014 to support countries' MSFD needs, in particular the 2014 MSFD monitoring programmes and the 2018 update of the initial assessment. [FCG]</li> </ul>	<p>COBAM, an inventory was carried out of national existing monitoring programmes to facilitate exchange of information amongst MS on biological monitoring and databases and contribute to a coordinated development of indicators under MSFD. [INVT]</p> <ul style="list-style-type: none"> <li>STRAT identifies a number of MPA monitoring milestones: <ul style="list-style-type: none"> <li>In 2012 it will be evaluated whether the OSPAR network of MPAs meet the OSPAR targets (i.e. meeting WSSD commitment and CBD target of at least 10% marine and coastal regions effectively conserved.</li> <li>In 2012, gaps in MPA network will be identified</li> <li>In 2016 evaluate whether OSPAR MPAs are well managed, working and, where relevant, cooperating</li> </ul> </li> </ul>	<p>programme (CEMP) applies. [AC-EU]</p> <ul style="list-style-type: none"> <li>The OSPAR Eutrophication Monitoring Programme is an integral part of the OSPAR Eutrophication Strategy and provides the basis for enabling CPs to assess and classify the eutrophication status of their maritime waters under the "Comprehensive Procedure" of the Common Procedure for the Identification of the Eutrophication Status of the OSPAR Maritime Area.</li> </ul>	<p>towards OSPAR's Strategy Objectives: 'background concentrations' and 'environmental assessment criteria'. The latter is currently under review to cover various existing approaching, including also WFD EQS. [AM-C]</p> <ul style="list-style-type: none"> <li>The CEMP encourages the monitoring and reporting of a range of contaminant-specific and general biological effects of hazardous substances. [AM-C]</li> </ul>		

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
		with competent authorities.				
<i>Data collection &amp; management (reporting)</i>	<ul style="list-style-type: none"> <li>Contracting Parties are required to report on the implementation of all decision, strategies and recommendations adopted by the Commission.</li> <li>The North Sea QSR 2010 contains a general assessment of current knowledge on the status of the North Sea, assessing the various impacts as well as the status of habitats and biota. The data for the QSR is collected through the JAMP as well as from other sources, such as the ICES or the EU.</li> <li>The 2006 Strategy for a Joint Assessment and Monitoring Programme (JAMP) includes the commitment by all Contracting Parties to provide an appropriate level of resources to achieve the common intention. [JAMP]</li> <li>OSPAR Guidelines ensure that data are</li> </ul>	<ul style="list-style-type: none"> <li>JAMP includes an assessment schedule for the various assessments to be produced. For the Biological Diversity and Ecosystems Strategy, there will be: <ul style="list-style-type: none"> <li>a. a series of assessments of human activities that impact significantly on the marine environment;</li> <li>b. an assessment of the conservation status of the species and habitats on the OSPAR list of threatened and/or declining species and habitats, to provide a basis for decisions on progress and priorities protecting them (2009). [JAMP]</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>For the Eutrophication Strategy, JAMP specifies that there needs to be an ongoing review of the changes in the eutrophication status of the different parts of the OSPAR maritime area, initially using the assessment criteria in the Common procedure for the identification of the eutrophication status of the maritime area for and subsequently against the agreed ecological quality objectives for nutrients and eutrophication effects and any intermediate targets. Assessments of the eutrophication status expected after the implementation of agreed measures will also be needed.</li> </ul>	<ul style="list-style-type: none"> <li>For the Hazardous Substances Strategy, JAMP specifies that there needs to be both reviews of what is happening on the various chemicals identified for priority action, including assessments of changes in environmental concentrations against agreed background reference concentrations and ecotoxicological assessment criteria, and a wider-ranging consideration of the biological effects of hazardous substances in general. Regional data collection is required to quantify the sources, release and pathways of hazardous substances on the List of Chemicals for Priority Action [STRAT].</li> </ul>	<ul style="list-style-type: none"> <li>Within the Biodiversity part of the JAMP programme, the impacts of human activities on the marine environment are considered. The human activities explicitly listed in the strategy include: fisheries. [STRAT]</li> </ul>	<ul style="list-style-type: none"> <li>Within the Biodiversity part of the JAMP programme, the impacts of human activities on the marine environment are considered. The human activities explicitly listed in the strategy include: marine litter. [STRAT]</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>comparable across the OSPAR marine region. [JAMP] Guidelines relate to the selection of data, the assessment of trends, data management and frequency of monitoring.</p> <ul style="list-style-type: none"> <li>• QA procedures are applied to the whole chain of JAMP activities, from programme design, through execution, evaluation and reporting to assessment. [JAMP]</li> <li>• Specific requirements in relation to data management are included in the JAMP, such as the need to ensure consistency management of data and documents as well as easy accessibility for all users.</li> <li>• Data is also available from general OSPAR data collection programmes, such as CEMP, RID and CAMP</li> </ul>					
<i>Stakeholder involvement</i>	<ul style="list-style-type: none"> <li>• The STRAT explicitly mentions that, in support of</li> </ul>	<ul style="list-style-type: none"> <li>• Observer organisations can take active part in the meetings of the</li> </ul>	<ul style="list-style-type: none"> <li>• Observer organisations can take active part in the meetings of the</li> </ul>	<ul style="list-style-type: none"> <li>• The OSPAR Commission and CPs will develop and</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration and exchange information with fisheries</li> </ul>	<ul style="list-style-type: none"> <li>• Observer organisations can take active part in the meetings of the</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>implementing the Ecosystem Approach to the management of human activities, the OSPAR Commission will continue to invite its observer organisations to take active part in all its work strands, and strengthen stakeholder involvement where and when deemed necessary. The Contracting Parties will ensure that they involve relevant stakeholders in the development of their national approaches to sustainable uses of the seas. [STRAT]</p> <ul style="list-style-type: none"> <li>• Observer organisations take part in all meetings, including those of working groups and of the ICGs</li> <li>• As for other aspects of the strategies, the Contracting Parties are required to report on the implementation of this requirement.</li> </ul>	<p>Committees and working groups, including the Committee on Biodiversity (BDC), where the strategy relating to biodiversity is implemented, GES descriptors are developed, joint monitoring and assessment procedures are developed, etc.</p>	<p>Committees and working groups, including the Hazardous Substances and Eutrophication Committee (HASEC)</p>	<p>maintain a constructive dialogue with regard to hazardous substances with all parties concerned, including producers, manufacturers, user groups, authorities and environmental NGOs. The OSPAR Commission will invite industry to cooperate in fulfilling the objective of OSPAR with regard to hazardous substance [STAT]</p> <ul style="list-style-type: none"> <li>• Observer organisations can take active part in the meetings of the Committees and working groups, including the Hazardous Substances and Eutrophication Committee (HASEC)</li> </ul>	<p>management authorities, advisory organisations, the fishing industry and other relevant Stakeholders to promote and support the integration of fisheries management with ecosystem-based management of the North-East Atlantic, the sustainable management of fisheries consistent with OSPAR Ecological Quality Objectives, and an improved assessment of fisheries which supports measures to achieve GES; [STRAT]</p> <ul style="list-style-type: none"> <li>• Observer organisations can take active part in the meetings of the Committees and working groups, including the Committee on Biodiversity (BDC) and the Environmental Impacts of Human Activities Committee (EIHA)</li> </ul>	<p>Committees and working groups, including the Committee on Biodiversity (BDC) and the Environmental Impacts of Human Activities Committee (EIHA)</p>
<i>Research</i>	<ul style="list-style-type: none"> <li>• OSPAR underlines the need to research</li> </ul>	<ul style="list-style-type: none"> <li>• No specific information was</li> </ul>	<ul style="list-style-type: none"> <li>• No specific information was</li> </ul>	<ul style="list-style-type: none"> <li>• No specific information was</li> </ul>	<ul style="list-style-type: none"> <li>• No specific information was</li> </ul>	<ul style="list-style-type: none"> <li>• Promotion of research to improve the</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	relations between different descriptors. No specific information was identified with regard to the research programmes or projects for the specific descriptors.	identified with regard to the research programmes or projects for the specific descriptors. <ul style="list-style-type: none"> <li>ICES provides scientific advice based on specific requests from OSPAR.</li> </ul>	identified with regard to the research programmes or projects for the specific descriptors. <ul style="list-style-type: none"> <li>The STRAT identifies an urgent need for research enabling a full assessment of the eutrophication status and their final classification as problem or non-problem area by 2014;</li> </ul>	identified with regard to the research programmes or projects for the specific descriptors.	identified with regard to the research programmes or projects for the specific descriptors. <ul style="list-style-type: none"> <li>ICES provides scientific advice based on specific requests from OSPAR.</li> </ul>	evidence base with respect to impact of litter, including micro-particles, on the marine environment [STRAT] <ul style="list-style-type: none"> <li>The OSPAR QSR 2010 states that Research is needed on the propagation and effects of underwater sound on marine life, as well as behavioural and auditory studies, programmes to monitor the distribution of sound sources and the relevant marine species, and anthropogenic sound budgets.</li> </ul>
<i>Communication and cooperation specific to development and implementation of MSFD components (Article 5(2) MSFD)</i>	<ul style="list-style-type: none"> <li>ICG MSFD provides a platform to allow parties to continuously share information on implementation at a national level. [FCG] This is confirmed in the North-East Atlantic Environment Strategy (2010-2020) [STRAT]</li> <li>The OSPAR Commission will facilitate the implementation of the</li> </ul>	<ul style="list-style-type: none"> <li>OSPAR established the COG (OSPAR Coordination Group) supported by the ICG-MSFD, which is the main delivery group in the OSPAR framework for coordination in relation to the biodiversity aspects of the MSFD.</li> <li>OSPAR's MSFD Advice Manual on Biodiversity Approaches to</li> </ul>		<ul style="list-style-type: none"> <li>OSPAR Commission will collaborate with the relevant international forums dealing with endocrine disruptors (e.g. OECD) [STRAT]</li> <li>OSPAR worked with ICES on the development of assessment criteria and scheme for integrated chemical and biological effects</li> </ul>	<ul style="list-style-type: none"> <li>No specific cooperation requirements were identified in relation to fisheries. The general overarching requirements include cooperation on this topic.</li> </ul>	<ul style="list-style-type: none"> <li>No specific cooperation requirements were identified in relation to marine litter. The general overarching requirements include cooperation on this topic.</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>MSFD by implementing its North-East Atlantic Environment Strategy and by contributing to the further development of the elements of GES under the MSFD to the extent this is relevant for the respective strategies [STRAT]</p> <ul style="list-style-type: none"> <li>• More specifically, the OSPAR Commission will facilitate the coordinated implementation of the MSFD by ensuring <ul style="list-style-type: none"> <li>(i) that assessment methodologies are consistent;</li> <li>(ii) that environmental targets are mutually compatible;</li> <li>(iii) that monitoring methods are consistent to facilitate comparability of monitoring results,</li> <li>(iv) take into account relevant transboundary impacts and</li> </ul> </li> </ul>	<p>determining GES, setting of environmental targets and selecting indicators for MSFD descriptors 1, 2, 4 and 6. – As part of OSPARs coordinating process an analysis of coherence in nationally identified indicators and targets are covered in report-version of 31.05.2011.</p> <ul style="list-style-type: none"> <li>• In order to halt and prevent biodiversity loss by 2020, the OSPAR Commission will cooperate with other competent authorities (as stipulated in MoU) and relevant scientific institutions (including ICES and EEA) [STRAT]</li> </ul>		monitoring. [AM-C]		

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>features. [STRAT]</p> <ul style="list-style-type: none"> <li>The OSPAR Commission will cooperate with the bodies implementing the Barcelona, Bucharest and Helsinki Conventions, in particular with the view to sharing best practice in monitoring and assessment frameworks and to facilitation achievement of GES [STRAT]</li> </ul>					

## 1.4. UNEP/MAP

### Abbreviations:

- MPA: Marine Protected Area
- SAP Strategic Action Programme
- EcAp: Ecosystem approach
- RACs: Regional Activity Centers
- Dumping Protocol: Protocol for the Prevention of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea
- Prevention and Emergency Protocol: Protocol Concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea
- LBS Protocol: Protocol on the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities
- SPA & Biodiversity Protocol: Protocol Concerning Specially Protected Areas and Biological Diversity in the Mediterranean
- Offshore Protocol: Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil
- Hazardous Wastes Protocol: Protocol on the Prevention of Pollution of the Mediterranean Sea by Transboundary Movements of Hazardous Wastes and their Disposal
- ICZM Protocol: Protocol on Integrated Coastal Zone Management in the Mediterranean
- SAP/MED: The MED POL Strategic Action Programme to Address Pollution from Land-Based Activities
- Regional LBS Plans: Regional Plans on reduction or elimination of substances or their inputs in the framework of the implementation of Article 15 of the LBS Protocol
- SAP/BIO: The Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean Region
- Endangered species Action Plan: Action Plans for the conservation and/or management of endangered or threatened species and sensitive seascapes
- Invasive Species Action Plan: Action Plan Concerning Species Introductions and Invasive Species in the Mediterranean Sea
- ICZM Action Plan: Action Plan for the implementation of the ICZM Protocol
- MSSD: The Mediterranean Strategy for Sustainable Development
- SAP Marine Litter: Strategic Action Plan for the management of marine litter in the Mediterranean (2011)

### Reference list:

- [IIAMS] 2012 Initial Integrated Assessment of the Mediterranean Sea: Fulfilling Step 3 of the Ecosystem Approach process
- [SoMMCER] 2013 State of the Mediterranean Marine and Coastal Environment Report based on the
- [SAP BIO 2003] Strategic Action Plan for the conservation of marine and coastal biodiversity in the Mediterranean (SAP BIO, 2003)
- [TDA] Transboundary Diagnostic Analysis for the Mediterranean Sea (2005)
- [EU- MS] Eutrophication Monitoring Strategy for the MEDPOL – Revision (2007).
- [SAP –P] Strategic Action Plan (and National Action Plans) to address pollution from land-based activities (1999)



- **[AR-2011]** 2011 Annual report – strategic partnership for the MED sea large ecosystem
- **[EcAp-MED]** UNEP, EcAp-MED, Project Document. Implementation of the Ecosystem Approach (EcAp) in the Mediterranean by the Contracting parties in the context of the Barcelona Convention for the Protection of the Marine Environment and the Coastal region of the Mediterranean and its Protocols. April 2012
- **[EU-STRAT]** MED POL Eutrophication Monitoring Strategy, Meeting of the MED POL National Coordinators Sangemini, Italy, 27 - 30 May 2003
- **[ML-STRAT]** Strategic Action Programme for the Management of Marine Litter in the Mediterranean. Meeting of MED POL Focal Points Rhodes (Greece), 25-27 May 2011, UNEP(DEPI)/MED WG.357/7 1 April 2011
- **[CC-MED]** Impact of climate change on marine and coastal biodiversity in the Mediterranean Sea: Current state of knowledge (2010)
- **[MED-BD]** The Mediterranean Sea Biodiversity: state of the ecosystems, pressures, impacts and future priorities

#### **Projects (see Annex IV)**

- **[CoCoNet]** – Towards Coast to Coast Networks of Marine Protected Areas, 2011-2014
- **[CREAM]** – Coordinating research in support of application of ecosystem approach to fisheries and management advice in the Mediterranean and Black Seas, 2011-2014
- **[PERSEUS]** – Policy-orientated marine Environmental Research for the Southern European Seas, 2011-2014
- **[Seas-Era]** – Towards Integrated Marine Research Strategy and Programmes, 2010-2014
- **[SESAME]** – Southern European Seas: Assessing and Modelling Ecosystem change, 2006-2011

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<p><i>(Initial) Assessment of the environmental status of the marine waters</i> (Articles 5(2)(a) and 8 MSFD)</p>	<ul style="list-style-type: none"> <li>An integrated initial assessment of the Mediterranean Sea was carried out in 2012 (2012 IIAMS), with a view to implementing step 3 of the ecosystem approach process for the Mediterranean. The report aims to collate information on the overall nature of ecosystems in the Mediterranean, including physical and ecological characteristics, drivers and pressures that affect the state of the marine environment, conditions or state of the coastal and marine ecosystems, and expected response of ecosystems if trends continue, where feasible.</li> <li>The 2013 State of the Mediterranean Marine and Coastal Environment Report (SoMMCER report) synthesises available knowledge about</li> </ul>	<ul style="list-style-type: none"> <li>SoMMCER (2013) identifies a variety of major pressures on the Mediterranean marine environment and, in particular, its biodiversity, such as urban sprawl, coastal erosion and invasive non-indigenous species. Although there is still high diversity in the Mediterranean, some species of reptiles, marine mammals, birds, and fish are reaching dangerously low abundance levels. Also habitats are under various pressures.</li> <li>The IIAMS identifies biodiversity loss and degradation of habitats as major issue in parts of the MED. [EcAp-MED]</li> <li>The 2005 TDA identified the decline in biodiversity as a major concern of the Mediterranean Sea. [TDA 2005]</li> <li>SAP BIO (2003) presents the status of</li> </ul>	<ul style="list-style-type: none"> <li>SoMMCER (2013) notes that eutrophication caused by human-mediated input of nutrients into marine waters is a source of concern, especially in coastal areas near large rivers and/or cities.</li> <li>The IIAMS identifies eutrophication as major issue in parts of the MED. [EcAp-MED]</li> <li>SAP BIO (2003) also looks at eutrophication, which is identified as a threat adversely affecting the state of marine and coastal biodiversity [SAP BIO 2003]</li> <li>Assessment of the magnitude of riverine inputs of nutrients into the MED has been delayed and its implementation started in 2011 [AR-2011].</li> <li>The Eutrophication Monitoring Strategy discusses the inventory of the data regarding</li> </ul>	<ul style="list-style-type: none"> <li>SoMMCER (2013) identifies a variety of major impacts from pollution on the Mediterranean marine environment.</li> <li>The IIAMS identifies contaminants as major issue in parts of the MED. [EcAp-MED]</li> <li>The 2005 TDA identified the decline in seawater quality as a major concern of the Mediterranean Sea. [TDA 2005]</li> <li>SAP BIO (2003) also looks at the impacts of contaminants on the marine environment. In particular industrial/urban pollution, underwater pipeline deployment and harmful agriculture practices are identified as threats [SAP BIO 2003]</li> </ul>	<ul style="list-style-type: none"> <li>SoMMCER (2013) concludes that over-exploitation beyond sustainable limits affects many of the commercially exploited fish stocks of the Mediterranean. Also marine food webs have been affected by fisheries activities.</li> <li>The IIAMS identifies (over)fishing as major issue in parts of the MED. [EcAp-MED]</li> <li>SAP BIO (2003) looks at the impacts of fisheries on the marine environment. Fishing on sensitive ecosystems is identified as a threat [SAP BIO 2003]</li> <li>The 2005 TDA identified the decline in fisheries as a major concern of the Mediterranean Sea. [TDA 2005]</li> <li>Pressures and impacts (consequences of intensive fishing) are discussed in the Report on the Mediterranean</li> </ul>	<ul style="list-style-type: none"> <li>SoMMCER (2013) concludes that the impact of marine litter, concentrated especially in bays and shallow areas, is increasingly regarded as a matter of concern across the Mediterranean.</li> <li>SAP BIO (2003) looks at the impacts of marine litter on the marine environment. Floating plastic objects and debris - mainly affecting sea turtles and marine mammals - is considered a threat to marine biodiversity [SAP BIO 2003]</li> <li>SoMMCER (2013) noted that <b>marine noise impact</b> on biota requires targeted research. Likely serious impacts from maritime traffic, particularly in the Western Med, and offshore exploration and military activities in specific locations.</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>major drivers and pressures affecting the Mediterranean Sea, the status of the marine environment, current and prospective impacts of collective human activity, and emerging issues in coastal and marine management. The main information source on which this report is the 2012 IIAMS.</p> <ul style="list-style-type: none"> <li>• Previous assessments also provided an assessment of the status of the marine environment of the Mediterranean. SAP BIO (2003) provided an in-depth analysis carried out in 19 MED countries identifying problems affecting biodiversity and their proximate/ultimate causes, assessing their relative importance and identifying national conservation priorities as well as remedial action.</li> <li>• The 2005 TDA included an assessment of the environmental status</li> </ul>	<p>the Mediterranean marine environment, including the status of biodiversity. Invasion by non-indigenous species is identified as a threats adversely affecting the state of marine and coastal biodiversity [SAP BIO 2003]</p> <ul style="list-style-type: none"> <li>• Guidelines for the preparation of the National ICZM Strategies were drafted in 2011. An assessment of existing relevant national strategies has been performed analysing their success factors. [AR-2011]</li> <li>• Based on the Country Reports, the SAP presents an overview of the Mediterranean Hot Spots and Sensitive Areas [SAP-P].</li> <li>• Features (biodiversity) of the MED as well as pressures and impacts (biological disturbance; NIS) are discussed in the Report on the Mediterranean Sea Biodiversity [MED-BD].</li> </ul>	<p>the eutrophication parameters in MED POL database[EU-STRAT]</p>		<p>Sea Biodiversity [MED-BD].</p>	

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	of the Mediterranean Sea. It identifies the main impacts and status, accompanied by supporting data.					
Setting priority objectives (GES/targets/indicators) (Articles 5(2)(a), 9 and 10 MSFD)	<ul style="list-style-type: none"> <li>Decision IG.17/6 outlines a roadmap for the implementation of EcAP. The roadmap consists of several subsequent steps, which provide for undertaking of an assessment of marine and coastal properties and pressures including a socio economic analysis, development of ecological objectives, operational objectives and respective indicators, development of GES and targets, the monitoring programmes that takes into account the agreed EA indicators, as appropriate and finally to undertake the necessary management measures and programmes to achieve GES. [EcAp-MED]</li> <li>The goals of the 2012</li> </ul>	<ul style="list-style-type: none"> <li>The SoMMCER Report provides for an ecological objective, operational objectives and indicators for biodiversity, non-indigenous species and sea-floor integrity. [SoMMCER 2013]</li> <li>2009 Marrakech Declaration sets an objective to establish by 2012 a network of MPAs, including on the high seas.</li> <li>EcAp-MED project includes an objective to Identify and prepare the nomination of Specially Protected Areas of Mediterranean Importance (SPAMI) by the COP through the following key actions: <ul style="list-style-type: none"> <li>a) Undertaking legal analysis about the status of each of the selected areas and data collection including field</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>The SoMMCER Report provides for an ecological objective, operational objectives and indicators for eutrophication and the marine foodweb (which is highly vulnerable to eutrophication). [SoMMCER 2013]</li> <li>Targets in the SAP-P cover the reduction of nutrients and suspended solids, the anthropogenic sources of nutrients (municipal sewage; Industrial waste water; agriculture; and atmospheric emissions) are targeted. [SAP-P].</li> </ul>	<ul style="list-style-type: none"> <li>The SoMMCER Report provides for an ecological objective, operational objectives and indicators for contamination (pollution). [SoMMCER 2013]</li> <li>The 2005 TDA defined EQOs for biodiversity and set priority actions. Environmental Quality Objective 1 in the TDA is: to reduce the impacts of land-based activities on Mediterranean marine environment and human health / The Strategic Action Programme to address pollution from land-based activities (SAP MED). Targets and needed activities at regional and national level are identified by the SAP MED. [TDA 2005]</li> <li>SAP priorities take in account the LBS</li> </ul>	<ul style="list-style-type: none"> <li>The SoMMCER Report provides for an ecological objective, operational objectives and indicators for harvest of commercially exploited fish and shellfish. [SoMMCER 2013]</li> <li>The 2005 TDA defined EQOs for biodiversity and set priority actions. Environmental Quality Objective 2 in the TDA is: Sustainable productivity from fisheries / Code of conduct for responsible fisheries. The TDA identifies specific actions needed to achieve this objective. Targets and specific activities are identified in the SAP MED. [TDA 2005]</li> </ul>	<ul style="list-style-type: none"> <li>The SoMMCER Report provides for an ecological objective, operational objectives and indicators for marine litter and noise. [SoMMCER 2013]</li> <li>Targets in the SAP-P cover the reduction of urban solid waste – which can affect through the release of raw waste into the sea, directly or indirectly, especially plastics – such as, by the year 2025 at latest, to base urban solid waste management on reduction at source, separate collection, recycling, composting and environmentally sound disposal. Targets also cover adequate municipal sewage – which can cover plastics and other marine debris –</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>IIAMS are to define the major basin-wide priority issues to be addressed by the EcAp and to determine where information that is being gathered within UNEP/MAP-Barcelona Convention system, combined with published studies, could suffice to elucidate management priorities.</p> <ul style="list-style-type: none"> <li>• The SoMMCER report identifies next steps: defining Good Ecological Status, setting targets, and developing an integrated monitoring programme based on the ecosystem-based approach. [SoMMCER 2013]</li> <li>• The 2005 TDA included an assessment of the environmental status of the Mediterranean Sea. It defined Environmental Quality Objectives and set priority actions. The specific associated targets and required activities are identified in the SAP MED,</li> </ul>	<p>survey;</p> <p>b) Elaborating the draft SPAMI presentation reports; and,</p> <p>c) Holding consultation meetings to review and finalize the presentation reports. [EcAp-MED]</p> <ul style="list-style-type: none"> <li>• The 2005 TDA defined EQOs for biodiversity and set priority actions. Environmental Quality Objective 3 in the TDA is: to conserve the marine biodiversity and ecosystem / Strategic Action Programme for the Conservation of Marine and Coastal Biodiversity in the Mediterranean Region (SAP BIO). The specific targets and activities are identified in the SAP MED. [TDA 2005]</li> <li>• Priorities identified cover the inventorying, mapping and monitoring MED coastal and marine biodiversity; assessing and mitigating the impact of threats on</li> </ul>		<p>Protocol, which in Annex 1, states 'to give priority to substances that are toxic, persistent and liable to bioaccumulate, in particular persistent organic pollutants (POPs)' [SAP-P].</p> <ul style="list-style-type: none"> <li>• Targets in SAP-P cover adequate municipal sewage – which can cover heavy metals and other toxic substances – through proposed targets to, by the year 2025, dispose all municipal waste water (sewage) in conformity with the provisions of the LBS Protocol. Targets also cover industrial development – which can cover TPBs – through proposed targets to, by the year 2025, point source discharges into the Protocol Area from industrial installations to be in conformity with the provisions of the Protocol and other agreed international and national provisions. Targets cover reduction and</li> </ul>		<p>through proposed targets to, by the year 2025, dispose all municipal waste water (sewage) in conformity with the provisions of the LBS Protocol [SAP –P]</p> <ul style="list-style-type: none"> <li>• One objective set by SAP-BIO is to achieve non-pollutant marine transport and navigation techniques, with special attention to noise pollution. It foresees a Regional Plan to address noise pollution but this has not been pursued.</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>together with an assessment of priority. [TDA 2005]</p> <ul style="list-style-type: none"> <li>• Decision 20/4 on “Implementing the Ecosystem Approach Roadmap” validated the work done so far with regard to the 11 ecological objectives, operational objectives and indicators for the MED which is aligned with the work under the MSFD. [EcAp-MED]</li> <li>• COP17 meeting mandates the Secretariat to mobilise its full capacity (with support of MEDPOL and RECs) to prepare work on the determination of Mediterranean GES and targets during the next biennium and continue supporting the CPs in their efforts to implement in particular the EU common MSFD implementation strategy. [EcAp-MED]</li> <li>• The EcAP project aims to support implementation of core</li> </ul>	<p>biodiversity; and capacity-building to ensure coordination and technical support [SAP BIO 2003]</p> <ul style="list-style-type: none"> <li>• Targets in SAP-P cover the combating of physical alterations and destruction of habitat to safeguard the ecosystem function, maintain the integrity and biological diversity of species and habitats. [SAP-P]</li> <li>• A specific objective of the MedPartnership is to assist countries in the implementation of the SAPs and NAPs to reduce pollution from land-based sources, and preserve the biodiversity and ecosystems of the MED from degradation [AR-2011]</li> </ul>		<p>phasing out of Substances that are Toxic, Persistent and liable to Bioaccumulate (TPB) – covering POP, pesticides, industrial chemicals, unwanted contaminants and heavy metals. Similarly, targets are set for organohalogen compounds. Finally, targets cover the reduction and safe disposal of hazardous waste. Special attention is paid to obsolete chemicals, used lubricating oil and batteries. [SAP-P]</p>		

