

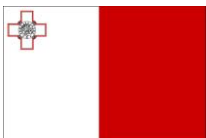
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# *Environmental Report*

Strategic Environmental  
Assessment of the European  
Maritime and Fisheries Fund  
(EMFF) Operational Programme

FINAL

December 2014



Fisheries Operational Programme 2007-2013  
Evaluation part-financed by the European Union  
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Co-financing rate: 75% EU Funds; 25% National Funds



*Investing in sustainable fisheries*

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# *Non-Technical summary*

## *Introduction*

This non-technical summary summarises the Environmental Report which constitutes the Strategic Environmental Assessment (SEA) carried out on the European Maritime and Fisheries Fund (EMFF) Draft Operational Programme (hereinafter referred to as the “OP”). The Funds and Programmes Division (FPD) within the Ministry for European Affairs and Implementation of the Electoral Manifesto (MEAIM) is coordinating the formulation of the EMFF OP.

The SEA was carried out on the basis of the Draft EMFF OP made available to PwC on 16 April 2014 and in accordance with Legal Notice 497 of 2010 hereinafter referred to as the “SEA Regulations”, which transposes the requirements set out in the Directive 2001/42/EC of the European Parliament and of the Council on the assessment of the effects of certain plans and programmes on the environment.

## *Relation with other relevant plans and programmes*

The OP operates within a wider policy context that has implications for the programme. The policies include higher-tier policies that influence the programme, and lower tier policies which may affect environmental obligations and objectives. The Environmental Report provides an overview of the environmental policy, legislative and planning context within which the OP will operate. This overview includes a review of international commitments such as the Conventions for the Conservation of Atlantic Tuna, Prevention of Pollution from Ships, Protection of the Marine Environment and Coastal Region in the Mediterranean and UN Conventions on the Law of the Sea and Biodiversity and UN Framework on Climate Change.

There is also a wide range of EU requirements that need to be considered by the OP and which have been identified in this context analysis. These include the Strategy for the Sustainability, Conservation and Management of Natural Resources, Regulations on the Conservation and Sustainable Exploitation of Fish Resources. The OP is also subject to the EU's Biodiversity Action Plan. Other regulations at the EU level relate to Food Safety, Conservation of Waters around Malta and use of Alien and Locally Absent Species in Aquaculture.

The OP is also subject to Maltese national environmental and planning legislation as well as sector specific plans and programmes. National strategic documents include the Structure Plan for the Maltese Islands, Coastal Strategy Topic Paper, National Report on the Strategic Action Plan for the Conservation of Maltese Coastal and Marine Biodiversity and National Biodiversity Strategy and Action Plan. Sectoral legislation includes regulations pertaining to fish packing and processing, fisheries conservation, waste management plan and aquaculture regulation. A full list of the environmental policy, legislative and planning regulations and plans considered can be found in Appendix 1.

## *EMFF Operational Programme*

The preparation of the OP is being coordinated by the programme proponent – the FPD, within the Ministry for European Affairs and Implementation of the Electoral Manifesto and its engaged contractors.

The Draft Operational Programme is organised along four pillars, which are aimed at addressing priorities and actions identified in EU and national policy documents and regulations. The four pillars identified for EMFF funding are:

### ***Vision 1 - Smart, Green Fisheries:***

To foster the transition to sustainable fishing, which is more selective, produces less unwanted catch, and does less damage to marine ecosystems. The support will focus on innovation and added value that can make the

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fisheries sector economically viable and resilient to external shocks and to competition from third countries. In particular, it is intended to:

- Promote the competitiveness and economic viability of small-scale fisheries
- Promoting the use of low impact fishing gear
- Greater utilisation of less popular and unwanted catches
- Increase the quality of seafood products
- Improved health and safety conditions
- Support the development of a more adaptable, intelligent and inclusive local market
- Reducing the long-term costs of seafood production
- Enhance the organisation of the Maltese fishing industry
- Improved management and regulation