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	activities related to the implementation of the Ecosystem Approach in UNEP/MAP's Programme of Work, and covers, amongst others, the determination of GES and target for each of the 11 agreed Ecological Objectives; and implement a pilot case which successfully tests EcAp indicators [EcAp-MED].					
<i>Measures, action plan, etc. (Articles 5(2)(b), 13, 14 and 15 MSFD)</i>	<ul style="list-style-type: none"> <li>The SoMMCER report recognises that more effective management response at both country level and through international cooperation can be expected to flow from coordinated monitoring and systematic understanding of these pressures, allowing for prioritisation of the many complicated management issues that require management responses. The report also identifies some better steps towards better management</li> </ul>	<ul style="list-style-type: none"> <li>Under the Barcelona Convention, a number of legally binding protocols have been adopted with the aim of restoring and maintaining biodiversity in the Mediterranean. The SPA &amp; Biodiversity Protocol deals in particular with the protection of marine biodiversity in the Mediterranean, including the issue of invasive non-indigenous species, and the ICZM Protocol deals with integrated coastal zone management, in</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of legally binding protocols under Barcelona Convention: The LBS Protocol and the ICZM Protocol deal in particular with the issue of eutrophication. [SoMMCER 2013]</li> <li>The SAP/MED on pollution from land-based activities as well as the regional LBS plans deal specifically with the issue of eutrophication. Also in the endangered species action plan, the ICZM protocol and the MSSD specific actions to tackle</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of legally binding protocols under Barcelona Convention: All seven Protocols (the Dumping Protocol, the Prevention and Emergency Protocol, the LBS Protocol, the SPA &amp; Biodiversity Protocol, the Offshore Protocol, the Hazardous Wastes Protocol and the ICZM Protocol) deal with particular aspects of contamination. [SoMMCER 2013]</li> <li>A specific Strategic Action Programme was adopted to Address</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of legally binding protocols with the aim of restoring and maintaining fish stocks and countering over-exploitation in the Mediterranean. The LBS Protocol and the SPA &amp; Biodiversity Protocol deal in particular with fisheries. [SoMMCER 2013]</li> <li>The MSSD, BIO/SAP and the Action Plan for Endangered species set out actions in relation to the overexploitation of Mediterranean fish stocks and propose fisheries management</li> </ul>	<ul style="list-style-type: none"> <li>Adoption of legally binding protocols contributing to the tackling of marine litter in the Mediterranean. The Dumping Protocol, the LBS Protocol, the SPA &amp; Biodiversity Protocol, the Offshore Protocol, the Hazardous Wastes Protocol and the ICZM Protocol contribute to diminishing marine litter in the Mediterranean Sea. [SoMMCER 2013]</li> <li>In 2011, a specific Strategic Action Plan to deal with the</li> </ul>



Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>have already been taken, for instance, the entry into force in 2011 of the 2008 Protocol on Integrated Coastal Zone Management (ICZM). [SoMMCER 2013]</p> <ul style="list-style-type: none"> <li>• Various legally binding Protocols have been adopted to tackle the impacts on the Mediterranean marine environment. Not all of these Protocols are however ratified by all Parties to the Barcelona Convention.</li> <li>• The SAP aims at improving the quality of the marine environment by better shared-management of the land-based pollution. Achievement of the aims of the SAP will contribute to maintaining and, where appropriate, restoring the productive capacity and biodiversity of the marine environment, ensuring the protection of human health, as well as promoting the conservation and</li> </ul>	<p>particular with a view to restore coastal biodiversity and to stop erosion. The Contracting Parties are required to implement the Protocols they have ratified and report on its implementation in their national territory. [SoMMCER 2013]</p> <ul style="list-style-type: none"> <li>• The identification of Ecologically and Biologically Significant Areas (EBSAs) proposed by MAP and its RAC/SPA [SoMMCER]</li> <li>• SAP/BIO sets out specific objectives, indicators and actions to be taken with a view to improving the status of the Mediterranean marine environment in relation to biodiversity and managing human activities having an impact on habitats, fish stocks, endangered species, etc. The actions are prioritised and responsible actors are identified. [SAP BIO 2003]</li> </ul>	<p>eutrophication are set out. [SoMMCER 2013]</p> <ul style="list-style-type: none"> <li>• A 2008 Regional Workshop was organised on sustainable agriculture and rural development.</li> </ul>	<p>Pollution from Land-Based Activities SAP/MED. In addition, Regional Plans on land-based pollution are prepared in the framework of the LBS Protocol as well as a specific Strategy for ship-source pollution. In addition, overarching strategies, such as the MSSD and the ICZM Protocol also deal with the reduction of contamination by hazardous substances. [SoMMCER 2013]</p> <ul style="list-style-type: none"> <li>• The SAP/MED requires National Action Plans to be prepared by the countries. The NAPs were prepared by 2005 and contain specific activities to be implemented with a view to reaching the objectives of the SAP/MED. A major challenge identified by UNEP/MAP was the full and sustained implementation of these NAPs in the long-term. MED POL is responsible for monitoring the</li> </ul>	<p>measures. [SoMMCER 2013]</p> <ul style="list-style-type: none"> <li>• SAP/BIO sets out specific objectives, indicators and actions to be taken in relation to managing human activities having an impact on fish stocks. [SAP BIO 2003]</li> <li>• Decision by the GFCM to restrict bottom trawling in all waters below 1.000 meters.</li> <li>• Most MED countries intend to use MPAs as a tool for conserving and managing marine coastal resources [SAP BIO 2003]</li> </ul>	<p>management of marine litter in the Mediterranean was adopted containing an identification of the main problems and actions required/work plan for implementation. Parties are required to report on progress on implementation. MED POL is responsible for collecting the data reported and to organise monitoring of the implementation of the SAP. Specific objectives of the Marine Litter are to: enhance the proper implementation of existing legislation dealing with municipal and sea based solid waste; to reduce, in view to eliminate, marine litter generated “in situ” (on beaches); and to influence environmental attitudes and behaviour of residents and tourists of coastal areas in the MED Region with regards to</p>



Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>sustainable use of marine living resources [SAP-P]</p> <ul style="list-style-type: none"> <li>• The SAP sets guidelines for the establishment of national action plans (NAP) to address land-based pollution. [SAP-P]</li> <li>• The EcAP project aims to support implementation of core activities related to the EcAp in UNEP/MAP's Programme of Work, and covers the need to develop and review relevant measures for implementation of EcAp [EcAp-MED]</li> <li>• COP17 mandates the update of a number of MAP regional sectorial policies to take into account the results of EcAp implementation and adopted a timeline for implementing EcAp until 2019 [EcAp-MED]</li> </ul>	<ul style="list-style-type: none"> <li>• Within SAP/BIO, National Action Plans were prepared by the CP with a view to follow-up on the implementation of the actions. However, a particular challenge seems to lie in the follow-up of implementation of the actions by the contracting parties. [SAP BIO 2003]</li> <li>• Most MED countries intend to use MPAs as a tool for conserving and managing marine coastal resources [SAP BIO 2003]</li> </ul>		<p>progress in the implementation of the SAP/MED. [webiste UNEP/MAP].</p>		<p>marine litter. [ ML-STRAT]</p> <ul style="list-style-type: none"> <li>• Also the action plans and strategies adopted within UNEP/MAP deal with marine litter. For instance, SAP/MED, SAP/BIO, the regional ship pollution strategy and the MSSD contain actions to reduce marine litter.</li> <li>• 2009 Regional Workshop on the promotion of sustainable tourism in the Mediterranean Region</li> <li>• Marine noise is not covered by measures or action plans.</li> </ul>
<p><i>Monitoring (Articles 5(2)(a) and 11 MSFD)</i></p>	<ul style="list-style-type: none"> <li>• The SoMMCER notes a lack of knowledge on the cumulative impact of the pressures affecting different locations within the Mediterranean. A</li> </ul>	<ul style="list-style-type: none"> <li>• The SoMMCER notes that for certain issues, such as floor integrity, and trophic levels and food webs, there are many gaps in knowledge and</li> </ul>	<ul style="list-style-type: none"> <li>• Parameters and indicators more related to the benthic ecosystem are considered useful and consistent for assessing the eutrophication</li> </ul>	<ul style="list-style-type: none"> <li>• UNEP/MAP suggests to all CPs to establish their own national monitoring programme following UNEP guidelines. The organization proposes</li> </ul>		<ul style="list-style-type: none"> <li>• The SoMMCER notes that for certain issues, such as marine litter and noise, there are many gaps in knowledge and information available</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>systematic monitoring program should provide data needed in the future for both environmental assessment (whether ecological objectives are being met) and management effectiveness assessment (whether management objectives are being met). [SoMMCER 2013]</p> <ul style="list-style-type: none"> <li>• COP17 meeting mandates UNEP/MAP to mobilize its full capacity (with support of MEDPOL and the RACs) to prepare an integrated monitoring programme based on the agreed ecosystem approach indicators [EcAp-MED]</li> <li>• Overall, the SAP aims to put in place monitoring programmes covering the quality of the marine environment as well as inspection (by the year 2000). [SAP-P]</li> </ul>	<p>information available and that this information will need to be gathered through targeted monitoring programs to provide a scientific basis for decision-making. [SoMMCER 2013]</p>	<p>state. [EU-MS]</p> <ul style="list-style-type: none"> <li>• The Eutrophication Monitoring Strategy provides guidelines on establishing a monitor plan (covering parameters, data quality assurance, and indicators). [EU-STRAT]</li> </ul>	<p>to cover hot spots, coastal areas, pollution sources &amp; perform as well compliance monitoring. Contaminants should be determined in seawater, sediments &amp; biota (bioindicators)</p>		<p>and that this information will need to be gathered through targeted monitoring programs to provide a scientific basis for decision-making. [SoMMCER 2013]</p> <ul style="list-style-type: none"> <li>• One of the objectives of the Marine Litter Strategy is to follow the trends of marine litter generation and distribution through the establishment of a monitoring programme for marine litter in the MED. [ML-STRAT]</li> </ul>
<i>Data collection &amp; management (reporting)</i>	<ul style="list-style-type: none"> <li>• The SoMMCER stressed the need for a more robust approach to</li> </ul>	<ul style="list-style-type: none"> <li>• The Barcelona Convention framework allows the coordinated</li> </ul>	<ul style="list-style-type: none"> <li>• The Eutrophication Monitoring Strategy provides guidelines on</li> </ul>	<ul style="list-style-type: none"> <li>• The Barcelona Convention framework allows the coordinated</li> </ul>		

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>deriving information to support the major issues outlined in the Ecosystem Approach Ecological Objectives. It noted that for some major issues, information will need to be gathered through targeted monitoring programs to provide a scientific basis for decision-making. [SoMMCER 2013]</p> <ul style="list-style-type: none"> <li>The SoMMCER notes that information should be collected on management measures, enforcement of regulations and level of local compliance. Thought should be given to optimising data compatibility between the environmental monitoring stream and management evaluation stream. Both information streams should feed the Ecosystem Approach process. [SoMMCER 2013]</li> <li>Reporting is a target in SAP, covering to</li> </ul>	<p>collection of information on biodiversity, through the Regional Activity Centre (RAC/SPA) in Tunis [SoMMCER 2013]</p> <ul style="list-style-type: none"> <li>The SoMMCER notes that there are important gaps in knowledge of the marine biodiversity in the Mediterranean Sea, including on the Specially Protected Areas and species and habitats, which are of conservation interest. [SoMMCER 2013]</li> <li>There are also gaps in understanding of the impacts of human activity on marine and coastal biodiversity. [SoMMCER 2013]</li> </ul>	<p>establishing a monitor plan (covering parameters, data quality assurance, and indicators). [EU-STRAT]</p> <ul style="list-style-type: none"> <li>The Barcelona convention countries are encouraged to submit yearly raw data on eutrophication to UNEP.</li> <li>A new reliable database is recently constructed by UNEP, open to national focal points and scientists of the participating countries, allowing basic statistical treatment of eutrophication data.</li> </ul>	<p>collection of information on levels of key contaminants, through MED POL [SoMMCER 2013]</p> <ul style="list-style-type: none"> <li>The CPs are encouraged to submit yearly raw data on contaminants to UNEP</li> <li>A new reliable database is recently constructed by UNEP, open to national focal points and scientists of the participating countries, allowing basic statistical treatment of contaminant data.</li> </ul>		

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	prepare and apply a unified reporting system on the application of the provisions of the Convention, the Protocols and the SAP [SAP-P]					
<i>Stakeholder involvement</i>	<ul style="list-style-type: none"> <li>The EcAP project reports that UNEP/MAP relies and has close ties with many stakeholders but that challenges to engage these include identifying the issues, credibility of the process, impartiality of coordination body and commitment of key stakeholders. It proposes different level of engagement: low (consultative seminars and interviews), medium (proactive participation in meetings and workshops), and high (key stakeholders engagement also in management of the process). [EcAp-MED].</li> <li>In the SAP, public participation is a target – considered as an</li> </ul>	<ul style="list-style-type: none"> <li>In general, the SAP BIO 2003 report mentions that the role of civil society is growing and better accepted by the governments of the MED countries. [SAP BIO 2003]</li> <li>Cooperation and coordination between the organisations concerned by the SAP BIO should be assured at: national level; intergovernmental organisations; and NGOs whose activities cover (part of) the Mediterranean basin. [SAP BIO 2003]</li> </ul>		<ul style="list-style-type: none"> <li>According to the SAP, the public industrial sector shall share the targets on industrial development [SAP-P]</li> </ul>		<ul style="list-style-type: none"> <li>One of the objectives of the Marine Litter Strategy is to establish synergies with on-going and planned initiatives in the MED Region as they relate to waste and marine litter. In fact, this objective aims at ensuring coherence and coordination of scattered activities undertaken by various stakeholders under all previous objectives. [ML-STRAT]</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>essential component of a sustainable development and environmental policy. This covers, inter alia, to identify potential roles for NGOs in the implementation of the SAP and to ensure that all relevant IGOs and NGOs have appropriate access to information concerning the SAP and its application [SAP-P]</p> <ul style="list-style-type: none"> <li>• The 2011 Annual Report identifies the involvement of civil society as important part of capacity building. [AR-2011].</li> <li>• An integral part of the MedPartnership, which is critical for the effective implementation of its objectives is the involvement of NGOs and CBOs in the project and its corresponding components. This lead to the implementation of the “NGO Involvement Plan” and the development of the on-line database of Mediterranean environmental NGOs</li> </ul>					

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	[AR-2011]					
Research	<ul style="list-style-type: none"> <li>The goal of the 2012 IIAMS is also to determine where gaps exist, in order to improve scientific research and monitoring being undertaken by Mediterranean countries so as to provide an adequate foundation for effective and efficient ecosystem-based management going forward.</li> <li>The SoMMCER notes that in addition to establishing a systematic monitoring regime to derive needed information on condition and trends, future research will have to elucidate cause-effect relationships, in order to support the establishment of management measures that lead to the desired outcomes. [SoMMCER 2013]</li> <li>There are critical gaps in the information</li> </ul>	<ul style="list-style-type: none"> <li>The SoMMCER report notes that the impact of offshore installations on sea-floor integrity is not well-researched. [SoMMCER 2013]</li> </ul>		<ul style="list-style-type: none"> <li>The SoMMCER report notes that research on the impacts of pollutants on the environment has tended to focus only on certain pollutants and in certain regions. Little is known about impacts from contaminants in many regions of the Mediterranean. [SoMMCER 2013]</li> </ul>		<ul style="list-style-type: none"> <li>The SoMMCER report notes that the impact of marine noise on biota requires targeted research. [SoMMCER 2013]</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>available on the environmental status of offshore areas and little or no monitoring and surveillance takes place there. There is a need to expand research to include offshore pelagic environments and the deep sea. [SoMMCER 2013]</p> <ul style="list-style-type: none"> <li>• Research needs/gaps are listed in the Report on the Mediterranean Sea Biodiversity [MED-BD].</li> </ul>					
<p><i>Communication and cooperation specific to development and implementation of MSFD components (Article 5(2) MSFD)</i></p>	<ul style="list-style-type: none"> <li>• UNEP/MAP Programme of work with regard to ecosystem approach (EcAp) is ambitious with the view to implementing the roadmap adopted by the Parties in 2008, through Decision IG 17/6 and an important vehicle for advancing the implementation of the MSFD. Its implementation falls under the Project of the ENRTP Strategic Cooperation Agreement (SCA)</li> </ul>					

Type of activities	Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
	<p>between UNEP and EU. [EcAp-MED]</p> <ul style="list-style-type: none"> <li>The EcAp-MED project will enable UNEP/MAP to further develop the Ecosystem Approach as the new integrated implementation strategy of the Barcelona Convention legal framework and to do so in full coherence with the MSFD as well as to contribute to the process of harmonizing measures and programmes as required by the Barcelona Convention and its Protocols with the EcAp. For those countries which are members of the EU, the project contributes to effectively meet their obligations under the MSFD. [EcAp-MED]</li> </ul>					



## 2 – Resources, planning and programming

For each of the RSC, this section describes human resources and existing structures which can be of relevance in the context of the implementation of the MSFD. It also describes the main features of planning and programming. Finally, existing cooperation programmes involving two or more RSCs are also described.

### 1.1 HELCOM

#### 1) Human resources/Working groups

The working structure of HELCOM, supported by the Secretariat, consists of the meetings of the Helsinki Commission, the Heads of Delegation, and six main groups. The groups address different aspects of HELCOM's work in preventing pollution and protecting the Baltic marine environment:

- Group for Implementation of the Ecosystem Approach (HELCOM GEAR): initiates actions to implement the BSAP and MSFD and steers HELCOM's efforts to restore the Good Environmental Status (GES) of the sea.<sup>1</sup> HELCOM GEAR is relevant for the implementation of the MSFD as a whole.
- The Nature Protection and Biodiversity Group (HELCOM HABITAT): works to ensure that suitable information on habitats, species and the conservation of biodiversity is available for all HELCOM's groups and identifies the current and potential impacts of human activities on Baltic marine biodiversity to make concrete proposals regarding possible measures to reduce or eliminate these impacts. HELCOM HABITAT is relevant for the implementation of MSFD requirements mainly related to the biodiversity descriptors (D1, 2, 4 and 6).<sup>2</sup>
- The Land-based Pollution Group (HELCOM LAND): responsible for reducing pollution from all sources on land within the Baltic Seas catchment area. It identifies point and diffuse sources of land-based pollution of nutrients and hazardous substances, and proposes suitable actions to reduce these emissions and discharges. Priority areas include eutrophication and hazardous substances and implementation of the Baltic Sea Joint Comprehensive Environmental Action Programme (JCP). HELCOM LAND is relevant for the implementation of MSFD requirements mainly related to the eutrophication and contaminants descriptors (D5, 8 and 9).<sup>3</sup>
- The Maritime Group (HELCOM MARITIME): works to prevent pollution from ships, including deliberate operational discharges as well as accidental pollution. It works closely together with international bodies to ensure that international measures (including the Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities) are properly implemented in the Baltic and to address the problem of marine litter. HELCOM MARITIME is relevant for the implementation of MSFD requirements mainly related to the contaminants and marine litter descriptors (D8, 9 and 10).<sup>4</sup>
- The Monitoring and Assessment Group (HELCOM MONAS): assesses trends in threats to the marine environment, their impacts, the resulting state of the marine environment, and the effectiveness of adopted measures. This work forms the basis for the work of HELCOM's other groups and helps define the need for additional measures. HELCOM MONAS is relevant for the implementation of MSFD requirements related to the development of monitoring programmes (Article 11 MSFD).<sup>5</sup>

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<sup>1</sup> [Terms of Reference - HELCOM GEAR](#)

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<sup>3</sup> HELCOM Secretariat Professional Secretary Mr. Mikhail Durkin, Phone: +358 46 850 9195

<sup>4</sup> HELCOM Secretariat, Professional Secretary, Mr. Hermann Backer. Phone: +358 46 8509199

<sup>5</sup> HELCOM Secretariat, Ms. Maria Laamanen. Phone: +358 46 850 9198

- The Response Group (HELCOM RESPONSE): coordinates two joint aerial surveillance flights a year as well as other operational exercises to combat pollution. Like HELCOM MARITIME, it works closely with other relevant international bodies including BONN Agreement, and the International Maritime Organisation (IMO), to ensure international measures are suitably applied and implemented in the Baltic.

In addition to the main groups, a few important topics are addressed more specifically by the following platforms:

- HELCOM Fisheries and Environment Forum (HELCOM FISH/ENV FORUM) serves as a platform for dialogue between fisheries and environmental authorities on marine biodiversity and sustainable fisheries. The work done in this forum is particularly relevant for the implementation of MSFD requirements mainly related to the fisheries descriptor (D3).
- HELCOM Agriculture and Environment Forum (HELCOM AGRI/ENV FORUM) enhances the dialogue between agricultural and environmental authorities on the development and application of sustainable agricultural practices with the least environmental impact on the Baltic Sea. The work done in this forum is particularly relevant for the implementation of MSFD requirements mainly related to the fisheries descriptor (D5).

With regard to financial resources, the only information publicly available relates to the “Financial Rules of the Helsinki Commission”, which explains that the budget is adopted every year financed by the contributions of the Contracting Parties, as stated in Article 22 of the Convention. No indication is provided in the Rules or in the Convention of the amount contributed by the Contracting Parties.

## 2) Planning and programming

### *Strategic documents*

The Baltic Sea Action Plan sets out an ecosystem-based approach to the protection of the marine environment of the Baltic Sea. It describes the actions to achieve a good environmental status of the Baltic Sea in the following areas:

- Towards a Baltic Sea unaffected by eutrophication;
- Towards a Baltic Sea undisturbed by hazardous substances;
- Towards a Baltic Sea with environmentally friendly maritime activities;
- Towards favourable conservation status of Baltic Sea biodiversity.

The BSAP Implementation Group prepares Ministerial meetings where national implementation programmes are evaluated and areas for progress are identified. It proposes detailed steps for implementation of the BSAP, using the BSAP Index of Actions. In particular, the BSAP Index of Actions includes information on implementation of HELCOM recommendations on eutrophication and hazardous substances, indicating completed, on-going and planned activities/next steps with an indication of a timetable. In relation to biodiversity, the BSAP includes an agreement to develop long-term plans for protecting, monitoring and sustainably managing coastal fish species, including most threatened and/or declining by 2012.

### *Work Programme*

No work programme for 2013 (or even previous years) has been found from the desk-study.

## 3) Cooperation projects

### *Cooperation between parties:*

Cooperation between Contracting Parties is taking place for the implementation of the BSAP in various implementation groups, such as the BSAP Implementation Group, but also HELCOM MONAS (Monitoring and Assessment). In addition, HELCOM ad-hoc groups can be established (as

projects) in order to ensure cooperation on more specific topics. Finally, close co-operation with Russia, which is the only HELCOM country outside the EU in the Baltic Sea region, is crucial for any further progress to be made in rescuing the troubled Baltic marine environment.