***Vision 2 - Smart, Green Aquaculture:***

To make this industry economically viable, competitive, green and able to face global competition, while providing Maltese and other EU consumers with healthy and highly nutritional products. In particular, it is intended to:

- Increase investment in aquaculture
- Address the key technical constraints to aquaculture
- Support innovation in aquaculture
- Develop codes of conduct, promote the highest possible best practice and exploring opportunities to promote the image and uniqueness of Maltese aquaculture to regional and international markets.
- Integrate aquaculture with Maltese coastal tourism
- Increase the range of local seafood products and add value
- Promote Malta as a centre for aquaculture expertise

***Vision 3 - Sustainable and Inclusive Territorial Development:***

To reverse the decline of many coastal communities dependent on fishing, by adding more value to fishing-related activities, and by diversifying to other sectors of the maritime economy. In particular, it is intended to:

- Improve stakeholder participation
- Encourage and enable diversification of traditional fishing activities
- Promote the greater integration of fisheries and aquaculture planning.

***Vision 4 - Integrated Maritime Policy:***

To support priorities which generate savings and growth and cut across sectors, such as marine knowledge, maritime spatial planning, integrated coastal zone management, integrated maritime surveillance, the protection of the marine environment and of biodiversity, and the adaptation to the adverse effects of climate change on coastal areas. In particular, it is intended to:

- Promote the greater partnership between fishers, scientists and managers, with a particular focus on testing new low impact fishing gear
- Develop greater spatial zoning of fishing and aquaculture activities
- Integrate the data collection and control regulations
- Join-up spatial planning and management
- Encourage both governmental and private sector multi-annual strategic planning

## ***The SEA process***

The purpose of the SEA is, very broadly, to assess the environmental impact, that the OP is envisaged to have and to identify ways in which any impacts can be mitigated or avoided through the identification of mitigation measures or alternative actions to the ones proposed in the OP. The findings and recommendations resulting from the SEA process will be taken into account and will feed into the finalisation of the OP, with the latter stating how these findings and recommendations have been reflected in the OP.

The key stages of the SEA process provided for in the SEA Regulations are:

- Screening: to determine whether the plan/programme is likely to have significant environmental effects and whether an SEA is required.
- Scoping: to determine the coverage and level of detail of the environmental report.
- Environmental report: to predict and assess the anticipated impacts of the plan/programme and provide an opportunity to stakeholders to discuss the impact of the plan/programme.
- Adoption/SEA statement: to show how the SEA process and feedback resulting from the consultation process has influenced the plan/programme.
- Monitoring: to monitor any significant environmental effects which the plan/programme is anticipated to result in and implement the recommended mitigation measures over time.

The screening of the EMFF OP was carried out in January 2014, in line with the SEA Regulations. The screening process determined the need for an SEA to be carried out on the EMFF OP. The screening template was published in the Government Gazette of the 7<sup>th</sup> February 2014<sup>1</sup>.

Subsequently, the Draft Scoping Report<sup>2</sup> was prepared and circulated to statutory consultees to seek guidance and feedback on the content of the report. The Draft Scoping Report was prepared on the basis of the Preliminary Draft OP provided to PwC by the FPD in December 2013. The consultations carried out and feedback received during this stage were taken into account in the preparation of the environmental report.

The Draft Environmental Report was issued for a 6 week consultation process on 30<sup>th</sup> April 2014. No feedback was received during this consultation period.

## *Approach and methodology*

This environmental report is intended to:

- provide information on the SEA process;
- provide information on the EMFF OP and the programme owner;
- identify and assess potential environmental impacts of the programme and identify any reasonable alternatives;
- provide an early and effective opportunity for designated authorities to participate in the SEA process and provide an opportunity for stakeholders and the public to provide their views and influence the EMFF OP.

This Report describes the main thrust of the Draft OP and the measures being proposed. It also provides the legislative and policy context within which the EMFF OP operates, and the constraints and targets that this imposes on the programme. This background and context analysis helps the proponent and other stakeholders understand the current state of the environment and how the OP may affect the environment in different thematic areas.