#### *Cooperation between RSCs:*

Cooperation between RSCs include cooperation with OSPAR for the implementation of the International Convention on the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) and cooperation with the Black Sea through the Baltic2Black project (Environmental Monitoring of the Black Sea with a focus on nutrient pollution (2011-2013)) which aims to exchange and collaborate with regard to the issue of eutrophication, a major issue of concern for both RSC.

In addition, cooperation is taking place at the EU level within the framework of the Common Implementation Strategy (CIS) for the implementation of the MSFD.

## **1.2 OSPAR**

### **1) Human resources/Working groups**

The five main OSPAR Committees in charge of implementing the strategies are the Biodiversity Committee (BDC) and the Hazardous Substances and Eutrophication Committee (HASEC), which replaces the Eutrophication Committee (EUC) and the Hazardous Substances Committee (HSC), the Offshore Industry Committee (OIC), the Radioactive Substances Committee (RSC) and the Environmental Impacts of Human Activities Committee (EIHA). For each main Committee, a work programme is designed and implemented annually. In addition to work on species and habitats together with marine protected areas, the BDC is responsible for the development of marine biodiversity assessment and monitoring.

Where issues require substantial work between meetings, informal groups may be established, such as intersessional correspondence groups (ICG). While the coordination of the implementation of the MSFD in OSPAR is led by the OSPAR Coordination Group (CoG), and the Inter-sessional Correspondence Group on the MSFD (ICG-MSFD), other ICG have been set up on specific topics, and together with the different committees and other structures, contribute to OSPAR work in relation to the MSFD descriptors, as follows:

- ICG-Risk Based Approach (RBA), under the Offshore Industry Committee: GES Descriptors 8 – *Contaminants* and 11 – *Noise*.
- ICG-Coordination of Biodiversity Assessment and Monitoring (COBAM) and ICG-Marine Protected Areas (MPA), under the Biodiversity Committee: GES Descriptors 1, 2, 4 and 6 – *Biodiversity*.
- ICG-Marine Litter (ML), ICG-Cumulative Impacts (C) and ICG-Socio-economic analysis (SEA) under the Environmental Impact of Human Activities Committee: GES Descriptors 2, 3, 7, 10 and 11.
- ICG-Ecotoxicological assessment criteria (EACs), ICG-Review of the Common Procedure (COMP), ICG-Eutrophication Modelling (EMO) together with the OSPAR Informal Group of DYNAMEC Experts (IGE), the Working Groups on Monitoring and on Trends and Effects of Substances in the Marine Environment and the Working Group on Inputs to the Marine Environment (WG MIME and INPUT), under HASEC: GES Descriptors 5, 8 and 9 – *Nutrients and contaminants*.

With regard to financial resources, the only information publicly available relates to the “Financial Regulations” in Annex I of the Rules of Procedures of the OSPAR Commission, which explains that

the budget is adopted for one year and is financed by the contributions of the CP according to specific rules detailed in the Financial Regulations. No information about amounts is provided.

## 2) Planning and programming

### *Strategic documents*

OSPAR has first developed, and is implementing, five thematic strategies to address the main threats that it has identified within its competence (the 2010 update of the OSPAR Strategies took account of the MSFD requirements):

- The Biodiversity and Ecosystem Strategy (which include marine litter): Strategic objective to halt and prevent by 2020 further loss of biodiversity in the OSPAR maritime area, to protect and conserve ecosystems, and to restore, where practicable, marine areas which have been adversely affected;
- The Eutrophication Strategy: Strategic objective to combat eutrophication in the OSPAR maritime area, with the ultimate aim to achieve and maintain a healthy marine environment where anthropogenic eutrophication does not occur;
- The Hazardous Substances Strategy: Strategic objective to prevent pollution of the OSPAR maritime area by continuously reducing discharges, emissions and losses of hazardous substances, with the ultimate aim to achieve concentrations in the marine environment near background values for naturally occurring substances and close to zero for man-made synthetic substances
- The Offshore Industry Strategy
- The Radioactive Substances Strategy.

### *Work Programme*

Work programmes are developed and implemented annually for each main Committee. They set out the products that should be delivered at the next meeting of the Committee and the task manager (from a CP or the Secretariat) responsible for the delivery of this product.

The following work programmes are publicly available and will be used for the analysis:

- Programme of work for the Biodiversity Committee - 2012/2013 (Revision),<sup>6</sup> which includes several products that have direct relevance to the MSFD (e.g. Product 6 Guidance for monitoring for D1, 2, 3, 4 and 6)
- Programme of Work 2012/2013 for the Hazardous Substances and Eutrophication Committee (HASEC),<sup>7</sup> which includes several products on monitoring of hazardous substances (including from atmospheric contamination) or setting of nutrient reduction targets, as well as product directly related to coordination with MSFD implementation (e.g. Product 36 Conclusions on indicators and targets to guide progress towards good environmental status for hazardous substances).

Other work programmes include:

- Programme of Work for the Offshore Industry Committee (OIC) - 2012/2013<sup>8</sup>
- Programme of Work for the Radioactive Substances Committee (RSC) – 2012/2013<sup>9</sup>

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<sup>6</sup> [http://www.ospar.org/html\\_documents/ospar/html/annex23\\_bdc\\_work\\_programme.doc](http://www.ospar.org/html_documents/ospar/html/annex23_bdc_work_programme.doc)

<sup>7</sup> [http://www.ospar.org/html\\_documents/ospar/html/annex25\\_hasec\\_work\\_programme.doc](http://www.ospar.org/html_documents/ospar/html/annex25_hasec_work_programme.doc)

<sup>8</sup> [http://www.ospar.org/html\\_documents/ospar/html/annex26\\_work\\_programme\\_oic\\_2012-13.doc](http://www.ospar.org/html_documents/ospar/html/annex26_work_programme_oic_2012-13.doc)

<sup>9</sup> [http://www.ospar.org/html\\_documents/ospar/html/annex27\\_work\\_programme\\_rsc\\_2012\\_13.doc](http://www.ospar.org/html_documents/ospar/html/annex27_work_programme_rsc_2012_13.doc)

### 3) Cooperation projects

#### *Cooperation between parties:*

The OSPAR QSR 2010 mentions that further coordination should be carried out between relevant Contracting Parties at a subregional level. In addition, in order to halt and prevent biodiversity loss by 2020, the OSPAR Commission should cooperate with other competent authorities (as stipulated in MoU) and relevant scientific institutions (including ICES and EEA). It should also collaborate with the relevant international forums dealing with endocrine disruptors (e.g. OECD).

In terms of on-going cooperation, ICG MSFD has carried out an analysis of the degree of comparability of the countries' draft GES determinations and targets/indicators with the aim of improving coordination in 2012, and identifying opportunities for further coordination in the period 2012-2018. Finally, OSPAR has worked with ICES on the development of assessment criteria and scheme for integrated chemical and biological effects monitoring.

#### *Cooperation between RSCs:*

In terms of cooperation with other RSCs, the MoU stipulates that the OSPAR Commission should cooperate with the bodies implementing the Barcelona, Bucharest and Helsinki Conventions, in particular with the view to sharing best practice in monitoring and assessment frameworks and to facilitation achievement of GES and that, in order to halt and prevent biodiversity loss by 2020, the OSPAR Commission should – in order to promote consistency – take into account measures taken under other RCS.

In addition, cooperation is taking place at the EU level within the framework of the Common Implementation Strategy (CIS) for the implementation of the MSFD.

### 1.3 Black Sea Commission

#### 1) Human resources/Working groups

The Commission on the Protection of the Black Sea against Pollution (Black Sea Commission, BSC) is the body responsible for the implementation of the Bucharest Convention and its protocols, and the Black Sea Strategic Action Plan (BSSAP2009).

The actual day-to-day responsibility to fulfill the functions of the BSC and implement the Work Program falls upon the Black Sea Permanent Secretariat, which is based in Istanbul. Six Advisory Groups advise the BSC and the Secretariat. An Advisory Group consists of two representatives from each of the six Black sea countries, acting also as an intermediary between the Commission and the national authorities and other stakeholders in their respective countries. The Advisory Groups are an integral part of the institutional structure of the BSC and function as specialized subsidiary bodies. In many ways, they are to serve not only as specialized technical bodies but also as the “eyes and ears” of the Commission so as to promote more harmonious implementation of policy and consequently advance the objectives of the Bucharest Convention and the BS-SAP.

The six Advisory Groups<sup>10</sup> work in the fields of land-based sources of pollution (LBS), environment safety aspects of shipping (ESAS), integrated coastal zone management (ICZM), biodiversity protection and conservation (CBD), management of living resources (FOMLR) and pollution monitoring/assessments (PMA).

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<sup>10</sup> The ToRs of the BSC AGs at: <http://www.blacksea-commission.org/advisorygroups.asp>

In relation to the MSFD Descriptors, the following relevance of work under the BSC Advisory Groups responsibilities (data/information reporting, preparing assessments, development of indicators) could be specified:

- LBS AG – Descriptors 5, 8
- PMA AG – Descriptors 5, 6, 7, 8, 9, 10
- ICZM AG – no particular relevance (dealing with progress of ICZM and state of the coast)
- FOMLR AG – Descriptors 2, 3, 4
- ESAS AG – Descriptor 2
- CBD AG – Descriptors 1, 2, 4

With regard to financial resources, the only financial rules available publicly are outdated (Interim financial rules governing the program of actions undertaken within the framework of the Convention, 2000-2003). Similarly to HELCOM and OSPAR, they introduce general provisions regarding CP contributions but do not provide any details regarding actual amounts.

## 2) Planning and programming

### *Strategic document*

The 1992 Convention on the Protection of the Black Sea against Pollution sets out the overall objectives and obligations of the Contracting Parties, which include, in particular, “the prevention, reduction and control of pollution”. Where the Bucharest Convention sets out the overall objectives and obligations of the Parties, the actual implementation of each of these is to be realized through more detailed and specific protocols. To date, the Black Sea States have ratified or adopted four implementing protocols dealing with land-based sources of pollution, emergency situations, damping and conservation of biodiversity.

Since 2001, many different strategic documents have been developed, including the 2009 Strategic Action Plan for the Rehabilitation and Protection of the Black Sea Strategic (which sets Long-term Ecosystem Quality Objectives EcoQOs), the Action Plan for the Black Sea Biodiversity and Landscape Conservation Protocol and the Draft Strategic Action Plan for the Management and Abatement of Marine Litter in the Black Sea Region. Additional relevant policy documents include among others the Draft Legally Binding Document (LBD) for fisheries and conservation of living resources of the Black Sea and the Black Sea Integrated Monitoring and Assessment Programme.

### *Work programme*

The Black Sea Commission has developed a work programme for 2012-2013 which is publicly available. It consists in a series of actions related to general coordination (e.g. implementation of the MoU between the BSC and the EEA on flow of information) and a series of policy actions listed according to the four EcoQOs (e.g. Action 12 – Work on the environmental quality objectives and target values, common understanding of ‘Good Environmental Status’ (GES)).

## 3) Cooperation projects

### *HELCOM-Black Sea:*

- Baltic2Black – Environmental Monitoring of the Black Sea with a focus on nutrient pollution (2011-2013) to exchange and collaborate with regard to the issue of eutrophication which is a major issue of concern for both RSC.

### *Mediterranean-Black Sea:*

- CoCoNET - "Towards Coast to Coast Networks of marine protected areas, coupled with sea-based wind energy potential" (2012-2016). The project has two objectives: identify prospective networks of existing or potential MPAs in the Mediterranean and the Black Seas



and explore where Offshore Wind Farms (OWF) might be established, producing an enriched wind atlas both for the Mediterranean and the Black Sea.

- PEGASO - "People for Ecosystem Based Governance in Assessing Sustainable Development of Ocean and Coast" (2010-2014), which aims at developing Integrated Coastal Zone Management in the Mediterranean and the Black Sea.
- PERSEUS - "Policy-oriented marine Environmental Research in the Southern European Seas" (2012-2015), which aims to identify the interacting patterns of natural and human-derived pressures on the Mediterranean and Black Seas, assess their impact on marine ecosystems and, using the objectives and principles put forward in the MSFD as vehicle, to design an effective and innovative research governance framework based on sound scientific knowledge.

In addition, cooperation is taking place at the EU level within the framework of the Common Implementation Strategy (CIS) for the implementation of the MSFD.

## 1.4 UNEP/MAP

### 1) Human resources/Working groups

The UNEP/MAP Coordinating Unit is the Secretariat of the Mediterranean Action Plan, the primary implementing body of the Barcelona Convention and its seven supporting Protocols. The Contracting Parties decide on UNEP/MAP strategies, budget and programme in pursuit of MAP's goal at Ministerial level meetings, held every two years. They appoint Focal Points to review the progress of work and ensure the implementation of recommendations at the national level. Thus, it is the Focal Point's responsibility to ensure that any monitoring/ assessment programmes or work agreed by the Contracting Parties (coastal national governments) are undertaken and reported on.

Implementation of the various programmes under the Mediterranean Action Plan is entrusted to the Secretariat of UNEP/MAP, whose work is extensively supported by UNEP's Regional Seas programme and by GEF funding.

The MED POL Programme (the marine pollution assessment and control component of MAP) is responsible for the follow up work related to the implementation of the LBS Protocol, the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities (1980, as amended in 1996), and of the dumping and Hazardous Wastes Protocols. MED POL assists Mediterranean countries in the formulation and implementation of pollution monitoring programmes, including pollution control measures and the drafting of action plans aiming to eliminate pollution from land-based sources.

UNEP/MAP's contracting parties are also advised by the Mediterranean Commission on Sustainable Development (MCSDD), which consists in representatives of the 22 CP and 15 representatives from local authorities, business community and NGOs. In particular, the MCSDD coordinated the preparation of the Mediterranean Strategy on Sustainable Development (MSSD), which was adopted by the Contracting Parties in 2005.

Finally, UNEP/MAP is also supported by a series of Regional Activity Centres, namely:

- Blue Plan RAC – sustainable development issues.
- Priority Action Plan RAC– ICZM issues.
- Special Protected Areas RAC – biodiversity.
- Regional Marine Pollution Emergency Response Centre.
- INFO RAC –communication issues.
- Cleaner Production Centre – BAT issues.

With regard to financial resources, the information publicly available mentions that the activities of UNEP/MAP are primarily financed by the Contracting Parties through their contributions to the Mediterranean Trust Fund (this also includes for instance the activities of the RACs). In 2012, at the 17<sup>th</sup> COP meeting of UNEP/MAP, the CPs discussed the Programme of Work and Budget for the biennium 2012-2013 and approved the budget appropriations of approximately 11 million Euros and took note of the other external funding for the programme of work which amounts to approximately 21 million Euros.<sup>11</sup>

## 2) Planning and programming

### *Strategic documents*

The 1999 Strategic Action Plan (and National Action Plans) to address pollution from land-based activities is the main strategic document outlining the objectives of UNEP/MAP's activities with regard to the reduction of pollution. It was followed up by a Strategic Action Plan for the conservation of marine and coastal biodiversity in the Mediterranean (SAP BIO, 2003), which has particular relevance for the biodiversity descriptors of the MSFD and the Strategic Action Programme for the Management of Marine Litter in the Mediterranean in 2011. Other relevant strategic documents include the 2005 Transboundary Diagnostic Analysis for the Mediterranean Sea, which defined environmental quality objectives and set priority actions.

In addition, in 2011, the UNEP/MAP Secretariat prepared the report entitled "The Mediterranean Action Plan/Barcelona Convention and the Implementation of the EU Marine Strategy Framework Directive" (March 2011) which was presented to the meeting of EU Marine Directors on May 2011. The document gives an overview of the outputs by the Barcelona Convention which are relevant to achieving the MSFD aims and discusses UNEP/MAP-Barcelona Convention contributions to the achievement of the MSFD which happens in particular through the gradual application of the Ecosystem Approach in the Mediterranean. At COP17 in 2012, Ecological Objectives for the Ecosystem Approach were adopted. These include general ecological objectives, operational objectives and indicators related to the MSFD Descriptors.

### *Work programme*

The Programme of Work and Budget for the 2012-2013 biennium was adopted at COP 17. It is the second biannual Programme of Work prepared in the context of the Five-Year Strategic priorities adopted by the Contracting Parties meeting in Marrakech on 3-5 November 2009. The Programme of Work focuses on the following priorities:

- Implication of progress achieved and future steps for the implementation of **ECAP roadmap**<sup>12</sup>
- Strategic and operational requirements necessary to set up effective Integrated Coastal Zone Management (ICZM) and Off-Shore systems
- Effective implementation of the seven Protocols in force
- Enhancing the capacity of the mechanisms that support compliance

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<sup>11</sup> Report of the 17<sup>th</sup> ordinary meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and Coastal Region of the Mediterranean and its Protocols, 17<sup>th</sup> Ordinary Meeting of the Contracting Parties, Paris (France), 8-10 February, 012[http://195.97.36.231/acrobatfiles/12IG20\\_8\\_Eng.pdf](http://195.97.36.231/acrobatfiles/12IG20_8_Eng.pdf)

<sup>12</sup> Includes developing targets and defining GES for the Ecological Objectives; developing an integrated monitoring system; ensuring an integrated assessment policy; developing common data-sharing policies and building a supporting information system based on Shared Environmental Information Systems principles; adopting priority sectoral measures (e.g. af. developing a Regional Action Plan on Marine Litter); assessing in-depth the socio-economic drivers affecting the status of our ecosystem; and, ensuring a coordinated and articulated implementation of ECAP activities throughout all MAP components.



- Continue improving MAP's governance (implementation of the governance reforms adopted by the CP in 2008)

The work programmes of the structures related to UNEP/MAP are sometimes available (such as the Programme of work on marine and coastal protected areas of RAC / SPA<sup>13</sup> of the Intervention Framework 2007-2015 of the Blue Plan RAC<sup>14</sup>).

### **3) Cooperation projects**

#### *Cooperation between Parties:*

Cooperation between parties takes place within the structures mentioned in the section above (MEDPOL, MCSD, RACs, etc.)

#### *Cooperation across RSCs*

Cooperation projects between UNEP/MAP and the Black Sea Commission have already been listed in the previous section. In addition, cooperation is taking place at the EU level within the framework of the Common Implementation Strategy (CIS) for the implementation of the MSFD.

#### *Other*

The Strategic Partnership for the Mediterranean Large Marine Ecosystem is a UNEP/MAP-World Bank-GEF collective project, involving regional, international and non-governmental organisations and countries of the Mediterranean and aiming for the protection of the marine and coastal environment of the Mediterranean through a coordinated and strategic approach.

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<sup>13</sup> <http://www.rac-spa.org/mcpa>

<sup>14</sup> [http://www.planbleu.org/publications/CIS\\_2007-2015\\_UK.pdf](http://www.planbleu.org/publications/CIS_2007-2015_UK.pdf)

### 3 – External research projects

#### 3.1. Black Sea

Overarching	Biodiversity (NIS, MPA/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<ul style="list-style-type: none"> <li>• MISIS Project aims to contribute to the development of national integrated monitoring programs in line with the MSFD in the countries of the Region.</li> <li>• EU-UNDP Project: Improving Environmental Monitoring in the Black Sea’s objective is to set up initiatives that will help improve the protection of the Black Sea environment.</li> <li>• SEAS-ERA is a networking project that aims at improving co-operation and co-ordination of the Black Sea countries on research by linking their research activities through national, bilateral and regional research programmes. A Strategic Research Agenda was delivered in 2012 for the Black Sea as part of the Project, setting research priorities for basic and applied research. This</li> </ul>	<ul style="list-style-type: none"> <li>• MISIS will propose transboundary MPA(s) for the southwestern Black Sea.</li> <li>• The SESAME project assesses and predicts changes in the Black Sea ecosystem as well as changes in the ability of this ecosystem to provide goods and services.</li> <li>• Specific monitoring projects are carried out and contribute to the preparation of the BS assessment report. For example, “Oxygen Monitoring in Aquatic Ecosystems” aims at improving the capacity to monitor oxygen depletion.</li> <li>• The PERSEUS project looks at natural interactions of sea masses, food web structures, non-indigenous species and physical damage or loss of habitats.</li> <li>• The CoCoNet Project identifies prospective</li> </ul>	<ul style="list-style-type: none"> <li>• The Baltic2Black project, in collaboration with HELCOM, deals with monitoring of nutrients in order to provide for information on eutrophication of the Black Sea.</li> <li>• The PERSEUS project looks at atmospheric deposition and nutrients.</li> <li>• The HYPOX project deals with research on hypoxic (low oxygen) conditions in aquatic ecosystems.</li> <li>• The Up-grade Black Sea Scientific Network collects and provides data on eutrophication.</li> </ul>	<ul style="list-style-type: none"> <li>• Romania and Bulgaria participate in CleanSeaNet.</li> <li>• On-going work on the list of hot-spots in the Black Sea region.</li> <li>• The PERSEUS project looks at material and contaminant fluxes, biochemical interactions and hazardous substances.</li> <li>• Specific projects on monitoring of contaminants are set up, such as MONINFO.</li> <li>• The Up-grade Black Sea Scientific Network collects and provides data on contaminants.</li> <li>• The CLEANSEA project aims to generate new information on the impacts of marine litter, develop monitoring and collection tools and to evaluate impact of mitigation strategies and measures</li> </ul>	<ul style="list-style-type: none"> <li>• The PERSEUS project looks at inter-basin fish migrations as well as professional and recreational fishing and aquaculture.</li> <li>• The CREAM Project deals with research and management in the area of fisheries in the region of Black Sea. The project seeks the active collaboration or regional and international fisheries management organisms as external participants in the project, in order to identify the gaps which hamper at present the full application of the Ecosystem Approach in the management of Black Sea fisheries.</li> <li>• The Up-grade Black Sea Scientific Network collects and provides data on fisheries.</li> <li>• The Enviro-Grids project ‘Building Capacity for a Black Sea Catchment Observation and</li> </ul>	<ul style="list-style-type: none"> <li>• The PERSEUS project looks at marine litter.</li> <li>• Romania and Bulgaria participate in CleanSeaNet.</li> </ul>

Overarching	Biodiversity (NIS, MPA/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<p>includes the major transboundary environmental issues in the SAP and the research supporting maritime economy. Present infrastructure capacity, needs and gaps to support research were also identified in several deliverables of the Project.</p> <ul style="list-style-type: none"> <li>• The PERSEUS Project aims to design an effective and innovative research governance framework for the Black Sea and the Mediterranean assessing and predicting the combined effects of natural and human pressures in both seas.</li> <li>• The Black Sea SCENE research infrastructure project focuses on increased scientific cooperation and exchange of knowledge and expertise in the Black Sea region.</li> <li>• The DEVOTES project works on identifying barriers and bottlenecks that prevent GES from being achieved.</li> <li>• The KnowSeas project employs stochastic modelling work developed in other projects with</li> </ul>	<p>networks of existing or potential MPAs in the Black Sea, shifting from a local perspective (centered on single MPAs) to the regional level (network of MPAs) and finally the basin scale (network of networks)</p> <ul style="list-style-type: none"> <li>• The DEVOTES project concerns issues of biodiversity</li> </ul>			<p>Assessment System supporting Sustainable Development' aims at establishing an effective collaboration network among key role players on Black Sea fisheries research and management. The Project establishes guidelines for the application of the Ecosystem Approach to Fisheries in the Black Sea, both in EU member states and third countries.</p> <ul style="list-style-type: none"> <li>• The ODEMM project is ensuring that fisheries are carried out in a way that supports the objectives of the MSFD.</li> <li>• The COFASP project enhanced scientific knowledge and innovation reinforcing advice on fisheries management supporting decision making and strengthening an ecosystem-based fisheries management.</li> </ul>	

Overarching	Biodiversity (NIS, MPA/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<p>respect to the policy frame, the ecological and economic modelling components and the regional seas case studies.</p> <ul style="list-style-type: none"> <li>• The ODEMM project aims at proposing options and actions for a gradual transition from fragmented management of certain activities to a mature integrated management including strategies for the implementation of the ecosystem approach.</li> <li>• The main objective of the MyOcean2 project is to operate an Ocean Monitoring and Forecasting component of the GMES Marine Service delivering ocean physical state and ecosystem information.</li> </ul>					

### 3.2. HELCOM

Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<ul style="list-style-type: none"> <li>• Some research projects take place within HELCOM, sometimes co-funded e.g. by the EU or by other organisations, such as the</li> </ul>	<ul style="list-style-type: none"> <li>• Various ongoing projects aim at improving monitoring of phytoplankton</li> <li>• Specific projects on key</li> </ul>	<ul style="list-style-type: none"> <li>• The HYPOX project deals with research on hypoxic (low oxygen) conditions in aquatic ecosystems.</li> </ul>	<ul style="list-style-type: none"> <li>• Specific projects on key priority areas financed by HELCOM, such as the BASE project</li> <li>• CleanSeaNet is the near</li> </ul>	<ul style="list-style-type: none"> <li>• The ODEMM project is carried out in a way that supports the objectives of the MSFD.</li> </ul>	<ul style="list-style-type: none"> <li>• The ECO2 project aims at assessing the risks associated with the storage of CO2 below the seabed and its impact on marine</li> </ul>

Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<p>Nordic Council.</p> <ul style="list-style-type: none"> <li>Major research projects are carried outside the HELCOM umbrella, however HELCOM cooperates with the BONUS research programme to set the priorities and be able to utilize the results in HELCOM work.</li> <li>The DEVOTES project works on identifying barriers and bottlenecks that prevent GES from being achieved.</li> <li>SEAS-ERA aims at embracing marine and maritime research in its entirety, overarching the previous initiatives which only targeted a given area or basin and, therefore, constituting a stable and durable structure for empowering and strengthening marine research all across Europe.</li> <li>The KnowSeas project employs stochastic modelling work developed in other projects with respect to the policy frame, the ecological and economic modelling components and the regional seas case studies.</li> </ul>	<p>priority areas financed by HELCOM, such as the BASE project focusing on Russia.</p> <ul style="list-style-type: none"> <li>The DEVOTES project concerns issues of biodiversity.</li> <li>VECTORS focused on causes and consequences of invasive alien species, outbreak and forming species.</li> <li></li> </ul>		<p>real time European satellite based oil spill monitoring service providing oil spill's pollution alerts.</p> <ul style="list-style-type: none"> <li>The CLEANSEA project aims to generate new information on the impacts of marine litter, develop monitoring and collection tools and to evaluate impact of mitigation strategies and measures</li> </ul>	<ul style="list-style-type: none"> <li>The VECTORS project focused on fisheries distribution and productivity.</li> <li>The COFASP project enhanced scientific knowledge and innovation reinforcing advice on fisheries management supporting decision making and strengthening an ecosystem-based fisheries management.</li> </ul>	<p>ecosystems.</p>

Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<ul style="list-style-type: none"> <li>• The ODEMM project aims at proposing options and actions for a gradual transition from fragmented management of certain activities to a mature integrated management including strategies for the implementation of the ecosystem approach.</li> <li>• The main objective of the MyOcean2 project is to operate an Ocean Monitoring and Forecasting component of the GMES Marine Service delivering ocean physical state and ecosystem information.</li> <li>• The COEXIST project aims at integrating aquaculture and fisheries with other activities in the coastal zones.</li> </ul>					

### 3.3. UNEP/MAP

Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<ul style="list-style-type: none"> <li>•The DEVOTES project works on identifying barriers and bottlenecks that prevent GES from being achieved.</li> <li>•SEAS-ERA aims at</li> </ul>	<ul style="list-style-type: none"> <li>• SESAME project assesses and predicts changes in the Mediterranean sea ecosystem as well as changes in the ability of the</li> </ul>	<ul style="list-style-type: none"> <li>•The PERSEUS project looks at atmospheric deposition and nutrients.</li> <li>•The HYPOX project deals with research on hypoxic</li> </ul>	<ul style="list-style-type: none"> <li>•The PERSEUS project looks at material and contaminant fluxes, biochemical interactions and hazardous substances.</li> </ul>	<ul style="list-style-type: none"> <li>•The PERSEUS project looks at interbasin fish migrations as well as professional and recreational fishing and aquaculture.</li> </ul>	<ul style="list-style-type: none"> <li>•The PERSEUS project looks at marine litter.</li> <li>•The MEDSEA project aimed at providing science-based projections of</li> </ul>

Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<p>embracing marine and maritime research in its entirety, overarching the previous initiatives which only targeted a given area or basin and, therefore, constituting a stable and durable structure for empowering and strengthening marine research all across Europe..The KnowSeas project employs stochastic modelling work developed in other projects with respect to the policy frame, the ecological and economic modelling components and the regional seas case studies.</p> <ul style="list-style-type: none"> <li>•The ODEMM project aims at proposing options and actions for a gradual transition from fragmented management of certain activities to a mature integrated management including strategies for the implementation of the ecosystem approach.</li> <li>•The main objective of the MyOcean2 project is to operate an Ocean Monitoring and Forecasting component of the GMES Marine Service delivering ocean physical state and</li> </ul>	<p>ecosystem to provide services.</p> <ul style="list-style-type: none"> <li>•The PERSEUS project looks at natural interactions of sea masses, food web structures, NIS and physical damage or loss of habitats.</li> <li>•The CoCoNet project identifies prospective networks of existing or potential MPAs in the Mediterranean Sea.</li> <li>•DEVOTES project concerns issues of biodiversity.</li> <li>•The HERMIONE project focused on investigating certain ecosystems.</li> <li>•VECTORS focused on causes and consequences of invasive alien species, outbreak and forming species.</li> </ul>	<p>(low oxygen) conditions in aquatic ecosystems.</p>	<ul style="list-style-type: none"> <li>•CleanSeaNet is the near real time European satellite based oil spill monitoring service providing oil spill's pollution alerts.</li> <li>•The CLEANSEA project aims to generate new information on the impacts of marine litter, develop monitoring and collection tools and to evaluate impact of mitigation strategies and measures</li> </ul>	<ul style="list-style-type: none"> <li>•The CREAM project deals with research and management in the area of fisheries in the Mediterranean and Black Sea regions. It seeks the active collaboration of regional and international fisheries management organisms as external participants in order to identify the gaps which hamper at present the full application of the EcAp in the management of Mediterranean fisheries.</li> <li>•The ODEMM project is ensuring that fisheries are carried out in a way that supports the objectives of the MSFD.</li> <li>•The VECTORS project focused on fisheries distribution and productivity.</li> <li>•The COFASP project enhanced scientific knowledge and innovation reinforcing advice on fisheries management supporting decision making and strengthening an ecosystem-based fisheries management.</li> </ul>	<p>Mediterranean acidification under the influence of climate change as well as associated economic impacts.</p>

Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
ecosystem information. <ul style="list-style-type: none"> <li>The COEXIST project aims at integrating aquaculture and fisheries with other activities in the coastal zones.</li> </ul>					

### 3.4. OSPAR

Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<ul style="list-style-type: none"> <li>The HARMONY project worked on developing and testing tools for characterisation of cumulative human pressures and impacts.</li> <li>The DEVOTES project works on identifying barriers and bottlenecks that prevent GES from being achieved.</li> <li>SEAS-ERA aims at embracing marine and maritime research in its</li> </ul>	<ul style="list-style-type: none"> <li>The HARMONY project worked on developing and testing tools for characterisation and assessment of “biodiversity status”</li> <li>The DEVOTES project concerns issues of biodiversity.</li> <li>The HERMES project studied particular benthic ecosystems constrained by chemical, physical, topographic and</li> </ul>	<ul style="list-style-type: none"> <li>The HARMONY project developed the eutrophication assessment tool HEAT 2.0 based on the OSPAR “Common Procedure” and taking the requirements of the MSFD Commission Decision into consideration.</li> <li>The HYPOX project deals with research on hypoxic (low oxygen) conditions in aquatic ecosystems.</li> <li>The ASIMUTH project aims at producing short-term forecasts of harmful algal events along the European Atlantic coasts and communication of this data.</li> </ul>	<ul style="list-style-type: none"> <li>The HARMONY project worked on developing and testing tools for characterisation and assessment of “chemical status”.</li> <li>CleanSeaNet is the near real time European satellite based oil spill monitoring service providing oil spill’s pollution alerts.</li> <li>The CLEANSEA project aims to generate new information on the impacts of marine litter, develop monitoring and collection tools and</li> </ul>	<ul style="list-style-type: none"> <li>The ODEMM project is ensuring that fisheries are carried out in a way that supports the objectives of the MSFD.</li> <li>The VECTORS project focused on fisheries distribution and productivity.</li> <li>The COFASP project enhanced scientific knowledge and innovation reinforcing advice on fisheries management supporting decision making and strengthening an ecosystem-based</li> </ul>	<ul style="list-style-type: none"> <li>The KnowSeas project investigates social and economic processes and indicators which make up “Good Environmental Status” within the Ecosystem Approach.</li> <li>The ECO2 project aims at assessing the risks associated with the storage of CO2 below the seabed and its impact on marine ecosystems.</li> </ul>



Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<p>entirety, overarching the previous initiatives which only targeted a given area or basin and, therefore, constituting a stable and durable structure for empowering and strengthening marine research all across Europe.</p> <ul style="list-style-type: none"> <li>The KnowSeas project employs stochastic modelling work developed in other projects with respect to the policy frame, the ecological and economic modelling components and the regional seas case studies.</li> <li>The ODEMM project aims at proposing options and actions for a gradual</li> </ul>	<p>geological factors containing a wealth of unknown species located on Europe's continental margins</p> <ul style="list-style-type: none"> <li>The HERMIONE project focused on investigating certain ecosystems.</li> <li>VECTORS focused on causes and consequences of invasive alien species, outbreak and forming species,.</li> <li>EURO-BASIN aims at expanding the knowledge of various influences on shelf sea ecosystems in the North Atlantic.</li> </ul>		<p>to evaluate impact of mitigation strategies and measures.</p>	<p>fisheries management.</p>	

Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
<p>transition from fragmented management of certain activities to a mature integrated management including strategies for the implementation of the ecosystem approach.</p> <ul style="list-style-type: none"> <li>• The main objective of the MyOcean2 project is to operate an Ocean Monitoring and Forecasting component of the GMES Marine Service delivering ocean physical state and ecosystem information.</li> <li>• The COEXIST project aims at integrating aquaculture and fisheries with other activities in the coastal zones.</li> <li>• The STAGES</li> </ul>					

Overarching	Biodiversity (NIS, MPAs/species)	Eutrophication	Contaminants	Fisheries	Emerging issues
project is designed to address knowledge experienced when setting up Good Environmental Status in EU marine waters.					

## 4 – Main gaps and needs identified in the literature review

Based on the analysis of existing and planned activities, we have produced a first overview of potential needs for support of the four Regional Sea Conventions. The needs for support cover principally areas where there is no activity (gaps) or a need for additional work to coordinate/implement the MSFD components. The tables compiling this information for each RSC are built around the type of activities (e.g. initial assessment, monitoring) and themes (e.g. biodiversity, fisheries) linked to the MSFD.

In addition, on the basis of the tables included in this document, the Interim Report submitted in the context of this project and on the basis of their experience and expert knowledge, our four regional experts have identified a number of high-level support needs for their respective RSC. In the next steps of the project, concrete activities and initiatives for support from the EU to the RSCs will be identified in relation to these high-level needs. These actions/initiatives will be discussed with RSC officials during interviews in a third phase of the project.

The form the support can take include the following types:

- Coordination
  - Common planning
  - Consultation
  - Exchange of information
  - Sharing of best practices
  - Other types of coordination e.g. development of common formats e.g. for reporting, indicators, protocols
  
- Capacity building
  - Training
  - Institutional structures
  - Infrastructure (equipment, offices etc)
  - Additional staff
  
- Secretarial support
  
- Research

## 4.1. HELCOM

The following table has been put together on the basis of the review of the most recent/relevant institutional documents produced by HELCOM. It aims to compile the gaps and needs identified in these documents by HELCOM and the CP themselves, categorized by topics and types of activities. It is different from the table included in the project Interim Report, which lists the various activities undertaken by HELCOM over the past years on the various topics.

The documents used to compile this table are:

- HELCOM Initial Holistic Assessment of Ecosystem Health of the Baltic Sea (2010) (HOLAS 2010)
- Baltic Sea Action Plan (2007) (BSAP 2007)

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
<i>(Initial) Assessment of the environmental status of the marine waters</i>	<p>No assessment of climate change as separate anthropogenic pressure because needs to be done at global level (HOLAS p27)</p> <p>Need for further development and validation of the Baltic Sea Pressure Index (BSPi) and the Baltic Sea Impact Index (BSII) tools (HOLAS p41)</p> <p>Limited understanding of synergistic effects of anthropogenic pressures (HOLAS p41)</p> <p>Need to harmonize assessment methodologies with EU methodologies (HOLAS p52)</p> <p>Need to make the monitoring-data exchange-assessment procedures operational (HELCOM MORE 5/2013)</p>	<p>No jointly agreed fixed set of assessment criteria for the whole BS (different areas assessed using different criteria) (HOLAS p24)</p> <p>Need to further develop biodiversity-related indicators at regional level (HOLAS p24)</p> <p>Some indicators have gone through strong national calibration while others are simply proposed by experts (HOLAS p24)</p> <p>Specific gaps:</p> <ul style="list-style-type: none"> <li>- limited number indicators for birds, zooplankton and phytoplankton</li> <li>- scarce data for areal distribution of biotopes</li> </ul> <p>Different assessment in some areas from assessment of ecological status under WFD.</p>	<p>44 areas (out of 189) with low confidence level because of mediocre monitoring activities/ too few or too low quality indicators or targets (southeastern or northern parts of BS) (HOLAS p16)</p>	<p>No jointly agreed fixed set of assessment criteria for the whole BS (different areas assessed using different criteria) (HOLAS p18)</p> <p>No known estimates of waterborne inputs of POPs from land-based sources (HOLAS p31)</p>	<p>Lack of information on flatfish species to make a specific stock assessment (HOLAS p37)</p> <p>Concerns over underreporting of catches (HOLAS p38)</p>	<p>No comprehensive field studies on the extent of the marine litter problem in BS (in particular on microplastics) (HOLAS p31)</p> <p>Poor knowledge on underwater noise (HOLAS p30)</p> <p><b>Urgent need</b> to develop Baltic-wide mapping of underwater noise (HOLAS p47)</p>

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
		<p>(HOLAS p24)</p> <p>Further development of Biopollution Index for NIS needed taking into account WFD and MSFD criteria (HOLAS p26)</p> <p>Further development of alternative approaches to assessment of NIS (biological contamination/biological pollution risk) (HOLAS p26)</p> <p>No assessment of small-scale dredging (HOLAS p29)</p> <p>Little information on the extent and spatial distribution of pressure from microbial pathogens in open BS (HOLAS p40)</p> <p>Need further work for assessing the impacts of various pressures on species and biotopes and distribution of various types of biotopes (HOLAS p41)</p> <p>Lack of ecological coherence and unbalanced area coverage between sub-basins of MPAs (HOLAS p48)</p> <p>Need for mapping of all habitats (HOLAS p49 and BSAP p20)</p> <p>Need for assessment of the conservation status of non-commercial fish species (BSAP p19)</p>				

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
<i>Setting priority objectives and targets (GES, targets &amp; indicators), including what are the main environmental challenges</i>						No objective set in BSAP for marine litter and no indicator developed.
<i>Measures, action plan, etc.</i>	Solutions with multiple positive effects are necessary (HOLAS p52)	<p>Measures not in BSAP (HOLAS p44-48)</p> <ul style="list-style-type: none"> <li>- Exclusion of bottom trawling within MPAs</li> <li>- Priority given to spatial distribution, abundance and habitat quality of habitat-forming species in restoration projects</li> <li>- Management of ballast water and sediment of ships to prevent the introduction of NIS</li> <li>- Improved security of mariculture and aquaculture facilities + conduction of risk assessment for new species proposed to be used in mariculture</li> </ul> <p>Lack of sufficient level of management of the BSPA network. Fisheries and research are not forbidden in any of the BSPAs. (HOLAS p48)</p> <p>Use of MARXAN tool for establishment of new MPAs</p>	<p>Nutrient input identified as one of the two main pressures on the Baltic marine environment needing decisive action for substantial progress (HOLAS p54)</p> <p>IA shows that BSAP helped reduced nutrient inputs but more needed also for phosphorus (HOLAS p17)</p> <p>In addition to BSAP measures: phosphorus trapping from animal husbandry and crop fields by precipitating chemicals (HOLAS p46)</p>	<p>IA shows that BSAP helped reduced HS inputs but more needed (HOLAS p21)</p> <p>All relevant measures already included in BSAP</p>	<p>Extraction of fish identified as one of the two main pressures on the Baltic marine environment needing decisive action for substantial progress (HOLAS p54)</p> <p>Additional measures necessary: establishment of spatial or temporal and permanent closures of fisheries of sufficient size and duration; exclusion or strict regulation of certain fisheries in MPAs; reintroduction programme of Baltic sturgeon. (HOLAS p46)</p>	No measures identified yet.

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
		(HOLAS p48) Application of MSP principles (e.g. ecosystem-management of human activities, precautionary principle, etc.)(HOLAS p49)				
<i>Monitoring</i>	Improved monitoring activities needed for Gulf of Finland and Archipelago Sea (HOLAS p15)	Need for better monitoring on biodiversity (linked to development of biodiversity indicators) (HOLAS p24) Differences across countries in the monitoring of alien species (HOLAS p26) <b>Urgent need</b> for more information on extent and impact alien species (HOLAS p47)				<b>Urgent need</b> for more information on marine litter (little information despite 2010 HELCOM recommendation to monitor marine litter) (HOLAS p47)
<i>Data collection &amp; management (reporting)</i>		Complete classification system for Baltic marine habitats/biotopes (BSAP p20) Update HELCOM red lists of Baltic habitats/biotopes (BSAP p20) Coordinated reporting system with ASCOBANS on Baltic harbour porpoise (BSAP p20)				Marine litter not included in NIPs
<i>Stakeholder involvement</i>	BSAP noted the need for financial support for training for project preparation and implementation, including of central and regional environmental authorities, commercial banks (unit abatement costs) (BSAP p34) Holding of a “pledging		BSAP noted the need for financial support for training of farmers (BSAP p34)			



Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
	conference”					
<i>Research</i>	Large-scale studies on both costs and benefits needed e.g. on eutrophication, fisheries, oil spills, etc. (in coordination with MSFD ESA) (HOLAS p52)	Assessment of NIS in BS done using the expert-based Biopollution Index: needs long-term research for implementation of actual measures (HOLAS p26)  Research on possibilities of reintroduction of valuable phytobenthos species in regions of historical occurrence (BSAP p19)  Research to develop additional methods for the assessment of, and reporting on, the impacts of fisheries on biodiversity (BSAP p20)				No research on marine litter and underwater noise identified.
<i>Communication &amp; cooperation between parties and outside parties (with EU/other RSCs, International Organisations e.g. CBD)</i>	Further development of knowledge on certain issues (e.g. ML and noise) will allow joint HELCOM requests to international organisations (e.g. IMO) on reduction measures not in HELCOM remit (HOLAS)  BSAP notes the need to increase dialogue with Russia to create more bankable projects in municipal infrastructures (BSAP p34)					

## 4.2. Black Sea

The following table has been put together on the basis of the review of the most recent/relevant institutional documents produced by the Black Sea Commission. It aims to compile the gaps and needs identified in these documents by the BSC and the CP themselves, categorized by topics and types of activities. It is different from the table included in the project Interim Report, which lists the various activities undertaken by the BSC over the past years on the various topics.

The documents used to compile this table are:

- Final "Diagnostic Report" to guide improvements to the regular reporting process on the state of the Black Sea environment, August 2010 (2010 Diagnostic report)
- 2009 Strategic Action Plan for the Rehabilitation and Protection of the Black Sea (2009 BS SAP)

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
<i>(Initial) Assessment of the environmental status of the marine waters</i>	A common understanding in the region is needed for the definition of transitional, coastal and marine waters for indicator based analysis and assessments (2010 Diagnostic report, Section III)  For wider assessments the major gaps in the BSIS itself include marine meteorology, physical oceanography, sedimentology, marine geology and geophysics, etc., habitats destruction, erosion and GIS development. (2010 Diagnostic report, Section III)	For assessments according to MSFD Annex I Descriptors, the BSIS is missing basically biological data. In general, the marine biology, incl. biodiversity conservation and habitats, data reporting needs serious improvement and further development to meet the requirements of the evaluations, envisaged in the MSFD. (2010 Diagnostic report, Section III)				
<i>Setting priority objectives and targets (GES, targets &amp; indicators)</i>						No objectives/targets for underwater noise.

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
<i>Measures, action plan, etc.</i>	BS pilot programmes on the various topics (see next columns) in all MS waters need to be undertaken in a harmonized way and taking into account transboundary problems (2010 Diagnostic report, Section III)	<p>Actions to be undertaken in relation to:</p> <ul style="list-style-type: none"> <li>• Cetaceans surveys</li> <li>• Habitats mapping, biodiversity assessments, etc.</li> </ul> <p>(2010 Diagnostic Report, Executive Summary)</p> <p>Capacity building needed for enforcement of measures on alien species (2009 BS SAP, section 3.4)</p>		<p>Actions to be undertaken in relation to the contamination of sediments and biota and the effects of HS. (2010 Diagnostic Report, Executive Summary)</p> <p>Capacity building needed for enforcement of measures on pollution (2009 BS SAP, section 3.4)</p>	<p>Actions to be undertaken to address the issue of fish and other marine living resources stock assessments in a harmonized way. (2010 Diagnostic Report, Executive Summary)</p> <p>Capacity building needed for enforcement of measures on fishery management (2009 BS SAP, section 3.4)</p>	<p>Actions to be undertaken to address the issue of marine litter in the sea. (2010 Diagnostic Report, Executive Summary)</p>
<i>Monitoring</i>	<p>Gaps identified in relation to monitoring in 2010 Diagnostic Report:</p> <ul style="list-style-type: none"> <li>• Monitoring in BSIMAP not integrated (carried out by different Institutes);</li> <li>• Recommended frequency of observations (in line with WFD) not always observed;</li> <li>• Mandatory parameters often not covered;</li> <li>• Open-sea stations missing, no agreed stations for regular monitoring;</li> <li>• Reference stations missing or not specified as such, except Romania;</li> </ul>	<p>Most of BSC Biodiversity indicators are also EEA and MSFD indicators, but the data supporting those indicators is limited or not reported. (2010 Diagnostic Report, Executive Summary)</p> <p>EEA indicator "North-ward movement of species" is not reported to the BSC, however, scientific studies in the region are available. Invasive species diversity and abundance are poorly reported to the BSC. (2010 Diagnostic Report, Executive Summary)</p>	<p>With regard to eutrophication indicators:</p> <ul style="list-style-type: none"> <li>• N/P is not specifically reported to the BSC.</li> <li>• Chlorophyll is poorly reported to the BSC and the data cannot be used for a regional assessment.</li> <li>• Nutrients data in BSIS is suitable to trace trends and spatial distribution in coastal waters,</li> </ul>	<p>Hazardous substances in biota, sediments and their effects are studied in the BS sporadically but the data is not sufficient for regional assessments yet.</p> <p>Discharge of oil from refineries and offshore installations is not reported to the BSC and there is no information on the availability of data in the region.</p> <p>Illegal discharges of oil from ships are</p>	<p>BSC fishery indicators are well reported to the BSC, however, stock assessments for most of the fish species are in need of harmonization. (2010 Diagnostic Report, Executive Summary)</p> <p>Lack of comprehensive information on fishing activity, catch quantities and composition and how they affect the current state of fish</p>	<p>Sources and occurrence of marine litter and its effects are randomly monitored by NGOs and not reported to BSIS. Last assessment dates back to 2007. Monitoring on ML should be incorporated into BSIMAP with relevant reporting formats prepared (2010 Diagnostic Report, Section I)</p>

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
	<ul style="list-style-type: none"> <li>• Long-term time series data stations lack special attention and permanent financial support;</li> <li>• BSIMAP stations mainly coastal, very few marine stations monitored;</li> <li>• Monitoring does not use much automated systems and other modern tools for observations;</li> <li>• Lack of harmonization (especially in fisheries).</li> </ul> <p>Main recommendations for monitoring and reporting improvements include emphasis on capacity building, incl. regular trainings, bringing best available practices to the region, strengthening collaboration between different authorities engaged in monitoring, further development of inter-ministerial mechanism, etc.</p> <p>More specifically:</p> <ul style="list-style-type: none"> <li>• Frequency of observations in line with WFD and MSFD;</li> <li>• Creation of network of reference sites</li> <li>• Expanding the BSIMAP toward open sea;</li> <li>• Revision of existing BSIMAP to exclude non-reliable parameters and inclusion of new parameters;</li> <li>• Further harmonization of</li> </ul>		<p>but not in the open-sea.</p> <ul style="list-style-type: none"> <li>• BSIS data on harmful algal blooms is not enough to support this indicator, but external data is sufficient for regional assessments.</li> <li>• Primary production is not regularly studied in the BS to build statistically significant trends or spatial distributions.</li> </ul> <p>(2010 Diagnostic Report, Executive Summary)</p>	<p>considered, EMSA provides satellite images in case of suspected oil spill, however, verification of spills (aerial surveillance, for instance) is still poorly provided by states.</p> <p>(2010 Diagnostic Report, Executive Summary)</p>	<p>stocks.</p> <p>Serious gaps in reports on annual catch quantities and composition and lack of accuracy of the analysis of fish stocks current state.</p> <p>Only two assessed stocks in the BS (sprat and turbot) out of a total of 26 commercial fish stocks.</p> <p>Data exchange at the regional level not yet systematic and regular.</p> <p>Need better communication between responsible authorities.</p> <p>(2010 Diagnostic Report, Projects in the Black Sea region)</p>	

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
	<p>methodologies;</p> <ul style="list-style-type: none"> <li>• Introduction of new observation techniques and modern equipment;</li> <li>• Initiation of regional cruises for transboundary environment problems assessments;</li> <li>• Development of bi-lateral and multi-lateral agreements between institutes dealing with monitoring to avoid overlaps of resources and efforts.</li> </ul> <p>National Monitoring Systems are not properly designed/organized to use the integrated monitoring available. A strategy for integrated monitoring should be developed at the national level, using best available examples (e.g. the system in Romania) and assuring sustainable financial assistance for better planning of activities. (2010 Diagnostic report, Section III)</p>					
<i>Data collection &amp; management (reporting)</i>	<p>Need for more transparency and accessibility in the data flow and dissemination of information within BSC as well as from BSC.</p> <p>Further development of BSIS needed and data and metadata services should be accessible online on the BSC website (in line with INSPIRE directive).</p> <p>Ensure that the special information needs of stakeholders are met by providing different products.</p>					<p>Current monitoring does not allow for an integrated ecosystem approach, it can only deal with marine issues and environmental state independent for each type of feature or impact.</p>

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
	For the BSIS (when fully operational on-line) a link to WISE-marine could be considered. The BSIS reporting templates for eutrophication/pollution data are similar to EIONET templates. (Section III, Diagnostic report, 2010)					
<i>Stakeholder involvement</i>	<p>Barriers to public engagement include linguistic, legal, operational, and differing perspectives among stakeholders, politicians and policy makers.</p> <p>Need for continuing:</p> <ul style="list-style-type: none"> <li>• Awareness-raising activities (e.g. the celebration of International Black Day)</li> <li>• Improved outreach programmes, such as regional information networks and information exchange mechanisms;</li> <li>• Improved introduction/acceptance of BAT and BEP principle by industry representatives;</li> <li>• On-going strengthened capacities and financial commitment by donors and countries.</li> </ul> <p>(2009 BS SAP, Section 3.5)</p>			Stakeholder involvement is seen as particularly important in addressing agriculture-derived pollution (POPs and nutrients) (2009 BS SAP, Section 3.5)	Stakeholder involvement is seen as particularly important in addressing fishing activities. (2009 BS SAP, Section 3.5)	
<i>Research</i>	<ul style="list-style-type: none"> <li>• Strengthening and building project development capacity, at both national and sub-national levels.</li> </ul> <p>(2009 BS SAP, section 5.2)</p>					
<i>Communication &amp; cooperation</i>	Gaps identified in 2010 Diagnostic Report, Executive Summary:					

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
<i>between parties and outside parties (with EU/other RSCs, International Organisations e.g. CBD)</i>	1. Poor coordination between responsible authorities (including ministries within countries); 2. Poor financial assistance, in general; 3. Regional dimension absent; Need for: <ul style="list-style-type: none"> <li>• Better coordination between authorities involved;</li> <li>• Partnership with international organizations EEA, IMO, ESA, EMSA, HELCOM.</li> </ul>					

### 4.3. UNEP/MAP

The following table has been put together on the basis of the review of the most recent/relevant institutional documents produced by UNEP/MAP. It aims to compile the gaps and needs identified in these documents by UNEP/MAP and the CP themselves, categorized by topics and types of activities. It is different from the table included in the project Interim Report, which lists the various activities undertaken by UNEP/MAP over the past years on the various topics.