In order for the SEA to assess the environmental impact of the measures proposed in the OP, an assessment framework was established. In scoping for this report, it was agreed by the statutory consultees that this OP should consider interactions with specific thematic areas. The themes were identified through the review of the environmental policy and legal context of the OP and feedback received during the consultation process. These themes comprise the issues that are deemed relevant to the OP and which the SEA will consider. Furthermore, a set of SEA objectives were identified to be used to assess the OP interventions. These objectives represent desired outcomes and are informed by external objectives, which are set out in various international, EU and national documents promoting environmental, social and economic objectives. The SEA objectives and assessment questions that guided the impact assessment process are being shown in Table A (Table 3 in the environmental report).

<sup>1</sup> Available from: <http://www.gov.mt/en/Government/Government%20Gazette/Documents/2014/02/Government%20Gazette%20-%207%20February.pdf>

<sup>2</sup> The contents of this report are reflected in the initial sections of this Environmental report.

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Each measure proposed in the OP was evaluated in terms of its expected interaction/s with the SEA themes and objectives. The magnitude and nature of the impact on each theme is described in the impact assessment (Section 6). The impact assessment describes whether the impact is direct or indirect and seeks to explain the reasoning and highlight the main issues.

## *Environmental Baseline*

A baseline assessment is critical for the SEA process as it allows actors involved in the programme to understand the current state of the environment and how the OP may affect the environment in different areas. The environmental baseline analysis covered the following themes: air quality, climate change, biodiversity, human health, spatial, marine environment, resource efficiency and water. These themes were agreed to the statutory authorities as a result of the consultation process on the SEA Scoping Report.

The Environmental Report provides a baseline assessment of these themes and also assesses their likely evolution in the absence of the OP. A summary of this assessment is provided by theme below:

- **Air Quality** - MEPA's air quality indicators focus on the level of major air pollutants including ozone, volatile organic compounds, nitrogen dioxide and sulphur dioxide. These air pollutants result mainly from the transport and power generation sectors. The impact of fisheries and aquaculture activities are restricted to emissions by fishing and other service vessels and therefore considered to have a negligible impact on air quality. The OP may contribute to temporary impacts on air quality during the construction phase of projects. However, such impacts are considered temporary and not significant.
- **Climate Change** - Greenhouse Gas emissions have remained stable with the main contributors being the energy sector and transport. The agriculture, forestry and fisheries' contribution is negligible (0.2% of the total). Any potential contributions to climate change are deemed insignificant particularly in view of the negligible impacts of the sector as a whole.
- **Biodiversity** - The OP includes measures for a temporary cessation in fishing activity, selective fishing gear, diversification of target and aquaculture species that are expected to contribute positively to biodiversity. Additionally, while not building the hatchery would limit the potential negative impact of benthic species close to production areas, the absence of such a development would limit the sectors competitiveness, decrease the production of alternative raised species and increase pressure on wildlife stocks.
- **Human Health** - Demand for fish arises from individual consumption, restaurants and the hotel industry. Fish constitutes an alternative healthy food source with many health benefits. Therefore the OP is expected to result in a number of positive spin-offs related to human health as well as the economic survival of the fishing community.
- **Spatial** - Currently Malta is working on the initial assessment of the environmental status of marine water, determination of Good Environmental Status and the establishment of environmental indicators and targets. An inter-ministerial technical working group has been set up to ensure an integrated approach to environmental protection and sustainable use of coastal and marine environments. Regarding the future baseline the construction of a new breakwater, aquaculture hatchery as well as measures to improve amenities in fishing ports are important infrastructure measures that will have positive spill over effects. The absence of such measures may lead to increased pressure on wildlife stocks.
- **Marine environment** - Aquaculture culture activities may be a cause of concern to the coastal and marine environment due to the risk of accumulation of waste generated from fish and feed, the growth of pathogens and associated diseases infecting wild flora and fauna, accumulation of pharmaceuticals with lateral effects on biodiversity within vicinity, over-fishing of wild species, introduction of alien species and adversely affecting tourism and recreation. With partial cessation of fishing activity,

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selective fishing gear, data collection and control programmes a more managed and sustainable approach should be attained through the OP.