The main document used to compile this table is the “2013 State of the Mediterranean Marine and Coastal Environment Report” (2013 SoMMCER). In addition, the following documents have been consulted:

- Results of the assessment of the status of Marine Litter in the Mediterranean, UNEP/MAP, June 2008 (2008 MLAS)
- 2005 Transboundary Diagnostic Report (2005 TDA)
- 2011 Annual report – strategic partnership for the MED sea large ecosystem, key Conclusions and recommendations from the 2nd MedPartnership Steering Committee (MEDPART 2011).
- Impact of climate change on marine and coastal biodiversity in the Mediterranean Sea Current state of knowledge (2010) (CC 2010)
- Eutrophication Monitoring Strategy for the MED POL (REVISION) 2007 (EUTRO 2007)

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
<i>(Initial)</i>	Less information available for topics,	Effect of NIS on native		Scarce data on the	Difficult to determine	The 2008 MLAS

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
<i>Assessment of the environmental status of the marine waters</i>	<p>such as noise, marine litter, sea-floor integrity, and trophic levels and food webs. Some chapters of the SoMMCER are fully supported by robust evidence while others are more qualitative. Need for a more robust approach to deriving information to support the major issues outlined in the Ecosystem Approach Ecological Objectives.</p> <p>Historic inability to conduct a uniform assessment of pressures and states to formulate responses. With the exceptions of localised pollutants and nutrient and organic matter enrichment, data for some countries are limited. (SoMMCER 2013)</p>	<p>biodiversity is poorly understood.</p> <p>The location and extent of the feather star, the sea pen and bamboo beds are not well known. Even less is known about vulnerable deep-sea fauna that inhabit abyssal plains throughout the Mediterranean.</p> <p>Mediterranean phytoplankton community is not well described.</p> <p>Gaps in understanding of the impacts of human activity on marine and coastal biodiversity.</p> <p>Impacts of offshore construction in the Mediterranean, generally drilling rigs, wind farms, and other energy facilities, have not been systematically evaluated.</p> <p>Still considerable gaps in the knowledge of marine species and habitats in the Mediterranean, and the knowledge that does exist is patchy in distribution</p>		<p>maritime sector and the potential implications of oil discharges</p> <p>Geographical distribution of research studies is poor, with little known about impacts from contaminants in many regions of the Mediterranean. (SoMMCER 2013)</p>	<p>the ecosystem effects of artisanal fisheries. Because of wide variety of gear types and target species.</p> <p>With regard to wild tuna, since many of the catches are undeclared, there are no accurate figures for the size of the catch. (SoMMCER 2013)</p>	<p>highlight the following gaps in relation to the management of ML:</p> <ul style="list-style-type: none"> <li>- Little and inconsistent information on quantities, flows and handlers of ML</li> <li>- Need for further information on impacts of ML on humans and ecosystem.</li> </ul> <p>Little scientific investigation has gone into the problem of microplastics in the Mediterranean.</p> <p>No mitigation measures taken on the impact of military sonar on marine mammals. No significant progress made to address the problem of marine noise, nor any attempts made to coordinate industrial activities with marine mammal conservation initiatives according to ACCOBAMS status report. (SoMMCER 2013)</p>



Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
		The SPA & Biodiversity Protocol identifies over 100 species that are of special conservation interest in the Mediterranean. The information on these species and their habitats, however, is sometimes limited. (SoMMCER 2013)				
<i>Setting priority objectives and targets (GES, targets &amp; indicators), including what are the main environmental challenges</i>	Establishing targets, and analysing trend information to know when targets are being approached, will provide the kind of robust scientific information needed to allow management priorities to be determined and to guide effective ecosystem-based management. (SoMMCER 2013)					
<i>Measures, action plan, etc.</i>	<p>The SoMMCER 2013 report notes that the next steps, such as development of target, etc., will ultimately lead to the revision and development of action plans and programmes of measures, which will require further analysis of previous responses.</p> <p>The State of the Mediterranean Marine and Coastal Environment Report 2012 (2012 SoE) highlights the major issues requiring coordinated policy and management responses in the coming years.</p> <p>The 2005 TDA provides a list of areas</p>	<p>The 2012 SoE highlights the following as the major issues requiring coordinated policy and management responses in the coming years:</p> <p>invasive non-indigenous species which have increased in recent years, sea-floor integrity, changed hydrographic conditions and the state of biodiversity. These issues should be considered as top priorities for management.</p>	<p>The 2012 SoE highlights the following to be considered as top priority for future management measures:</p> <p>eutrophication is still a source of concern, especially in coastal areas near large rivers and/or cities.</p> <p>2005 TDA recommendations against decline of</p>	<p>The 2012 SoE highlights the following to be considered as top priority for future management measures:</p> <p>coastal development and sprawl, driven by urban and touristic development, chemical contamination of sediments and biota caused by pollution from urbanization, industry, anti-foulants, and atmospheric transport.</p>	<p>The 2012 SoE highlights the following to be considered as top priority for future management measures:</p> <p>over-exploitation beyond sustainable limits, including the impacts on marine food webs. These issues should be considered as top priorities for management.</p> <p>2005 TDA</p>	<p>The 2008 MLAS highlight the following gaps in relation to the management of ML:</p> <ul style="list-style-type: none"> <li>- Lack of international legal instrument</li> <li>- Lack of adequate regulatory framework for coastal waste in certain CP</li> <li>- Lack of technical tools</li> </ul> <p>The 2012 SoE highlights the following to be considered as top priority for future</p>

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
	<p>and actions for priority intervention covering biodiversity, fisheries and seawater quality. (TDA 2005)</p> <p>A major challenge identified by UNEP/MAP is the full and sustained implementation of the National Action Plans prepared to reach the objectives of the SAP in the long-term. [webiste UNEP/MAP].</p>	<p>2005 TDA recommendations against decline of biodiversity:</p> <ul style="list-style-type: none"> <li>- Implementation of SAP BIO</li> <li>- Rehabilitation of wetlands</li> <li>- Implementation of ICZM</li> <li>- Control of inputs of alien species</li> <li>- Follow up investment of 12 preinvestment studies for Hot Spots in GEF eligible countries</li> </ul>	<p>biodiversity:</p> <ul style="list-style-type: none"> <li>- Reduction of riverine inputs of nutrients</li> </ul>	<p>2005 TDA recommendations against decline of seawater quality:</p> <ul style="list-style-type: none"> <li>- Reduction of 50% of industrial BOD</li> <li>- Implementation of SAP/NAP list of priority actions for POPs and industrial releases</li> <li>- Implementation of regional plan for reduction of 20% hazardous waste</li> <li>- Follow up investment of 12 preinvestment studies for Hot Spots in GEF eligible countries</li> </ul>	<p>recommendations against decline of fisheries:</p> <ul style="list-style-type: none"> <li>- Implementation of FAO Code of conduct</li> <li>- Implementation of EC related Directives</li> </ul>	<p>management measures: the impact of marine litter and the impact of marine noise on biota, especially marine mammals and fish, including from offshore exploration and military activities in specific locations. These issues should be considered as top priorities for management.</p> <p>2005 TDA recommendations against decline of biodiversity:</p> <ul style="list-style-type: none"> <li>- Rehabilitation of coastal solid waste landfills</li> </ul>
Monitoring	<p>Need for a systematic monitoring regime that will allow accurate assessments of the state of the Mediterranean coastal and marine environment.</p> <p>For some major issues (noise, marine litter, sea-floor integrity, and trophic levels and food webs), information will need to be gathered through targeted monitoring programs to provide a scientific basis for decision-making.</p> <p>The net cumulative impact of the pressures affecting different locations within the Mediterranean is</p>		<p>Better monitoring regimes and analysis of resulting data to determine trends will, in the future, allow robust statements of the effect of eutrophication on the ecology, as well as on fisheries and other valuable ecosystem services. (SoMMCER 2013)</p>			

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
	<p>difficult to accurately determine beyond modelling efforts based on expert judgement due to previous non-integrated monitoring that focuses on single species, sites, or sectors.</p> <p>Need for future, rationalized monitoring programme, based on the selection of ecological and operational objectives to help understand the Driver-Pressure-State-Impact-Response sequence across a wide span of impacts from human activity. (SoMMCER 2013)</p>					
<i>Data collection &amp; management (reporting)</i>	<p>Need for a more robust approach to deriving information to support the major issues outlined in the Ecosystem Approach Ecological Objectives.</p> <p>Information should be collected on management measures, enforcement of regulations and level of local compliance. Thought should be given to optimising data compatibility between the environmental monitoring stream and management evaluation stream. Both information streams should feed the Ecosystem Approach process. (SoMMCER 2013)</p>	<p>Gaps in knowledge and data on the marine biodiversity in the Mediterranean Sea, including on the Specially Protected Areas and species and habitats, which are of conservation interest. (SoMMCER 2013)</p>				<p>The 2008 MLAS highlight the following gaps in relation to the management of ML:</p> <ul style="list-style-type: none"> <li>- Lack of reliable statistical information</li> </ul>
<i>Stakeholder involvement</i>	<p>Recommendations in 2005 TDA for better stakeholder involvement:</p> <ul style="list-style-type: none"> <li>- Reducing differences in levels of development: strengthening assistance to and improving the</li> </ul>					<p>The 2008 MLAS highlight the following gaps in relation to the management of ML:</p> <ul style="list-style-type: none"> <li>- Need for</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
	<p>capacities of partners in the South and East</p> <ul style="list-style-type: none"> <li>- Improving MAP's operational tools (strengthening MAP as focal point for partnership)</li> <li>- Promoting concerted action by the partners (promoting partnership networks)</li> </ul> <p>EcAP project notes that challenges to engage stakeholders include identifying the issues, credibility of the process, impartiality of coordination body and commitment of key stakeholders.</p>					<p>communication, transparency and coordinated action with various economic sectors</p> <ul style="list-style-type: none"> <li>- Awareness campaigns and educational programmes have been isolated and short-term efforts and have addressed in a non-integrated way the problem of marine litter in the Mediterranean.</li> </ul>
<i>Research</i>	<p>In addition to establishing a systematic monitoring regime to derive needed information on condition and trends, future research will have to elucidate cause-effect relationships, in order to support the establishment of management measures that lead to the desired outcomes.</p> <p>Ground-truthing needed to see if the models accurately reflect the extent to which multiple human pressures are causing ecological impacts and potentially undermining the delivery of ecosystem services. (SoMMCER 2013)</p> <p>Need for further research on the factors of vulnerability of the Mediterranean to climate change to elaborate effective adaptation</p>	<p>Important information is still missing and required for the precise evaluation of the resilience of the invertebrate populations which are affected by extreme climatic events. This information is set at present at the heart of various research programmes. (CC 2010)</p>	<p>Need for the introduction of new parameters and indicators more related to the benthic ecosystem and considered useful and consistent for assessing the eutrophication state. This is at the heart of several research programmes and in MEDPOL. (EUTRO 2007)</p>	<p>Research on the impacts of pollutants on the environment has tended to focus on pollutants known to be most harmful to human health (for example, mercury).</p> <p>Although new techniques measuring the total response of organisms to all possible stressors have been developed, none of them can give accurate estimates of levels of acute or sublethal toxicity of contaminants. Sensitive <i>in situ</i> bioassays are needed to measure</p>		

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
	strategy. (CC 2010)			<p>water and sediment toxicity using indigenous organisms. (SoMMCER 2013)</p> <p>More research is needed to assign bio-concentration levels of contaminants to their biological effects at different organisation levels (sub-cellular, individual, population).</p> <p>More research is needed to determine background and pristine contaminant levels in different Mediterranean areas that constitute the first step to classify and evaluate given pollutant concentrations.</p>		
<i>Communication &amp; cooperation between parties and outside parties (with EU/other RSCs, International Organisations e.g. CBD)</i>	<p>Need for transboundary regional cooperation because of the interconnectivity between different habitats/ecosystems, the ecosystem wide relationships and the scale of some of the major issues affecting the Mediterranean environment.</p> <p>Need for a robust and systematic management within countries, but at the same time working together through the framework that the</p>					The 2008 MLAS highlight that there has not been a concerted regional response to the problem of marine litter in the Mediterranean through a harmonized regional coastal waste management scheme, taking into account national specificities,

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Emerging issues
	<p>Barcelona Convention provides. (SoMM CER 2013)</p> <p>Need for regular and increased coordination and cooperation between UNEP/MAP PMU and other key actors in the region such as the EU and other donors, creating synergies leading to the improved use of resources.</p> <p>Need to operationalise environmental mainstreaming through in-country inter-ministerial coordination.</p> <p>Need for a permanent solution for the implementation of the Communication Strategy. (MEDPART 2011)</p>					needs, opportunities and priorities.

#### 4.4. OSPAR

The following table has been put together on the basis of the review of the most recent/relevant institutional documents produced by OSPAR. It aims to compile the gaps and needs identified in these documents by OSPAR and the CP themselves, categorized by topics and types of activities. It is different from the table included in the project Interim Report, which lists the various activities undertaken by OSPAR over the past years on the various topics.

The main document used to compile this table is:

- 2010 Quality status report (QSR 2010)
- Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2010-2020 (2010 NEAES)
- Finding common ground. Towards regional coherence in implementing the Marine Strategy Framework Directive in the North-East Atlantic region through the work of the OSPAR Commission.

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Marine Litter and noise
<i>(Initial) Assessment of the environmental status of the marine waters</i>	The OSPAR Commission will continue to identify “emerging pressures” with the aim to understand the nature of any such pressures, assess their impact and advocate intervention, as appropriate. (NEAES) OSPAR countries have identified a number of areas where regional coordination can be improved. Key priorities for OSPAR-level work between 2012 and 2018, include developing agreement on the need for collective OSPAR action with regard to the preparation of the 2018 update of national Initial Assessments, including considering how this relates to the next OSPAR QSR;	<ul style="list-style-type: none"> <li>- On the basis of current evidence, the UN target of reducing the loss of biodiversity by 2010 is far from being achieved in the North-East Atlantic. The OSPAR QSR 2010 identified the protection of biodiversity as an area with many problems in OSPAR marine region and with significant additional action needed.</li> <li>- Need to extend the development and application of ecosystem assessment methodologies;</li> </ul>	<ul style="list-style-type: none"> <li>- Need to evaluate the contribution of atmospheric nitrogen emissions, including from ships, to raise awareness of the issue and promote the adoption of measures.</li> </ul>	<ul style="list-style-type: none"> <li>- There is a need to assess the contribution of the offshore oil and gas industry to marine radioactive pollution.</li> <li>- Need to improve assessment tools to evaluate the impacts of discharges of radioactive substances to the marine environment and develop environmental quality criteria for such discharges.</li> <li>- There is a need to coordinate and align OSPAR and WFD assessment methodologies for pollution effects (NEAES)</li> </ul>	<ul style="list-style-type: none"> <li>- The OSPAR QSR 2010 identified the status of commercial fish stocks as an area with still many problems and a negative outlook for pressures.</li> <li>- For a large number of fish stocks data quality is very poor. In particular for deep-sea species data is very poor, with as a consequence that no assessment of the sustainability of the fish stocks can take place.</li> <li>- Need to cooperate in working towards improved assessment of the effects of fishing on the marine ecosystems of the OSPAR area.</li> </ul>	<ul style="list-style-type: none"> <li>- Need to agree on methods for cumulative impact assessment and socio-economic evaluation in relation to marine litter;</li> <li>- Urgent need to standardise methods for assessing the impacts of sound on marine species and to address the cumulative effects of different sources</li> </ul>
<i>Setting priority objectives and targets (GES, targets &amp; indicators), including what are the main</i>	OSPAR countries have identified a number of areas where regional coordination can be improved. Key priorities for OSPAR-level work between		<ul style="list-style-type: none"> <li>- OSPAR QSR: set OSPAR reduction targets for nutrient inputs to individual problem areas. Overall reduction targets for nitrogen have not yet been reached (2010),</li> </ul>	<ul style="list-style-type: none"> <li>- Need to use OSPAR to contribute to the identification, selection and prioritisation of hazardous substances of concern for the marine environment in the EU.</li> </ul>	<ul style="list-style-type: none"> <li>- There is a need to further define reference points for the sustainable level of quite a few fish stocks.</li> <li>- In relation to mariculture, OSPAR</li> </ul>	

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Marine Litter and noise
<i>environmental challenges</i>	2012 and 2018, include building on the work to coordinate national approaches to GES, targets and indicators, and associated assessment criteria, by taking forward a special programme of work to develop common indicators across the GES Descriptors. (NEAES)		while more progress is made for phosphorus.	<ul style="list-style-type: none"> <li>- Need to continue to work towards the target for ceasing discharges, emissions and losses of hazardous substances from offshore oil and gas industry.</li> <li>- There is a need to consider the suitability of existing measures to manage oil and gas activities in the Arctic waters where an increase in such activities is expected.</li> </ul>	needs to keep under review the wider impacts, such as non-indigenous species, impacts of sea lice, escaped fish and increased demand for industrial fisheries, especially in the event of substantial increases in mariculture activities. If necessary, coordinated management may then be required. The need to adapt mariculture management approaches to climate change should also be reviewed.	
<i>Measures, action plan, etc.</i>	<ul style="list-style-type: none"> <li>- OSPAR countries have identified a number of areas where regional coordination can be improved. Key priorities for OSPAR-level work between 2012 and 2018, include developing agreement on common policy requirements and opportunities for coordination in the development of measures, identifying the relevant scale for action: national,</li> </ul>	<ul style="list-style-type: none"> <li>- There is an urgent need for effective protection and conservation of the threatened and/or declining species and habitats on OSPAR's List, which are primarily affected by pressure from fishing, general environmental status and the developing pressures from climate change. OSPAR must ensure that biodiversity protection is fully taken into account in the management of human activities, such as</li> </ul>	<ul style="list-style-type: none"> <li>- Need to implement OSPAR and EU measures to reduce nutrient inputs to problem areas for eutrophication and take additional measures. The most important sources are agriculture, atmospheric inputs and UWWT. Specific actions, including for the EU, are identified: full implementation of UWWTD is considered key, CAP reform is considered an opportunity for tackling nitrogen inputs from</li> </ul>	<ul style="list-style-type: none"> <li>- Need to continue and improve abatement of pollution from OSPAR priority chemicals at source, including PAH emissions from combustion of fossil fuels; (long-range air transport and sea-based activities are key pressures for the OSPAR regions)</li> <li>- Need to promote actions under the REACH Regulation and other relevant EU legislation to reduce releases of priority substances;</li> </ul>	<ul style="list-style-type: none"> <li>- Need to achieve further reductions in fishing pressure and ensure that priority action is taken to address discarding practices, which remain a key issue, especially in EU waters. The EU CFP should be used to ensure that fisheries are managed in a sustainable manner.</li> <li>- Need to ensure that deep-water fisheries take into account the special vulnerability of</li> </ul>	<ul style="list-style-type: none"> <li>- OSPAR should assess the effectiveness of measures in relation to shipping through improved data collection on, and continued monitoring of, key pressures and impacts of shipping on the marine environment, including underwater noise</li> </ul>



Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Marine Litter and noise
	subregional, OSPAR, EU. (NEAES)	<p>fisheries policies, in the MSFD and in marine spatial plans;</p> <ul style="list-style-type: none"> <li>- develop targeted measures to support the protection and conservation of all threatened and declining species and habitats;</li> <li>- need to establish additional MPAs, particularly beyond the coasts and in areas beyond national jurisdiction, and ensure that OSPAR MPAs are effectively managed;</li> <li>- There is a need for OSPAR countries to ratify and implement the IMO Ballast Water Convention and to assess the risk of new species introductions.</li> </ul>	<p>agriculture and the WFD river basin management plans could be used to tackle specific sources contributing to problem areas. Additional action is considered necessary for reducing atmospheric inputs of nitrogen from agriculture and shipping (combustion).</p>	<p>(specific reference to full implementation of IED Directive, WFD, priority substances daughter directive and MSFD).</p> <ul style="list-style-type: none"> <li>- Need to further develop BAT for minimising discharges of radioactive substances from the nuclear sector</li> <li>- There is a need to identify and implement appropriate management measures for radioactive pollution from offshore oil and gas industry.</li> <li>- Need to continue efforts to phase out discharges of hazardous substances and reduce discharges of oil from offshore oil and gas industry through a risk-based approach to management of produced water;</li> <li>- Need to continue monitoring and assessment and improve the evidence base for evaluating the impacts of the offshore industry on marine ecosystems.</li> </ul>	<p>both the species exploited and their habitats;</p> <ul style="list-style-type: none"> <li>- Need to ensure that the by-catch of marine mammals, sharks, seabirds and turtles is kept as low as possible, and preferably eliminated;</li> <li>- Need to integrate fisheries management with wider maritime management, promoting consistency and synergy between fisheries policies and the policies regulating other maritime uses.</li> </ul>	
<i>Monitoring</i>	<ul style="list-style-type: none"> <li>- OSPAR countries have identified a number of areas where regional coordination can be improved. Key priorities for OSPAR-</li> </ul>	<ul style="list-style-type: none"> <li>- OSPAR must extend its focus beyond protecting individual species and habitats or specific sites to develop a scheme for assessing and</li> </ul>	<ul style="list-style-type: none"> <li>- Need to refine OSPAR's assessment methodologies (Common Procedure), including the assessment of individual indicators, and modelling</li> </ul>	<ul style="list-style-type: none"> <li>- Need to improve and extend OSPAR's monitoring framework (CEMP) and better link it with the understanding of biological effects and</li> </ul>	<ul style="list-style-type: none"> <li>- Need for improved observer programmes are needed for by-catch of non-commercial species.</li> </ul>	<ul style="list-style-type: none"> <li>- Need to monitor the impacts of marine litter from growing human uses of the sea.</li> <li>- Need for research and</li> </ul>

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Marine Litter and noise
	level work between 2012 and 2018, include the use of the information on GES and indicators referred to above to inform the development of an OSPAR monitoring framework, which will feed into an updated Joint Assessment and Monitoring Programme by 2014, focussed on supporting countries' MSFD implementation;	monitoring wider biodiversity status at the ecosystem scale. (lined with the concept of GES under the MSFD) - Need to develop an integrated monitoring and assessment programme based around an improved and comprehensive set of indicators that describe a clean, healthy and biologically diverse sea;	of nutrient transports. - Need to improve OSPAR's monitoring framework through coordinated use of novel observation tools and coordination of data collection on sources, inputs and environmental status.	ecological impacts. - Need for an improved understanding of the cumulative effects of hazardous substances, improved monitoring of biological effects, integrated, where appropriate, with chemical monitoring. - There is increasing evidence that climate change may alter pathways of hazardous substances to the North-East Atlantic and make marine ecosystems more vulnerable to chemical pollution. OSPAR should include considerations of climate change in future monitoring and assessment of hazardous substances. - Need to continue monitoring programmes on the impacts of discharges of radioactive substances in the marine environment. - Need to discuss integrated monitoring of pollution effects (NEAES)		monitoring of micro-plastics - Need for development of monitoring for energy/noise.
<i>Data collection &amp; management (reporting)</i>	- OSPAR countries have identified a number of areas where regional coordination can be improved. Key			- Need for an extension of datasets further offshore beyond the densely populated and industrialised coasts and	- Developments in science and data quality to support fisheries management, in particular relating to	- Little data available on the amounts and types of wastes handled by port-state facilities. As these

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Marine Litter and noise
	priorities for OSPAR-level work between 2012 and 2018, include considering opportunities for regionally coordinated data and information reporting linked to the work of the EU Working Group on Data Information and Knowledge Exchange			<p>information collection on the production, uses and pathways to the marine environment, especially for substances which are not deemed suitable candidates for marine monitoring.</p> <p>- Better information is needed about the sources, releases and pathways for several of some priority chemicals. This includes the need for improved tracking of the releases and environmental fate of pharmaceuticals.</p>	<p>reference points and multi-species interactions. Some 48 to 56 stocks were designated as being of unknown status between 2003 and 2009 due to poor data.</p> <p>- Need to continue data acquisition, development of models and reference points of commercial fish stocks (NEAES)</p>	<p>operations are contracted out to private operators, there is hardly any reporting on the amounts of wastes handled.</p> <p>- Consider the development of systems to collect and store accurate and comparable data that can be used to assess the impact of shipping on the marine environment, including underwater noise.</p>
<i>Stakeholder involvement</i>						
<i>Research</i>			<p>- There is increasing evidence that climate change may alter eutrophication effects. OSPAR should improve knowledge on the inter-actions of climate change and eutrophication</p>	<p>- Improve OSPAR's understanding of the effects of hazardous substances, particularly cumulative effects and endocrine disruption.</p> <p>- OSPAR should examine whether there are specific issues related to ageing installations and infrastructure in the offshore oil and gas industry.</p> <p>- The research results on concentrations and effects of hazardous substances on deep-sea species and ecosystems</p>	<p>- Improved information on deep-sea species, so that the management of these species takes into account the special vulnerability of both the species exploited and their habitats.</p> <p>- Development of fishing techniques and approaches that prevent negative impacts on vulnerable habitats and allow recovery of these habitats where possible.</p>	<p>- OSPAR should investigate the impact of underwater noise from the offshore oil and gas industry and, as appropriate, develop guidance on best practice for its mitigation.</p> <p>- Need for research and monitoring of micro-plastics and for investigations into evidence of biological impacts of marine litter.</p> <p>- Need for development of</p>

Type of activities	Overarching	Biodiversity (NIS, PA/species)	Eutrophication	Contaminants	Fishing	Marine Litter and noise
				should be used in the CEMP.	- Need for a better understanding of interactions between fish farming and wild fish stocks. (mariculture) Example of interaction between farmed salmon and decline in wild salmon and sea trout.	improved understanding of current measures and evidence gaps for energy/noise.
<i>Communication &amp; cooperation between parties and outside parties (with EU/other RSCs, International Organisations e.g. CBD)</i>	- It is also imperative that work within OSPAR is coordinated with activities on MSFD implementation being taken forward in the context of the EU Common Implementation Strategy. In order to do this effectively it is essential that joint work planning between the EU and regional sea conventions is carried out on a regular basis to ensure that work being carried out at each level is mutually supportive.	- Assessment of regional coherence still to be carried out through ICG COBAM and discussions with the EC, both for biodiversity and for non-indigenous species. (NEAES)	- -Increased cooperation and thus further work is need within the ICG EUT to develop appropriate nutrient reduction targets for problem areas of eutrophication.		- Need to exchange information on national assessment methods for shellfish (NEAES)	

## 5 – RSC Interviews

The questionnaires for the face-to-face interviews with RSC staff consisted of an introduction, the interview questions and a page of project information. The interview questions were specifically adapted to each of the four RSC, while the project information was exactly the same in all four cases. Therefore, introduction and questions are provided separately for each RSC below while the project description is only included once.

The interview replies themselves are not included because of the very different ways in which the interviews were carried out in practice. These differences could give rise to misunderstandings while the added value of inclusion of the interview results would remain very limited. The differences reflect the preferences of the RSCs in terms of the interview approach, but also the fact that the interviews followed the semi-structured approach. For example, the BSC and UNEP/MAP interviews were conducted as group interviews and the written results were subsequently reviewed by RSC staff. Although the results can in no way be viewed as ‘official’, they clearly go beyond individual expert opinions. By contrast, the Helcom and OSPAR interviews were carried out individually. They were not reviewed and - reflecting the semi-structured interview approach - some of them deviated significantly from the questionnaire. These interviews are therefore much more variable and contextual than the group interviews and clearly reflect the opinions of individual experts.

### 5.1. Questionnaire - Black Sea Commission

The main purpose of this interview is to help identify the most important concrete areas where the implementation of the MSFD would benefit from EU-support for the BSC, including related concrete support options. In addition, we would like to generate feedback from the BSC on some of the preliminary results of the electronic survey (see below).

The information contained in the questionnaire draws on two main sources: first, the information is based on desk research of measures directly or indirectly contributing to implementation of the MSFD and which were already adopted, or are planned to be adopted, by the BSC. Second, we conducted an electronic stakeholder survey on the Regional Sea Conventions support needs with respect of the implementation of the MSFD. For the electronic survey we used questions similar to those which are used in this questionnaire. Overall we contacted about 300 stakeholders of the four European marine conventions and received a total of 51 replies. 13 of these concerned the Black Sea. As the survey was closed only one day ahead of the interview, we could only draw on a preliminary analysis of the survey results for the preparation of the interview questionnaire.

For more information on the project to which this interviews contributes, see the project information at the end of this document.

## INTERVIEW QUESTIONNAIRE

### General question

1. Please explain the in which way your work at the BSC (directly or indirectly) relates to the implementation of the MSFD.

### Priority environmental topics

2. A preliminary examination of the results of our (non-representative) electronic stakeholder survey suggests that biodiversity, fisheries, followed by eutrophication are considered to be priority areas for the Black Sea, while contaminants and emerging issues, such as marine litter and underwater noise, are considered somewhat less important. Other areas are also considered less relevant.

Would you agree? How would you rank these areas? Please provide reasons.

### Specific activities

#### *Assessment/data collection/monitoring*

3. Our analysis so far suggests that there is a need to support the BSC with respect to assessment, data collection, and monitoring. More specifically, such support could relate to

- The structure of the monitoring, reporting and assessment system, which needs to be more integrated. For example, the BSC could receive support to engage in an exchange of information with other RSCs on setting up integrated assessment and monitoring systems (e.g. HELCOM holistic assessment tool) to address this issues;
- Making data supplied by BSC Parties more comparable;
- Providing monitoring, reporting and assessment equipment.

How would you rank these options? Please provide reasons for your ranking.

3.1 In which way and by which means could the EU support these activities? Please be as concrete as possible.

3.2 Which, if any, more specific or alternative most important support needs would you see in the area of monitoring, reporting and assessment? More specific needs could, for example, relate to gaps in knowledge, e.g. of a certain topic (biodiversity, eutrophication, etc.), of a certain element (specific marine species, specific contaminants, etc.), of a certain geographical area, of a certain period of time (lack of historical data, lack of recent data, etc.). Please be as concrete as possible in describing

- These support needs;
- And the means which the EU could use to address them.

#### *Objectives/targets (management targets)*

4. According to the preliminary results of our stakeholder survey, the objectives and targets set by the BSC are - with some important exceptions – appropriate and sufficiently ambitious. With respect to objectives and targets, the main problem is that fisheries are not covered. In addition, there are also important problems with the coverage of marine litter and underwater noise.

- Do you agree with this assessment? Please specify why you agree/disagree.
- If you disagree: where would you see the main problems with respect to objectives and targets?
- How do you assess the lack of BSC environmental targets as required by the MSFD?

5. The preliminary survey results indicate that insufficient implementation at national and sub-national levels is the main obstacle to the achievement of the objectives and targets set by the BSC. Political factors are the most important reason for this implementation deficit. More specifically, there is a lack of political commitment at the national level, and insufficient willingness to co-operate with the BSC but also among BSC Parties.

The second most important obstacle to the achievement of the objectives and targets set by the BSC are insufficient financial resources.

- Do you agree with this assessment? Please specify why you agree/disagree.
- If you disagree: where would you see the main problems with respect to achieving the objectives and targets of the BSC? Please specify why you consider these obstacles to be particularly relevant?
- With respect to which specific implementation issues related to the MSFD do you see the strongest need to increase
  - the political commitment of BSC Parties
  - co-operation with the BSC and/or among BSC Parties
  - support through EU-funded projects
- Do you have any concrete suggestions for EU-funded projects which could help to
  - increase the political commitment of BSC Parties to implementation, in particular of those requirements which also contribute to implementation of the MSFD?
  - increase the willingness of BSC Parties to cooperate with the BSC and with each other in the implementation process, in particular concerning those requirements which also contribute to implementation of the MSFD?
  - improve access of the BSC to financial support for implementation, in particular of measures which contribute to the implementation of the MSFD?

6. Cooperation with other relevant international conventions and agreements could help to improve the effectiveness of the BSC. Our preliminary results indicate that the Baltic Sea and the Mediterranean are particularly relevant. Environmental challenges in the Black Sea and the Baltic Sea are in some respects similar. Consequently, the BSC could benefit from the experience of HELCOM. At the same time, the Black Sea and the Mediterranean share certain marine living resources, most importantly fish stocks. Regarding fisheries the BSC could therefore benefit from stronger co-operation with the UN/FAO General Fisheries Commission for the Mediterranean (GFCM) and perhaps also CMS ACCOBAMS (Agreement on the Conservation of Cetaceans in the Black Sea Mediterranean Sea and contiguous Atlantic Area).

- Do you agree with this assessment? Please specify why you agree/disagree.
- Do you see any benefits of, and possibilities for, closer co-operation with UNEP/MAP, in particular with respect to issues where cooperation would help to meet the requirements of the MSFD?
- Do you see any other important possibilities for cooperation with regional international agreements/ organisations, in particular with respect to issues where cooperation would help to meet the requirements of the MSFD?
- Do you have any concrete suggestions for EU-funded projects which could support closer co-operation with other RSCs and/or other relevant international conventions, agreements or organisations, in particular with respect to issues where cooperation would help to meet the requirements of the MSFD?

### *Research*

7. According to the preliminary results of the electronic stakeholder survey, the following research areas should be prioritised: assessment of fish and other biological resources; biodiversity indicators, and ecosystem-based approaches.

- Do you agree with this assessment? Please specify why you agree/disagree.
- Do you have any alternative suggestions for research priorities, in particular those which are highly relevant for meeting the requirements of the MSFD?
- Do you have any concrete suggestions for EU-funded research, in particular with respect to issues where research would help to meet the requirements of the MSFD?

8. 'Fragmentation' of research may be an important factor undermining the knowledge base which is necessary to formulate and implement effective measures. More specifically, while there may be good co-ordination and cooperation in research between some BSC Parties, this is not the case with all. In addition there is no functioning overall co-ordination.

- Do you agree with this assessment? Please specify why you agree/disagree.
- Do you have any concrete suggestions for EU-funded projects which could help to better co-ordinate research among BSC Parties and with the BSC Secretariat, in particular with respect to issues where research would help to meet the requirements of the MSFD?

*Overall support priorities*

9. EU support for the BSC could either focus mainly on particular environmental issues, such as biodiversity and more specific aspects thereof, or on cross-cutting issues, such as data collection/monitoring/assessment and specific aspects thereof.

On which of these two areas would you put an emphasis? Please give reasons.

10. The preliminary results of the electronic stakeholder survey suggest that data collection/monitoring/assessment - including indicator development - is seen as the most important area in which the EU could support the BSC with respect to the implementation of the MSFD. Research into causal links is also seen as important.

- Do you agree with this assessment? Please specify why you agree/disagree, i.e. why you think this area or, if you disagree, an alternative area is more than others suited to receive EU support.
- In which way and by which means could the EU support these activities? Please be as concrete as possible.

11. The preliminary results of the electronic stakeholder survey also suggest that the most important types of needed EU support to improve data collection/monitoring/assessment are coordination/common planning and physical infrastructure capacity building. Support for research also appears to be very important but still somewhat less relevant.

- Do you agree with this assessment? Please specify why you agree/disagree.
- If you think other types of EU support are most important, please specify and give reasons.
- Please specify in as much detail as possible the characteristics of potential relevant EU support actions and programmes.



## **5.2. Questionnaire - HELCOM**

The main purpose of this interview is to help identify the most important concrete areas where the implementation of the MSFD would benefit from EU-support for HELCOM, including related concrete support options. In addition, we would like to generate feedback from HELCOM on some of the preliminary results of the electronic survey (see below).

The information contained in the questionnaire draws on two main sources: first, the information is based on desk research of measures directly or indirectly contributing to implementation of the MSFD and which were already adopted, or are planned to be adopted, by HELCOM. Second, we conducted an electronic stakeholder survey on the Regional Sea Conventions (RSCs) support needs with respect to the implementation of the MSFD. For the electronic survey we used questions similar to those which are used in this questionnaire. Overall we contacted about 300 stakeholders of the four European marine conventions and received a total of 50 replies. Only a relatively small share of these - nine - concerned HELCOM.

For more information on the project to which this interview contributes, see the project information at the end of this document.

## INTERVIEW QUESTIONNAIRE

### General question

1. Please explain in which ways your work at HELCOM (directly or indirectly) relates to the implementation of the MSFD.

### Priority environmental topics

2. A preliminary examination of the results of our (non-representative) electronic stakeholder survey suggests that biodiversity is considered to be the most important priority area for the Baltic Sea. Other important priorities are - in descending order – eutrophication, fisheries, and contaminants. Coping with pressures from maritime traffic, and off-shore and coastal development is also considered important.

- Would you agree? If any, which additional areas would you consider important? How would you rank these areas? Please provide reasons.

### Specific activities

#### *Assessment/data collection/monitoring*

3. Our analysis so far suggests that HELCOM's knowledge of the state of the environment in the Baltic Sea in general is relatively good, although there are still some gaps, in particular with respect to some elements (specific species, contaminants etc.). According to the survey results, the most important reason for these gaps is insufficient comparability of data.

- Would you agree with this assessment? Where would you see the most important gaps with respect to data collection/monitoring and assessment?
- Is insufficient comparability of data the most important reasons for these gaps? Which additional or alternative reasons would you consider to be important?
- How would you assess the availability of data and monitoring at disaggregated geographical levels? If there is insufficient availability, would you consider this as a larger or smaller problem than the gaps with respect to knowledge of certain elements?

3.1 HELCOM is currently in the process of adopting an ambitious monitoring and assessment strategy.

- Where would you see the greatest need for EU Commission funded projects to support this specific process? Please be as specific as possible.
- Which concrete form should this support take (e.g. support for sharing best practice, physical infrastructure, training etc.)? Please be as specific as possible.

#### *Objectives/target, measures and implementation*

4. According to the results of our stakeholder survey, the objectives and targets set by HELCOM mostly cover the relevant priority issues. However, some objectives/ targets are not considered to be sufficiently ambitious and implementation results are mixed and need to be improved. Adequate identification and management of MPAs appears to pose particularly large problems in terms of implementation.

- Do you agree with this assessment? Please specify where and why you agree/disagree? Which objectives/targets should be more ambitious? Which are the most important areas in which implementation has to be improved? Please be as specific as possible.
- How would you assess the development of indicators? Do they cover the relevant objectives and targets? If not, where are the main gaps/ need for improvement?

4.1 The survey results indicate that implementation could be improved by creating more transparency, improving communication and better information sharing.

- Do you agree with this assessment? Please give reasons.
- If you agree, in which areas/with respect to which concrete activities would you see the largest benefits from creating more transparency, improving communication and better data sharing? Please be as specific as possible.

5. Co-ordination and co-operation with other European RSCs and additional relevant organisations and agreements could help to improve the effectiveness and efficiency of HELCOM and contribute to a coherent implementation of the MSFD. Given certain common characteristics and environmental challenges as well as some overlapping membership, co-operation with the BSC might be particularly relevant. Concerning OSPAR, the Baltic and North Seas are linked and there is a membership overlap between HELCOM and OSPAR.

- In which specific areas and with which European RSCs and other organisation and agreements would co-operation be particularly helpful in terms of (a) increasing the effectiveness and efficiency of HELCOM and (b) a coherent implementation of the MSFD?
- Which type of activities and arrangements could serve as a basis for this cooperation?
- Do you have any concrete suggestions for EU-funded projects which could support closer co-operation with other RSCs and/or other relevant international conventions, agreements or organisations, in particular with respect to issues where cooperation would help to meet the requirements of the MSFD?

#### *Research*

6. According to the results of the electronic stakeholder survey, the HELCOM knowledge base would benefit from better co-ordination of research and also an improved science-policy interface.

- Do you agree with this assessment? Please give reasons. If you agree, which actors would be key to improving research co-ordination? Do you have first suggestions for the kind of arrangements that would be needed?
- Do you have any suggestions for EU-funded projects which could support better coordination, in particular with respect to issues where coordination would help to meet the requirements of the MSFD?

6.1 Which research topics would be most important to pursue, in particular with respect to HELCOM requirements which are also highly relevant for implementing the MSFD? Research topics could either be linked to cross-cutting themes, such as the development of indicators, cumulative effects, the ecosystem, socio-economic analysis etc or to particular environmental topics, such as biodiversity, marine litter or underwater noise.

- In general would you consider research into cross-cutting issues or into particular environmental topics more relevant with a view to HELCOM's contribution to MSFD implementation?
- Which particular cross-cutting and/or environmental topics do you consider to be most relevant in the context of HELCOM's contribution to implementing the MSFD?
- Do you have suggestions for EU funded projects which could help to address these research topics?

#### *Governance*

7. The results of the electronic survey suggest that stakeholders are not very satisfied with their involvement in HELCOM. They indicated that they would prefer stronger involvement in particular at the working level. More stakeholder consultation and better involvement in high-level discussions were also considered important.

- Do you agree with this assessment? Please give reasons.
- Do you have suggestions how the involvement of stakeholders could be improved?
- Do you have suggestions for EU funded projects which could support better stakeholder involvement? Please be as concrete as possible.

### Overall support priorities

The questionnaire has so far focussed on particular aspects of HELCOM in relation to the implementation of the MSFD without establishing a hierarchy of importance among these different aspects (e.g. cooperation with other RSCs vs. research). To the extent possible, the main purpose of the remaining questions is to establish such a hierarchy. When considering the hierarchy of importance, two aspects should be taken into account: the overall **importance** of a particular issue/measure for the implementation of HELCOM and the BSAP, in particular of requirements which are highly relevant for the MSFD, and the urgency of the issue/measure in terms of the **timing** of the different MSFD requirements. Consequently, measures/issues which have a high overall importance and are also urgent, should be at the top of the hierarchy.

Please note that a number of issues which were already discussed in the previous questions will reappear in the second part of the questionnaire. However, this time the focus of your comments and replies should be on establishing a hierarchy among these issues and measures.

8. EU support for HELCOM could either focus mainly on particular environmental issues, such as biodiversity and more specific aspects thereof, or on cross-cutting issues, such as data collection/monitoring/assessment and specific aspects thereof.

- On which of these two areas would you put most emphasis? Please give reasons.

9. The electronic stakeholder survey does not provide clear results with respect to priority support needs and options for HELCOM. However, respondents who viewed support in relation to a specific environmental issue as most important seemed to focus in particular on biodiversity and, in relation to this, on MPAs, fishing and coastal zones.

- Would you agree with the view that biodiversity, in particular in relation to MPAs, fishing and coastal zones, is the most important environmental issue under HELCOM? Which environmental issue do you see as being the most important? Please give reasons, referring both to ‘importance’ in terms of MSFD requirements and timing.
- Which type of activity would be needed to address the most important issue? (e.g. research, better implementation of measures etc.)? Please be as specific as possible.
- How could the EU support this activity (e.g. provide funding for physical infrastructure, equipment, organise best practice workshops, funding of research etc.)? Please be as specific as possible.

10. The results of the electronic survey suggest that cross-cutting activities are mostly seen as more important than a focus on specific environmental issues. However, no specific cross-cutting activity clearly emerges as most important. The most what one can say is, that there seems to be a tendency to emphasise issues connected to maritime spatial planning.

- Would you agree that maritime spatial planning or related instruments are the most important cross-cutting priority? If not, which cross-cutting issues do you consider to be the most important? Please be as specific as possible and give reasons.

10.1 Although the electronic survey provided no clear results on the most important cross-cutting issue itself, the results suggest that to effectively address the main cross-cutting issues, the EU should provide support to improve co-ordination, in particular to increase transparency, exchange

of information and data, sharing of good practice and common planning.

- Would you agree with this assessment? If not, what type of support should the EU offer to address the most important cross cutting problem? Please be as specific as possible and give reasons.
- Please specify in as much detail as possible the characteristics of potential relevant EU support actions and programmes, including timing.

### **5.3. Questionnaire - OSPAR**

The main purpose of this interview is to help identify the most important concrete areas where the implementation of the MSFD would benefit from EU-support for OSPAR, including related concrete support options. In addition, we would like to generate feedback from OSPAR on some of the preliminary results of our electronic survey (see below).

The information contained in the questionnaire draws on two main sources: first, it is based on desk research of OSPAR measures directly or indirectly contributing to implementation of the MSFD and which were already adopted, or are planned to be adopted. Second, we conducted an electronic stakeholder survey on the Regional Sea Conventions' support needs in view of the implementation of the MSFD. For the electronic survey we used questions similar to those used in this questionnaire.

For more information on the project to which these interviews contributes, see the project information at the end of this document.

## INTERVIEW QUESTIONNAIRE

### General question

1. Please explain in which ways your work at OSPAR (directly or indirectly) relates to the implementation of the MSFD.

### Priority environmental topics

2. A preliminary examination of the results of our (non-representative) electronic stakeholder survey suggests that biodiversity is considered to be the most important priority area for the NEA. In particular fisheries but also contaminants are also considered very important. Perhaps somewhat less so marine litter and underwater noise (the latter appears to be important in particular relative to the results for other RSCs).

Would you agree with the selection of these issues? How would you rank these areas? Please give reasons.

### Specific activities

#### *Assessment/data collection/monitoring*

3. Our analysis so far suggests that, building on OSPARs existing work on biodiversity indicators, there is a need to support the development of an integrated monitoring and assessment programme to cover biodiversity status beyond individual species. More specifically, this would require:

- Development, and agreement on, a limited number of improved and more comprehensive indicators which are linked to relevant pressures;
- A better integration of monitoring and assessment.

3.1 Would you agree with this assessment, in particular with a view to the requirements of the MSFD? Please give reasons.

3.2 Which, if any, more specific or alternative support needs would you see in the area of monitoring, reporting and assessment?

3.3 In which way and by which means could the EU support these activities? Please be as concrete as possible.

4. There may be a need for improved data collection/monitoring/assessment with respect to ‘emerging issues’, i.e. underwater noise (and the impact of shipping more generally) and marine litter. On underwater noise, better data collection and monitoring as well as agreement on methods for assessing cumulative impacts are needed. In particular the last item also applies to marine litter.

4.1 Would you agree with this assessment? Please give reasons.

4.2 In which way and by which means could the EU support these activities? Please be as concrete as possible.

5. According to our survey stakeholders are divided in their assessment of OSPAR’s knowledge of the state of the marine environment. However, a majority believed that it was not sufficiently comprehensive. This was mainly attributed to a lack of knowledge of certain broader topics and of certain more specific elements. Three main reasons were identified for this: lack of

- Comparable data;

- An integrated OSPAR framework;
- Effective transfer of data from private to public organisations.

5.1 Would you agree with this assessment? Please give reasons.

5.2 Which more specific or alternative main knowledge gap - e.g. of a certain geographical area (open sea, southern Mediterranean etc), of a certain period of time (lack of historical data to establish baseline, lack of recent data, etc.) - would you see?

5.3 How could the EU help to close these knowledge gaps? Please be as concrete as possible in terms of both the gaps and the means – including EU funded projects - which the EU could employ to address them.

*Objectives/targets (management targets)*

6. According to the results of our stakeholder survey, stakeholders are divided over whether OSPAR's objectives and targets cover the main priority areas – while many think they do, a majority believes that this is only partly the case.

Would you agree with this assessment? Please specify why you agree/disagree, where you see major gaps etc.

7. Stakeholders considered the OSPAR objectives and targets only partly sufficiently ambitious to ensure a healthy sea – some thought that they were not sufficiently ambitious at all. Reasons given for this include an incomplete definition of GES and a lack of quantified and comparable targets.

7.1 Would you agree with this assessment? Please specify why you agree/disagree?

7.2 If you (partly) agree, do you see a potential role for the EU in supporting the adoption of more ambitious targets? If so, what could this role be? Please be as concrete as possible in identifying the relevant deficiencies of the objectives and targets as well as the potential means which the EU could employ to help address the deficiencies.7. The preliminary survey results suggest that stakeholders most - though certainly not all – stakeholders do not consider the measures taken by OSPAR to protect the marine environment adequate.

7.3 Would you agree with this assessment? Please specify why you agree/disagree.

7.4 If you (partly) agree, do you see a potential role for the EU in supporting the adoption of more adequate measures? If so, what could this role be? Please be as concrete as possible in identifying the relevant gaps/deficiencies of existing measures and as well as the potential means - including EU funded projects - which the EU could employ to help address the gaps/deficiencies.

8. According to the results of the electronic survey, the quality of the implementation of measures is mixed and there may be a significant geographical/political aspect to this in that some southern European Parties appear to be less committed while there are also problems for the wider Atlantic and the Arctic.

- Potential means to address the implementation problems are:
- Adoption of improved targets and better co-ordination;
- Increased integration and consultation of stakeholders;
- More effective compliance and reporting mechanisms;
- Better integration of regional issues in OSPAR work to promote engagement.

8.1 Would you agree with the overall assessment regarding implementation? Please specify



why you agree/disagree.

8.2 In which particular areas do you see the most important implementation problems (Eutrophication, ...)?

8.3 With which of the means to address the implementation problems do you agree? Are there any additional means you consider particularly important? How would you rank these means? Please give reasons.

8.4 Do you see a potential role for the EU in supporting better implementation? If so, in which areas and by which means? Please be as concrete as possible in identifying the areas and means, including potential EU-funded projects.

9. Cooperation with other relevant international conventions and agreements might offer opportunities to improve the effectiveness of OSPAR (and of the partners). So far co-operation appears to have mainly focussed on HELCOM. Regarding future additional co-operation there are various considerations, including the following:

- According to the stakeholder survey, maritime spatial planning and MPAs could be areas of potential cooperation;
- There might be areas in which it would make sense for OSPAR and other RSCs to develop common guidelines on particular issues (similar to the HELCOM/OSPAR Ballast Water guidelines);
- Co-operation with HELCOM on effect of shipping on marine environment;
- Co-operation with UNEP/MAP, given that that some OSPAR Parties are also Parties to UNEP/MAP;
- (More) co-operation with non-RSC international bodies and agreements, such as the North East Atlantic Fisheries Commission.

9.1 Do you agree with the statement that co-operation with other RSCs has so far been limited to HELCOM? If so, what are the main reasons for this? If you don't agree, what are/were the main instances of cooperation with other RSCs?

9.2 Which, if any, of the co-operation options with other RSCs and international bodies and agreements mentioned above would you consider to be the most promising? Do you see any additional more or similarly promising options for cooperation?

9.3 Do you see any benefits of, and possibilities for, closer co-operation with one or more of the other European RSCs/ other international bodies and agreements, in particular with respect to issues where cooperation would help to meet the requirements of the MSFD? If so, with which RSCs/ other international bodies and agreements, in which areas and using which type and means of co-operation?

9.4 Do you have any concrete suggestions for EU-funded research projects which could support closer co-operation with other RSCs and/or other relevant international conventions, agreements or organisations, in particular with respect to issues where cooperation would help to meet the requirements of the MSFD?

### *Research*

10. The stakeholder survey yielded no clear results with respect to research areas which should be prioritised. Perhaps the investigation of the cumulative biological and ecologic effects of hazardous substances could be a priority research area.

10.1 Would you agree that cumulative effects could be a priority research area? Do you have

suggestions for alternative research priorities, in particular those which are highly relevant for meeting the requirements of the MSFD?

10.2 Do you have any concrete suggestions for EU-funded research projects, in particular with respect to issues where research would help to meet the requirements of the MSFD? Please be as concrete as possible.

11. The results of the electronic survey suggest that to improve the OSPAR knowledge base better co-ordination of research topics, of the physical research infrastructure and an improved science-policy interface would be necessary.

11.1 Do you agree with this assessment? Please specify why you agree/disagree.

11.2 Do you have any concrete suggestions for EU-funded projects which could help to better co-ordinate research among OSPAR Parties and with the OSPAR Secretariat and other bodies, in particular with respect to issues where research would help to meet the requirements of the MSFD?

#### *Governance*

12. Most stakeholders participating in the stakeholder survey considered participation of stakeholders in OSPAR only as partly sufficient or less. According to the survey, more opportunities for active participation in working level meetings as well as more public events and better opportunities for informal contacts with RSC Secretariats are considered would help to improve stakeholder involvement.

12.1 Do you agree with this assessment? Please specify why you agree/disagree.

12.2 Do you have any concrete suggestions for EU-funded projects which could help to improve stakeholder involvement, in particular with respect to issues where this would help to meet the requirements of the MSFD?

#### **Overall support priorities**

The questionnaire has so far focussed on particular aspects of OSPAR in relation to the implementation of the MSFD without establishing a hierarchy of importance among these different aspects (e.g. cooperation with other RSCs vs. research). To the extent possible, the main purpose of the remaining questions is to establish such a hierarchy. When considering the hierarchy of importance, two aspects should be taken into account: the overall importance of a particular issue/measure for the implementation of OSPAR and the Ecosystem Approach, in particular of requirements which are highly relevant for the MSFD, and the urgency of the issue/measure in terms of the timing of the different MSFD requirements (development of monitoring programmes, programmes of measures etc). Consequently, measures/issues which have a high overall importance and are also urgent, should be at the top of the hierarchy.

Please note that a number of issues which were already discussed in the previous questions will reappear in the second part of the questionnaire. However, this time the focus of your comments and replies should be on establishing a hierarchy among these - or your preferred alternative - issues and measures.

13. EU support for OSPAR could either focus mainly on particular environmental issues, such as biodiversity or contaminants and specific aspects thereof or on cross-cutting issues, such as data collection/monitoring/assessment and specific aspects thereof.

On which of these two areas would you put most emphasis? Please give reasons.

14. The electronic stakeholder survey only provides vague indications with respect to priority support needs and options for OSPAR. However, it seems possible to group responses into two broad clusters: development of common definitions and approaches (GES, targets, indicators, methodologies) and management of sustainability/green growth (marine resources/overfishing, maritime spatial planning/strategic environmental assessment, Green growth).

14.1 Would you agree with these (mostly cross-cutting) priorities? Which, if any, of these issue(s) do you see as being the most important ones? Can you identify any other similarly or more important priorities? Please give reasons, referring both to 'importance' in terms of MSFD requirements and timing.

14.2 For most important environmental (rather than cross-cutting) issues: which types of activities would be needed most to address these issues? (e.g. research, better co-ordination etc.)? Please be as specific as possible.

14.3 How could the EU support this activity (e.g. provide funding, sharing of best practice, common planning etc)? Please be as specific as possible.

#### **5.4. Questionnaire - UNEP/MAP**

The main purpose of this interview is to help identify the most important concrete areas where the implementation of the MSFD would benefit from EU-support for UNEP/MAP, including related concrete support options. In addition, we would like to generate feedback from UNEP/MAP on some of the preliminary results of the electronic survey (see below).

The information contained in the questionnaire draws on two main sources: first, the information is based on desk research of UNEP/MAP measures directly or indirectly contributing to implementation of the MSFD and which were already adopted, or are planned to be adopted. Second, we conducted an electronic stakeholder survey on the Regional Sea Conventions support needs with respect of the implementation of the MSFD. For the electronic survey we used questions similar to those which are used in this questionnaire.

For more information on the project to which these interviews contributes, see the project information at the end of this document.

## INTERVIEW QUESTIONNAIRE

### General question

1. Please explain in which ways your work at UNEP/MAP (directly or indirectly) relates to the implementation of the MSFD.

### Priority environmental topics

2. A preliminary examination of the results of our (non-representative) electronic stakeholder survey suggests that biodiversity is considered to be the most important priority area for the Mediterranean. Other important priorities are contaminants, fishing/living natural resources and marine litter. Other areas, such as underwater noise, are considered somewhat less important.

Would you agree with the selection of these issues? How would you rank these areas? Please give reasons.

### Specific activities

#### *Assessment/data collection/monitoring*

3. Our analysis so far suggests that there is a clear need to support UNEP/MAP in particular with respect to data collection and monitoring. More specifically, such support could relate to

- The focus and coverage of data collection and monitoring
  - Building a more rationalized monitoring programme, based on the selection of ecological and operational objectives to help understand the Driver-Pressure-State-Impact-Response sequence across a wide span of impacts from human activity.
  - For some major issues (noise, marine litter, sea-floor integrity, and trophic levels and food webs), information will need to be gathered through targeted monitoring programs to provide a scientific basis for decision-making.
- Organisation and coordination of monitoring and data collection
  - There is a very strong issue with regard to the environmental data flow from the national collecting bodies to the UNEP database. Even Contracting Parties with strong national monitoring and data collection frameworks do not systematically transfer the data collected to the UNEP database.
    - The data flow needs to be improved, for instance through development of a unique and user-friendly portal for data entry using standard data formats (e.g. new MEDPOL Info System);
    - making data supplied by UNEP/MAP Parties more comparable;
  - Capacities
    - In particular physical infrastructure for data collection and monitoring, but also expertise

How would you rank these options? Please provide reasons for your ranking.

3.1 In which way and by which means could the EU support these activities? Please be as concrete as possible.

3.2 Which, if any, more specific or alternative most important support needs would you see in the area of monitoring and reporting? More specific needs could, for example, relate to gaps in knowledge, e.g. of a certain topic (biodiversity, eutrophication, etc.), of a certain element (specific marine species, specific contaminants, etc.), of a certain geographical area (open sea, southern Mediterranean etc), of a certain period of time (lack of historical data to establish

baseline, lack of recent data, etc.). Please be as concrete as possible in describing

- These support needs
- And the means which the EU could use to address them

*Objectives/targets (management targets)*

4. According to the preliminary results of our stakeholder survey, the objectives and targets set by UNEP/MAP are at least partly appropriate and sufficiently ambitious. The main problem is that the targets prepared for the Ecosystem Approach are too qualitative and may therefore not be practical for achieving GES.

- Do you agree with this assessment? Please specify why you agree/disagree, where you see major gaps etc.
- How do you assess the targets for the Ecosystem Approach?

5. The preliminary survey results indicate that the lack of environmental information and knowledge (caused in turn by lack of political will and financial resources) as well as the absence of sanctions for non-implementation are the main reasons why implementation is insufficient at national and sub-national levels to achieve the objectives and targets set by UNEP/MAP.

- Do you agree with this assessment? Please specify why you agree/disagree.
- If you disagree: where would you see the main obstacles for achieving the objectives and targets of UNEP/MAP? Please specify why you consider these obstacles to be particularly relevant?
- With respect to which specific implementation issues related to the MSFD do you see the strongest need to increase
  - The political commitment of UNEP/MAP Parties
  - Co-operation within UNEP/MAP and/or among UNEP/MAP Parties
  - Support through EU-funded projects. Here the survey suggests that knowledge generation, monitoring and harmonisation could be addressed, in particular with respect to the establishment and management of MPAs. Would you agree with this assessment? If not, where would you see the main priorities?
- Do you have any concrete suggestions for EU-funded projects which could help to
  - Increase the political commitment of UNEP/MAP Parties to implementation, in particular of those requirements which also contribute to implementation of the MSFD?
  - Increase the willingness of UNEP/MAP Parties to cooperate with UNEP/MAP and with each other in the implementation process, in particular concerning those requirements which also contribute to implementation of the MSFD?
  - Improve access of UNEP/MAP to financial support for measures to increase political commitment and/or co-operation and/or better data collection and monitoring and improved knowledge, which is particularly relevant to the implementation of the MSFD?

6. Cooperation with other relevant international conventions and agreements might offer opportunities to improve the effectiveness of UNEP/MAP. However, co-operation with the BSC, HELCOM and/or OSPAR so far seems to have been quite limited. The results of the electronic survey on this question seem to support this conclusion: there were only very few responses and the suggestions for areas of cooperation remained very vague, i.e. cooperation with HELCOM and OSPAR on fisheries, pollution and EcAP, and among all European RSCs on coherent monitoring strategies.

One could argue that co-operation with the BSC might be helpful because the Black Sea and the Mediterranean share certain marine living resources, most importantly fish stocks. Such co-operation could be in addition to what is being done by the UN/FAO General Fisheries Commission for the Mediterranean (GFCM) and perhaps also CMS ACCOBAMS (Agreement on the Conservation of Cetaceans in the Black Sea Mediterranean Sea and contiguous Atlantic Area).

- Do you agree with the statement that co-operation between UNEP/MAP and the other European RSCs has been very limited so far? If so, what are the main reasons for this? If you don't agree, what are/were the main instances of cooperation?
- Do you see any benefits of, and possibilities for, closer co-operation with one or more of the other European RSCs, in particular with respect to issues where cooperation would help to meet the requirements of the MSFD? If so, with which RSCs and in which areas?
- Do you have any concrete suggestions for EU-funded research projects which could support closer co-operation with other RSCs and/or other relevant international conventions, agreements or organisations, in particular with respect to issues where cooperation would help to meet the requirements of the MSFD?

### *Research*

7. Besides, perhaps, a certain focus on biodiversity, the electronic survey yielded no clear results with respect to research areas which should be prioritised.

- Do you have any suggestions for research priorities, in particular those which are highly relevant for meeting the requirements of the MSFD?
- Do you have any concrete suggestions for EU-funded research, in particular with respect to issues where research would help to meet the requirements of the MSFD?

8. The results of the electronic survey indicate that to improve the knowledge base better co-ordination of research topics and, somewhat less critically, a better science-policy interface would be necessary.

- Do you agree with this assessment? Please specify why you agree/disagree.
- Do you have any concrete suggestions for EU-funded projects which could help to better co-ordinate research among UNEP/MAP Parties and with the UNEP/MAP Secretariat and other bodies, in particular with respect to issues where research would help to meet the requirements of the MSFD?

### **Overall support priorities**

The questionnaire has so far focussed on particular aspects of UNEP/MAP in relation to the implementation of the MSFD without establishing a hierarchy of importance among these different aspects (e.g. cooperation with other RSCs vs. research). To the extent possible, the main purpose of the remaining questions is to establish such a hierarchy. When considering the hierarchy of importance, two aspects should be taken into account: the overall **importance** of a particular issue/measure for the implementation of UNEP/MAP and the Ecosystem Approach, in particular of requirements which are highly relevant for the MSFD, and the urgency of the issue/measure in terms of the **timing** of the different MSFD requirements. Consequently, measures/issues which have a high overall importance and are also urgent, should be at the top of the hierarchy.

Please note that a number of issues which were already discussed in the previous questions will reappear in the second part of the questionnaire. However, this time the focus of your comments and replies should be on establishing a hierarchy among these - or your preferred alternative - issues and measures.

8. EU support for UNEP/MAP could either focus mainly on particular environmental issues, such as biodiversity or contaminants and specific aspects thereof or on cross-cutting issues, such as data collection/monitoring/assessment and specific aspects thereof.

- On which of these two areas would you put most emphasis? Please give reasons.

9. The electronic stakeholder survey only provides vague indications with respect to priority support

needs and options for UNEP/MAP. However, among the respondents who viewed support in relation to a specific environmental issue as most important there was a tendency to focus on biodiversity in coastal zones, in particular the management of existing MPAs in this respect, and on the establishment of high seas MPAs. Fish, contaminants and marine litter are also seen as - perhaps somewhat less important - priorities. Addressing the problem of marine litter was also mentioned as a priority.

- Would you agree with these environmental priorities, including the hierarchy among them? If not, which environmental issue do you see as being the most important? Please give reasons, referring both to 'importance' in terms of MSFD requirements and timing.
- Which type of activity would be needed most to address the most important issue? (e.g. research, better implementation of measures etc.)? Please be as specific as possible.
- How could the EU support this activity (e.g. provide funding for physical infrastructure, equipment, organise best practice workshops, funding of research etc.)? Please be as specific as possible.

10. For cross-cutting issues the results of the electronic survey suggest that data collection and monitoring, and in particular ensuring comparability of data, are perceived to be priorities (In fact, these are also seen as the most important activities to address the priority environmental issues).

- Would you agree that these are the most important cross-cutting issues? If not, which cross-cutting issues do you consider to be the most important? Please be as specific as possible and give reasons.

10.1 According to the electronic survey, the most important types of support which the EU could provide to address the priority cross-cutting issue (as well as the priority environmental issue) relate to various forms of co-ordination among authorities, of formats, and through sharing of best practice. Equally, infrastructure capacity building is important. Perhaps somewhat less critically, stakeholder participation needs to be improved and research better co-ordinated.

- Would you agree with this selection of types of support and the prioritisation? If not, what types of support should the EU offer to address the most important cross cutting problem? Please be as specific as possible and give reasons.

Please specify in as much detail as possible the characteristics of potential relevant EU support actions and programmes, including timing (where appropriate you may of course refer to your answers to question 3.1).



## **5.5. Project information**

### **Analysis of Regional Sea Convention needs ensuring better coherence of approaches under the Marine Strategy Framework Directive**

Milieu Ltd and its partners SYKE, ICES and HCMR are carrying out a project for the European Commission (DG ENV) on the identification of the needs for support of the four European Regional Sea Conventions (RSCs) with regard to the implementation of the Marine Strategy Framework Directive (MSFD). The overall objective of the project is to identify the various areas and forms of support which the RSCs need in order to carry out activities which improve the implementation of the MSFD in 'their' marine regions (such as capacity building, exchange of information, etc.) and provide corresponding policy recommendations to the European Commission. The project started in February 2013 and the project final report will be completed in October 2013.

The project interim report was completed on 19th April 2013. It provides an overview of existing and planned RSC activities as well as RSC resources, planning and programming so far and is based on a desk analysis of relevant documents. These preliminary results will be further complemented in the run of the project.

In a separate working document the project team with the support of its local experts produced a first preliminary identification of gaps and corresponding support needs of the RSCs at a still very general level. More concrete proposals are expected to result from the following upcoming project activities:

- An electronic survey addressed to a broad range of stakeholders as well as a questionnaire for the members of the Marine Strategy Coordination Group (MSCG). The survey will be launched in May 2013. It aims at identifying stakeholder opinions on the most important support needs of the RSCs with a view to the implementation requirements of the MSFD. The questionnaire will also be submitted to the MSCG members in May 2013;
- Several interviews with staff from each of the four RSC secretariats. The interviews will serve to provide the RSCs own views of their support needs concerning activities which support the implementation of the MSFD. They will also provide feedback on the results of the desk study and of the electronic survey and will help to identify and describe in more detail priority support options.

Taking into account the implementation schedule of the MSFD and based on the desk study, the results of the survey and of the interviews, the project final report will present a work plan to implement its policy recommendations.

## 6 – MSCG survey

### 6.1 – Questionnaire

#### Survey for the identification of support needs of the Regional Sea Conventions

*Specify to which RSCs your answers relate:*

1. What is the current role of the RSCs with respect to:

a. assisting in the implementation of the MSFD

--

b. improving the coherence of Member State approaches to implementing the MSFD

--

2. What should the role of the RSCs be in these respects?

--

3. How could the role of the RSCs be improved?

--

4. What are the main areas in which the RSCs would need to be supported to fulfil their roles with respect to the MSFD more effectively?

--

5. Which concrete form could the support take (capacity building, enhanced participation in CIS, research collaboration etc.) and how could it be funded/who should provide funds?

6. What are the most urgent support needs?

7. Which are the most important long-term support needs?

## 6.2 - Responses

### 6.2.1. Germany

#### Survey for the identification of support needs of the Regional Sea Conventions

Germany

9 July 2013

*Specify to which RSCs your answers relate:*

*OSPAR Commission for the North-Sea sub-region and HELCOM for the Baltic Sea Region*

*The term “RSC” is used here to refer to OSPAR and HELCOM.*

1. What is the current role of the RSCs with respect to:

a. assisting in the implementation of the MSFD

So far OSPAR and HELCOM have provided platforms for the regional coordination of national approaches in the implementation of the MSFD (OSPAR COG and ICGMSFD and HELCOM GEAR) through which they sought regional coherence, synergies and alignment of regional work for MSFD purposes. Both Conventions have actively supported the first phase of implementation in 2012 through science-based proposals for the technical implementation of MSFD requirements (partly in cooperation with ICES), coordinated monitoring under existing programmes, regional assessments and roof reports and have orientated substance and timing of their strategic planning and work programmes along the MSFD requirements and action plan. Both Conventions currently assist in the implementation of the MSFD through

- agreeing on a suite of indicators applicable to the respective marine region (OSPAR common indicators, HELCOM core indicators), with the perspective to develop common GES boundaries;
- revising and further developing the OSPAR and HELCOM joint monitoring programmes and data collection activities to fit also MSFD needs
- closing thematic gaps (e.g. certain biodiversity and food web aspects, litter, noise) including engagement with socio-economic analysis
- further developing or adjusting thematic/integrated assessments in relation to descriptors and continued work on ecosystem-based assessments

With a view to measures, the HELCOM Baltic Sea Action Plan includes a first basis for a regional programme of measures. Under both Conventions commitment is in process to develop a regional action plan on marine litter.

Research cooperation under both Conventions support joint efforts to enhance and share knowledge on marine ecosystems.

b. improving the coherence of Member State approaches to implementing the MSFD

The activities under (a) on the implementation of the MSFD are all about coordination and increasing coherence within the region.

Commitment is in process in HELCOM on joint documentation of monitoring programmes which would reduce burdens on Member States and increase coherence. In OSPAR consideration is given to developing “roof reports” with the same aim.

Coherence of MS approaches to implementing the MSFD should be improved within the marine (sub)regions through using to the extent possible common agreements achieved in the EU-MSFD-CIS process, such as guidance documents. At the same time, CPs which are also EU MSs should seek to the extent possible to feed common agreements reached under their RSCs into the CIS process to

increase efficiency by avoiding double work and “re-inventing the wheel”. OSPAR and HELCOM agreements relating to monitoring and measures could be included in MSFD guidance documents to illustrate how MSFD implementation could look like, identify potential gaps and recommend solutions. EU and RSC processes should learn from each other.

Improved coherence between neighbouring RSCs, such as HELCOM and OSPAR, would also increase coherence of those MS which share different marine regions or sub-regions.

## 2. What should the role of the RSCs be in these respects?

The *acquis* of marine knowledge, scientific tools and management experience in the RSCs should be actively used for the implementation of the MSFD and integrated in the formulation of MSFD implementation requirements at EU level. RSCs should focus on their strengths in relation to regional (and where appropriate subregional) aspects. In this context it is also of importance that in the framework of RSCs, CPs that are EU MS actively aim at aligning their national approaches to implementing the MSFD to agreed regional approaches and vice versa. This implies focus of EU MS in RSCs on

- defining common standards for good environmental status for comparable (sub)regional assessments
- environmental targets associated with (sub)regional/transboundary problems and with maritime activities/pressures
- guiding measures to achieve GES (e.g. through establishing regional action plans; recommendations for environmentally sound practices; identification of hot spots causing environmental problems etc.)
- measures for larger scale problems and for transboundary issues
- sharing research and development work in relation to new topics in order to provide regional baseline information for assessment of the need and extent of future activities
- joint documentation of MSFD implementation approaches and results to support EU MS in MSFD reporting

Efficiency of the implementation process requires better sharing of work load both *vertically* (among national, EU and regional level) and *horizontally* (among RSCs and other organisations such as ICES) among *existing* structures. RSCs should take the *lead* for identified topics and tasks suitable for their scale with a view to sharing the results and avoiding duplication of work in several fora. For example, RSCs have been very active over the past years in developing the science base for monitoring and assessing biodiversity and ecosystem health and should take a lead in this on the basis of requirements and processes of the RSCs as well as of the MSFD and other relevant EU-Directives (e.g. WFD, Habitats-Directive).

This is to recall that the MSFD takes a genuine regional approach to GES. Therefore RSCs should have a genuine role in delivering regional approaches and regional results under the MSFD. In support of this, RSCs should be linked up with MSFD reporting requirements and information systems to allow MS to fulfil their requirements under the MSFD on reporting and providing access to information resulting from monitoring and assessment.

## 3. How could the role of the RSCs be improved?

With COM Decision 2010/477/EU, a framework was developed that gave incentive to re-design issues that are well established and tested in the RSCs. The revision of the Decision provides an opportunity to better align its requirements to the *acquis* of the RSCs and thereby help allocating resources to new and less advanced aspects (e.g. biodiversity, litter, noise) rather than to re-working existing achievements. By using WFD CIS Working Groups for the MSFD-related EU-work on eutrophication and hazardous substances (descriptors 5 and 8), care should be taken that the long-standing knowledge and experience of RSCs in assessing those issues in offshore marine waters is taken into account. The learning process should be mutual, i.e. WFD should be allowed to learn from RSCs in marine waters

and vice versa.

Enhanced communication and cooperation between expert groups of EU, RSCs and ICES, including the possibility to assign a specific task in the CIS process to an expert group of an RSC or ICES, would help avoiding the current situation of parallel work efforts.

Through closer cooperation with riverine commissions, RSCs could play an instrumental role in feeding back results of marine assessments and resulting environmental targets and management requirements in relation to land-based sources to WFD processes and thereby help that MSFD and WFD programmes of measures are complementary and mutually supporting.

While the MSFD provides a good basis and opportunity to interact with and influence other policies e.g. fisheries, shipping, land-based industries or agriculture with a view to improving the quality of marine waters and health of marine ecosystems, fragmented policies and powers at national, EU and international level as well as the lack or limitation of RSCs competencies in management issues (e.g. fisheries, OSPAR in relation to shipping) is a clear deficit. RSCs should better capitalise on their potential through their assessment capacities at regional scale to provide the science base and associated recommendations for solutions for decision-making at EU level and other international bodies with management competencies. This would include support through the EU to take up advice from RSCs within the Union and in international fora (Art. 15 MSFD). The RSCs could be instrumental to aid those processes e.g. through

- collective views or initiatives of Contracting Parties and their communication to the relevant organisations (see Art. 13(5) MSFD)
- provision and reinforcement of dialogue structures that allow interaction of the environmental community with other sectors (e.g. fisheries, shipping). Examples exist already with joint HOD meetings of OSPAR and NEAFC or the Fish/Env and Agri/Env forums in HELCOM
- cross-sector inter-institutional cooperation. This could draw e.g. on OSPAR's experience gained in the inter-institutional cooperation on the management of high seas MPAs

The success of RSCs depends among other factors on them being accepted as equal partners in the implementation process and on the acknowledgement of their biogeographical and geopolitical specialities and different capacities. It will be important that the CIS process allows for a mechanism to take up results of RSC work and project results with a view to providing a common science and knowledge base for decision making, including take up for decision making at EU level.

For RSCs to engage with MSFD CIS process requires capacity building and financial support in order to enable e.g. Secretariats or project managers to involve actively in the CIS process.

#### 4. What are the main areas in which the RSCs would need to be supported to fulfil their roles with respect to the MSFD more effectively?

See ad 2 and 3. Prime issue is the political willingness and commitment of all parties to use region-level work for the implementation of the MSFD. Key for HELCOM and OSPAR to fulfil their roles more effectively is that states allocate their resources to RSCs appropriately in order to allow them e.g. to take the lead for a particular question as well as to closely link national MSFD-related work to the national involvement in the RSCs. Assigning tasks to the most appropriate level / body only leads to effective work sharing if that level / body is vested with the necessary resources and capacity to carry out the tasks. For RSCs, resources relate primarily to (1) national staff time and financial support from MS for participating in committees and working groups as well as in intersessional work and (2) Secretariat staff time supporting various subsidiary bodies and intersessional work. EU financial support for technical developments (e.g. data infrastructure) and staff (e.g. project managers) would help integrating national, EU and regional levels. EU financial support for joint RSC research projects with common and region-specific modules e.g. in relation to new topics would enhance efficiency, coherence and swift progress in the implementation of MSFD aspects. Including advanced cooperation such as HELCOM and OSPAR in joint RSC cooperation helps knowledge transfer, sharing of experience and making best use of synergies between RSCs.

5. Which concrete form could the support take (capacity building, enhanced participation in CIS, research collaboration etc.) and how could it be funded/who should provide funds?

In terms of support:

- capacity building in relation to data infrastructure and systems to allow RSCs to take a role in making available regional data and information resulting from assessments and monitoring;
- capacity building in OSPAR to support project- or contract-based work, including project-managers, with a view to take work load from Contracting Parties and Secretariats. Opportunities for OSPAR to find EU funding to take project work forward would be helpful; if a proper feedback system was set up (see ad 3), this would benefit the CIS process as a whole. Short-term leases of national officers for dedicated tasks (e.g. in periods of assessments or for the development of indicators) could be helpful too;
- capacity to source-out work or buy-in project-based support not only eases work load for Contracting Parties and the Secretariats but also opens up for innovative approaches and fresh ideas and continuous progress
- enhanced participation in the CIS process would be a clear benefit in terms of active and regular participation at MSCG and working level as well as regular inclusion at least as observers in MD meetings
- research collaboration within the Region and between Regions. The focus should be on pilot studies and applied research projects that support the operational implementation of MSFD requirements and the uptake of their results in the management.

In terms of funding:

Funding data infrastructure and research collaboration should come from the EU, including the funding of supporting personnel to manage such projects. Funding of regular work within the RSCs and other capacity building and regular work within the RSCs should come from MS.

6. What are the most urgent support needs?

Data systems and infrastructure.

7. Which are the most important long-term support needs?

True cooperative relationship between RSCs and between RSCs and the EU with respect for each other's strengths and weaknesses and associated work sharing. Respect for the autonomy of RSCs which have tasks and objectives that go beyond the implementation of the MSFD. Within each regional sea and to the extent possible there is a need for coherence between the work carried out in the context of the RSC and the implementation of EU legislation in order to avoid duplication of work. There is also a need for respect of the specificity of regional processes that follow an evolutionary approach and are inclusive for non-EU Member States which are instrumental in achieving good environmental status. Striving for strict coherence *between* the RSCs at EU-level is unrealistic due to natural differences between the regional seas and goes against environmental, political and economic differences, however the most possible degree of alignment should be sought.

## 6.2.2. Finland

### Survey for the identification of support needs of the Regional Sea Conventions

Specify to which RSCs your answers relate: *HELCOM*

#### 1. What is the current role of the RSCs with respect to:

##### a. assisting in the implementation of the MSFD

- HELCOM Moscow Ministerial Meeting agreed that HELCOM BSAP is the instrument to implement the EU MSFD in the Baltic Sea.
- Several HELCOM projects and intersessional activities have developed indicators to assess GES.
- HELCOM has established a WG “HELCOM GEAR” to coordinate implementation of the ecosystem approach, i.e. MSFD in the Baltic Sea.
- In addition, HELCOM MONAS (incl. HELCOM MORE) is revising joint monitoring and assessment activities to better take into account the requirements and the time table of MSFD.
- Joint activities of HELCOM and BSC.

##### b. improving the coherence of Member State approaches to implementing the MSFD

- Aligning the HELCOM BSAP and the MSFD activities.
- Involving Russia as the sole non-EU country in the implementation of MSFD through BSAP.
- Planning of new, operational monitoring and assessment systems (incl. indicators and assessment tools) to coordinate the HELCOM CPs assessment of reaching GES.
- HELCOM BSAP to coordinate PoMs.

#### 2. What should the role of the RSCs be in these respects?

- HELCOM should have the central role in the regional implementation of MSFD in the Baltic Sea by coordinating the MSs (and Russian) actions especially concerning monitoring and assessment activities, determination of GES and coordination of PoM of transboundary pressures.
- HELCOM should cooperate with institutions having leading expertise on economic and social analysis of the use of Baltic waters and of the cost of degradation of the marine environment in order to coordinate the national activities for the next Initial Assessment’s socio-economic analysis

#### 3. How could the role of the RSCs be improved?

- Better aligning the HELCOM BSAP and the MSFD activities to gain synergy
- Better support by the EU for the RSC’s activities and plans to coordinate the implementation of MSFD
- Increase of the interest of the EU MSs to coordinate the MSFD implementation activities regionally.

#### 4. What are the main areas in which the RSCs would need to be supported to fulfil their roles with respect to the MSFD more effectively?

- Activities contributing to coordination of monitoring and assessing of GES, PoMs, including joint reporting.
- Exchange of experiences between the Baltic and Black Sea (the two brackish and semi-enclosed



European seas)

5. Which concrete form could the support take (capacity building, enhanced participation in CIS, research collaboration etc.) and how could it be funded/who should provide funds?

- Financial support of HELCOM project to develop
  - Joint monitoring
  - Joint holistic assessments (Initial Assessment)
  - Joint PoMs especially for the transboundary pressures
  - Active alignment of MSFD CIS and implementation of the HELCOM BSAP
- Better coordination of EU financial support and the MSs contribution to the joint projects.

6. What are the most urgent support needs?

- Support to develop:
  - Joint monitoring.
  - Joint holistic assessments (Initial Assessment).
  - Joint PoMs especially for the transboundary pressures.

7. Which are the most important long-term support needs?

- Joint PoMs especially for the transboundary pressures.

### 6.2.3. Bulgaria

#### Survey for the identification of support needs of the Regional Sea Conventions

*Specify to which RSCs your answers relate:*

1. What is the current role of the RSCs with respect to:

a. assisting in the implementation of the MSFD

The Black Sea Commission (Convention on the Protection of the Black Sea Against Pollution or Bucharest Convention) has so far played partial and insufficient role with respect to support for MSFD implementation in the Black Sea marine region. A number of projects coordinated by the Secretariat to the Black Sea Commission and related to the marine environment of the Black Sea have been completed so far, but they don't reflect the requirements of the MSFD to the extent necessary, so as to contribute to the efforts of MS in the Black Sea region.

b. improving the coherence of Member State approaches to implementing the MSFD

Given the diversity of contracting parties to the Convention on the Protection of the Black Sea against Pollution with only Bulgaria and Romania being EU member states, pursuing implementation of MSFD on regional scale is currently not feasible. Because of national priorities some of the contracting parties cannot openly engage in activities for the implementation of MSFD or other EU legislation, be it in the framework of the Black Sea Convention.

2. What should the role of the RSCs be in these respects?

- Coordination across MS in a process for assessment and improvement of the regional and BSC's capacities in order to achieve:
  - consistency in methods for assessment of the Black Sea environment,
  - consistency in drawing of ecological targets and GES,
  - detailed socio-economic consideration of measures
  - broad implementation of new modeling tools
  - remote sensing etc
- Preparation of regional monitoring programme including descriptors, criteria and / or indicators (where applicable) in accordance with COM Decision 2010/477/EO or revision of the regional integrated program for monitoring and assessment of the Black Sea (BSIMAP). The latest has been done and will be presented to the Black Sea Commission for approval
- Periodical overall detailed assessment of the Black Sea environment, which to improve understanding of the transboundary impacts, to achieve coherence and balance between elements, to achieve efficiency as well as to reach comparable results at BS level
- Harmonization of methodological approaches to determining GES by descriptors, criteria and / or indicators at the regional level through the Black Sea Commission Secretariat and Advisory Groups. Methods applied should be coherent and coordinated; also they should reflect transboundary impacts.
- Coordination of a process for Data, Information and Knowledge Exchange of BS data which to improve the assessment of the Black Sea environment, reporting tasks and data management
- Preparation of regional programme of measures to achieve and maintain good ecological status of the Black Sea. Complement the regional programme by national measures by EU member states and use the results of regional measures implementation by the BG and RO as a platform to meet the requirements of Art. 13 of the MSFD.

3. How could the role of the RSC be improved?

- Amendment of the Convention and revision of the internal documents in a way for achieving at a regional level of integration and implementation of requirements of the MSFD.
- Financing of projects coordinated by the Black Sea Commission final beneficiaries being the competence authorities under the MSFD. The final results of the projects to cover completely or most of the needs of EU countries for implementation of the directive.
- Create a database for sharing data and information on regular annual reports of the Parties to the Black Sea Commission, and information on past and current projects in the Black Sea.

4. What are the main areas in which the RSCs would need to be supported to fulfil their roles with respect to the MSFD more effectively?

- Preparation of regional monitoring programme including all descriptors, criteria and / or indicators (where applicable) in accordance with COM Decision 2010/477/EO or revision of the regional Black Sea integrated program for monitoring and assessment of the Black Sea (BSIMAP).
- Developing a regional program of measures to achieve and maintain good ecological status of the Black Sea.
- Assessment and improvement of the regional and BSC's capacities

5. Which concrete form could the support take (capacity building, enhanced participation in CIS, research collaboration etc.) and how could it be funded/who should provide funds?

- All these methods are necessary to achieve good environmental status of the marine environment of the Black Sea: e.g. project management at the regional level related to capacity building, active participation of the Black Sea Commission is the process of CIS, specialized researches using the newest equipment for research and analysis.
- Financing such support could be through EU financial mechanisms, the Black Sea Commission budget or international programs for protection of marine environment.

6. What are the most urgent support needs?

- Initiation of a project for consultancy and coordination during preparation of MS's monitoring programs, integration of different monitoring requirements under other directives, gap analyses and harmonization of methodological approaches to determining GES by descriptors, criteria and / or indicators
- Consultancy and technical support in order to improve the coordination and data sharing - Integration of available information systems to respond new needs for data, analyses and reporting
- Initiation of a project for consultancy and coordination during preparation of programs of measures focused on transboundary pollution and integration of different measures requirements under other directives
- Workshops and support in strengthening of new type of expertise - modeling, socio-economic consideration of measures, satellite image analyses etc.

## 7. Which are the most important long-term support needs?

- Consultancy for capacity assessment and trainings for coordination of Integrated maritime policy at implementation organizations, institutes, municipalities, other ministries – transport, fisheries, energy etc.
- Inclusion of state of the art technologies for monitoring of the marine environment – remote sensing, satellite images etc.

### 6.2.4. Malta

#### **Survey for the identification of support needs of the Regional Sea Conventions (RSCs)**

*Specify to which RSCs your answers relate: Barcelona Convention*

#### 1. What is the current role of the RSCs with respect to:

- a. assisting in the implementation of the MSFD

The Contracting Parties to the Barcelona Convention have articulated a systematic process for moving towards a more effective, ecosystem-based management. The aim of this process, known as the Ecosystem Approach (EcAp) is to move towards the goal of “a healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse for the benefit of present and future generations”.

The EcAp process builds, to a certain extent, on the requirements of the Marine Strategy Framework Directive (MSFD). In fact it interprets each Descriptor under the MSFD and casts it as a Mediterranean-relevant Ecological Objective. In some cases, Descriptors have been merged, amended, and added to reflect the priorities and characteristics, of the Mediterranean Sea. Though it is recognised that this EcAp does not reflect the timelines, is not as ambitious and does not have exactly the same specific objectives as the MSFD, the overall aim is the same

Through this process the Barcelona Convention and Mediterranean Action Plan (MAP) have provided a platform for all the Mediterranean countries, both EU Member States and not, to tackle common issues of priority in view of management of human activities and conservation of the natural marine environment and ecosystem services. This would be carried out through enhanced coordination at regional, sub-regional and national level.

Current efforts are focused on achieving the remaining steps of the EcAp 7-Step Process<sup>15</sup>. These being the development of the Operational Objectives, with their associated Indicators and Targets; and the revision of existing monitoring programmes.

#### 1. improving the coherence of Member State approaches to implementing the MSFD

Coherence of Member States with regard to the MSFD is to be tackled through the requirements of regional coordination, emanating from the Directive.

The EcAp provides the tool to engage non-EU countries, to follow suite in the efforts being made by the Mediterranean EU Member States, in order to fulfil the requirements of the MSFD.

It would be opportune to note that, while the need for separate coordination with these countries might still be required, the EcAp process should also facilitate coordination with EU Member States within

<sup>15</sup> The Ecosystem Approach 7 Step Process, was approved at the 15<sup>th</sup> COP in January 2008 (Decision IG17/6), consists of the following steps: i) Definition of an ecological Vision for the Mediterranean; ii) Setting of common Mediterranean strategic goals; iii) Identification of important ecosystem properties and assessment of ecological status and pressures; iv) Development of a set of ecological objectives corresponding to the Vision and strategic goals; v) Derivation of operational objectives with indicators and target levels; vi) Revision of existing monitoring programmes for ongoing assessment and regular updating of targets; and, vii) Development and review of relevant action plans and programmes.

same region/sub-region. However, the EcAp process will provide an overarching broad framework, through which Member States would align their approach for implementation of the MSFD.

The EcAp, further provides room for the involvement of other entities operating within the Mediterranean, such as Agreement on the Conservation of Cetaceans in the Black sea Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS), the Marine Pollution Assessment and Control Component of MAP (MEDPOL), the various Regional Activity Centres of the MAP and NGOs. Thus encompassing a larger stakeholder group in the process, with a view of gaining better acceptance and ownership of the whole process and aims.

## 2. What should the role of the RSCs be in these respects?

RSCs should have a focal role as key players with regard to organising regional and sub-regional coordination, whilst making sure that the exchange of specific information from Mediterranean Member States is facilitated and ensure that efforts are focussed towards the main goal, whilst ensuring compatibility and consideration, of national specificities.

Moreover, RSCs need to be involved in the regional integrated assessment, setting of targets and Good Environmental Status, and subsequent monitoring at a regional scale, in order to ensure compatibility and consideration, of characteristics of the individual Contracting Parties and/or restructured according to the national reports of the individual Mediterranean Member States.

At the same time RSCs are to be entrusted with the upkeep of timelines and roadmaps in order to ensure that regional and national obligations are fulfilled.

## 3. How could the role of the RSCs be improved?

Whilst noting that RSCs play a key role in the coordination of regional and sub-regional issues, such a process would benefit from enhanced communication between all relevant stakeholders. This also entails that Contracting Parties provide a complete list of national contact points to be kept in the loop with regard to the dissemination of documents and information.

Communication can be improved both with RSCs and Member States.

RSCs should be furnished with adequate resources, being financial and human resources, in order to allow for the proper carrying out of the various activities and tasks. This would also facilitate Contracting Parties to participate in meetings and workshops in order to tackle particular subjects, and the carrying out of required contracts with consultants and acquisition of data.

Attendance to important MSFD meetings and workshops should be ensured and the specific Regional Activity Centres (RACs) which tackle that particular subject should be present and not only the overall MAP/Barcelona heads.

This may at times mean that 2/more officials attend such meetings and/or that the information is disseminated immediately to the concerned RACs & National Focal Points quickly. In order to ensure this, the focal points of such RACs should also be copied so that the communication loop is completed and everybody is aware of what is happening.

The various RSCs, should be entrusted with specific components of the regional assessments and be given due guidance and technical assistance to fulfil the required obligations, thus allowing timelines to also be adhered to.

4. What are the main areas in which the RSCs would need to be supported to fulfil their roles with respect to the MSFD more effectively?

- Regional coordination is an important factor required for the long-term success of the EcAp and MSFD in the Mediterranean. As such this is to be strengthened together with better communication;
- Mobilisation of adequate funding to assist the RSCs and Contracting Parties, especially in those areas where gaps and/or limitations have been highlighted and also for attendance of meetings;
- RSCs should also take into consideration the need of streamlining methodologies, data collection and monitoring programs, allowing for adequate comparability through the Mediterranean region.
- Mediterranean Member States should speak more freely with the RSC and/or the different RACs to gain better support and speak in unison;
- The central and eastern regions of the Mediterranean are inadequately represented and most of the time western Mediterranean issues emerge as being more critical, whilst other countries are still struggling in view of the gaps identified in this process;
- More specific information should also reach the different RACs of the Barcelona Convention and not just the head office; for example, many biodiversity issues should directly reach RAC/Specially Protected Areas (SPA) etc., since they may have more specific tools to tackle certain issues (Barcelona Headquarters should obviously be copied in any such correspondence). The latter may further instigate further specific action. Timelines and deadlines should be specified such that RSC would have timeframes to stick to.

5. Which concrete form could the support take (capacity building, enhanced participation in CIS, research collaboration etc.) and how could it be funded/who should provide funds?

Capacity building is definitely necessary and enhanced participation in the Common Implementation Strategy (CIS) process is also important;

- More research and collaboration is necessary, especially when tackling target issues which evidently need to be addressed by third countries;
- Funds could be shared between EU and the RSC in question.

6. What are the most urgent support needs?

Current efforts are aimed at the finalisation of Regional targets and indicators, and the drafting of coherent GES descriptions. Whilst noting that Mediterranean EU Member States, with the assistance of the European Commission, are aiming to streamline these requirements with those emanating from the MSFD, further support from the Commission could assist in the completion of these tasks. Moreover, GES and targets should take into account the financial and human resources in connection with the integrated monitoring. The need for streamlining methodologies, data collection and monitoring programs, allowing for adequate comparability through the Mediterranean region, should also be taken into consideration.

Enhance the Contracting Parties' capabilities to implement these targets to reach GES through capacity building. Additional support would also be needed on the analysis of the gaps & how to address such gaps.

7. Which are the most important long-term support needs?

Regional coordination is an important factor required for the long-term success of the EcAp and MSFD in the Mediterranean.

As such, the RSC should dedicate adequate resources to maintain and enhance liaisons and capacity building, in order to strengthen regional and sub-regional coordination with special emphasis where these (regions and sub-regions) host EU and non-EU Contracting Parties, in order to achieve GES in the whole Mediterranean region.

## 6.2.5. Netherlands

### Netherlands' Survey for the identification of support needs of the Regional Sea Conventions

Specify to which RSCs your answers relate: OSPAR

#### 1. What is the current role of the RSCs with respect to:

##### a. assisting in the implementation of the MSFD

Timeframe 2013 – 2018

- Setting up a coordinated monitoring programme (art. 11)
- Coordinate programmes of measures (art. 13)
- Improve regional coherence of implementation of art. 8, 9 and 10 (art. 17)
- From these roles feeding into the EU-wide CIS MSFD

##### b. improving the coherence of Member State approaches to implementing the MSFD

- Developing a set of common indicators (2013 and beyond)
- Develop an OSPAR monitoring framework which will feed into an updated Joint Assessment and Monitoring Programme by 2014 (for the period 2014-2021)
- Considering opportunities for regionally coordinated data and information reporting (2014-2016)
- Developing agreement on policy requirements and opportunities for coordination in the development of measures whenever there is a need to coordinate on a regional scale (2013-2015)
- Working towards coherent determination of good environmental status and choice of targets and indicators by reviewing and revising existing OSPAR Advice Documents (2012) for Biodiversity (D1, D2, D4, D6), D5, D7, D8 and D10, taking into account art. 12 assessment (2014-2016)
- Preparing joint assessments (intermediate assessment 2017 mainly focussed on common indicators and regional assessments, followed by QSR 2021)
- Providing a platform for information exchange e.g. on science needs (on a continuous basis), also with other RSCs, related to the implementation of art. 8, 9, 10, 11, 13 of the MSFD.

#### 2. What should the role of the RSCs be in these respects?

- Ad 1) Contracting Parties to agree for monitoring and assessment purposes
- Ad 2) Include MSFD monitoring in the wider OSPAR context
- Ad 3) Build and make operational web-based OSPAR Information System (INSPIRE proof), activities and pressure data is added value of OSPAR
- Ad 4) Identify regionally important measures through OSPAR measures or recommendations to e.g. EC and IMO (beyond OSPAR's competence), publish a "roof report"
- Ad 5) OSPAR's regional expertise to feed into preparatory work under MSFD CIS for the review of Commission Decision EU/2010/477
- Ad 6) Prepare a "roof report" for regional monitoring and assessment
- Ad 7) Identification of research needs, and exchange of knowledge/expertise

#### 3. How could the role of the RSCs be improved?

Development of (sub)regional knowledge, indicators and targets on areas that are less developed, such as litter, noise, food webs.

Development of knowledge of upcoming themes/issues as the effects of climate change and ocean acidification.

4. What are the main areas in which the RSCs would need to be supported to fulfil their roles with respect to the MSFD more effectively?

3, 4, 5, 7

5. Which concrete form could the support take (capacity building, enhanced participation in CIS, research collaboration etc.) and how could it be funded/who should provide funds?

Ad 3) clear guidance and formats, should be delivered by the European Commission in such a way that it leaves room for regional differences, but can be used for official reporting to the commission

Ad 4) enhanced cooperation on necessary measures on EU level

Ad 5) research collaboration & capacity building, co-funding by the EU

Ad 7) assist in organisation and information exchange, co-funding by the EU

In our view enhanced participation in CIS is not a solution. While the MSFD CIS sets out **how** the MSFD needs to be delivered, the RSCs should enable discussions on **what** things should be done to deliver suitable outcomes. This avoids duplication of efforts.

6. What are the most urgent support needs?

3, 4, 5, 7

7. Which are the most important long-term support needs?

4, 5, 7



## 6.2.6. Slovenia

### Survey for the identification of support needs of the Regional Sea Conventions

*Specify to which RSCs your answers relate: Barcelona Convention*

1. What is the current role of the RSCs with respect to:

a. assisting in the implementation of the MSFD

- Barcelona convention contributes significantly to MSFD implementation through development of EcAP, although the process is currently too slow for the 1<sup>st</sup> MSFD management cycle;
- RSC is contributing to governance through its role in the implementation of several protocols;
- RSC is also contributing to implementation of Ballast water convention and other policies;

b. improving the coherence of Member State approaches to implementing the MSFD

- EU Member states should improve cooperation among themselves on regional level and have a common position in all for a of Barcelona conv.
- MS should also be more actively involved in the EcAP process, especially in the phase of GES and targets development, which is currently being done with a project (the progress is very good for entire region, but still much too slow for Member states);

2. What should the role of the RSCs be in these respects?

All RSCs have presumably different roles. Barcelona convention is different from OSPAR or HELCOM due to large number of non-EU countries, so its role has to take that into account. RSC should provide support to EU MS, which have more demanding needs, to develop regional approach to the management in line with the MSFD and for the transfer of experience to other Mediterranean countries as well as develop common priorities for management.

3. How could the role of the RSCs be improved?

- Funds and agreed ToR for work in line with MSFD, which would support regional implementation should be provided, taking into account MSFD requirements and deadlines;

4. What are the main areas in which the RSCs would need to be supported to fulfil their roles with respect to the MSFD more effectively?

- Identification and cooperation among relevant national experts to further develop EcAP approach;
- Organisation of expert groups, where national experts (those involved also in MSFD process on EU level) would be able to communicate and work toward common selection of GES indicators, approach to target setting and monitoring programme in line with MSFD;
- Enable common work among EU MS to communicate the approach to national MSFD Management plans and development of common approach on regional level in line with MSFD deadlines;
- Transfer of knowledge and experience to Non-EU countries and further development of EcAP approach based on regional MSFD experience.

5. Which concrete form could the support take (capacity building, enhanced participation in CIS, research collaboration etc.) and how could it be funded/who should provide funds?

- All : capacity building, enhanced participation in CIS, research collaboration;
- Funds should be provided and streamlined properly in tasks, supporting implementation of MSFD, starting with selection of GES, targets and development of monitoring; common regional work plan should be prepared to fill gaps in knowledge;
- Further more funds should be provided from EU and UNEP side to support faster progress on overall regional level, support national agencies, develop polluter pays principle and support the greening of the economy in the region.

6. What are the most urgent support needs?

- Selection of GES indicators and targets;
- Development of monitoring programmes;
- Establishment expert support to decision making and implement Marine protected areas;
- Sub-regional/regional pressures inventory in line with MSFD Annex III, table 1 and impact assessment to support informed management and decision making;
- Establishment of knowledge bases, coordinate regional management plan

7. Which are the most important long-term support needs?

- Stable structure, which would support improvement of the MSFD/EcAP approach to management;
- Appropriate research and development structure;
- Governance