- **Resource Efficiency** - The OP addresses resource efficiency from an energy point of view through proposed new engines installed on small-scale vessels. Given the negligible overall impact of this sector to air quality and emissions, this measure is expected to have a positive but not significant effect. In terms of waste, the OP aims to reduce discards through more selective gear for target species that could have positive impacts. Such improvements may not be achieved in absence of the OP.
- **Water** - Depending on scale and location, aquaculture activities can affect water quality. The OP, through the proposed commercial scale hatchery, can lead to an increase in aquaculture projects with associated localized nutrient enrichment, sedimentation and transparency issues. However, such developments would need to operate within regulated parameters and conditions set out in regulatory regimes. An increase in aquaculture activities may still occur even in the absence of the OP as a result of market forces.
- **Socio-economic** - The fisheries and aquaculture sectors face a number of socio-economic threats due to ageing workers, uneconomic trawler fleet, rising fuel costs and better employment opportunities elsewhere. In the absence of the OP, measures to develop a marine hatchery and improvements in fish shelters may not occur and as a result more fishermen could depart from the sector.

**Table A: Proposed SEA objectives and assessment questions**

Theme	SEA objective	Decision-making criteria	SEA indicator	Data source
Air quality	<ul style="list-style-type: none"> <li>To minimise adverse albeit temporary effects on air quality from infrastructure development activities</li> </ul>	<ul style="list-style-type: none"> <li>Will it have a negative impact on air quality?</li> </ul>	<ul style="list-style-type: none"> <li>Emission values to which aquaculture and fisheries measures co-financed under the EMFF may contribute to, particularly during the development stage of infrastructure.</li> </ul>	Malta Environment and Planning Authority (MEPA) – any reported increases in the levels of certain pollutants which could be attributed to EMFF OP measures
Climate change	<ul style="list-style-type: none"> <li>To contribute towards climate change mitigation efforts</li> <li>To help the sector adapt to climate change effects</li> </ul>	<ul style="list-style-type: none"> <li>Will it reduce energy consumption?</li> <li>Will it improve energy efficiency?</li> <li>Will it increase take-up of cleaner energy solutions?</li> <li>Will it help the sector to better adapt to climate change impacts?</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in greenhouse gas emissions by fishing vessels which benefited from EMFF OP funds</li> </ul>	MEPA, MRA – national emissions inventory, emissions of fishing vessels
Biodiversity, fauna and flora	<ul style="list-style-type: none"> <li>To minimise impact on protected species and species diversity</li> <li>To control impacts on habitats</li> </ul>	<ul style="list-style-type: none"> <li>Will it contribute to the sustainability of certain fish species?</li> <li>Will it facilitate the transition to sustainable fishing and the maximum sustainable yield (MSY)?</li> <li>Will it help maintain or enhance the conservation of protected sites?</li> </ul>	<ul style="list-style-type: none"> <li>Number of permitted sites in protected areas</li> <li>Quotas – any recorded excess</li> </ul>	MEPA indicators on: <ul style="list-style-type: none"> <li>Designated natural areas</li> <li>Status of Maltese habitats and species of ecological importance</li> <li>Natura 2000 designated sites</li> <li>Indicators reported under MSFD</li> <li>Malta Aquaculture and Research Centre (MARC)</li> </ul>
Human health	To provide aquaculture products that provide a healthy food option for the local population and tourists	<ul style="list-style-type: none"> <li>Will it increase fish consumption levels?</li> <li>Will it ensure safe consumption and healthy aquaculture products?</li> </ul>	<ul style="list-style-type: none"> <li>Analyses and test results, where available</li> </ul>	MARC, Malta Competition and Consumer Affairs Authority (MCCAA), National Statistics Office (NSO)

<b>Theme</b>	<b>SEA objective</b>	<b>Decision-making criteria</b>	<b>SEA indicator</b>	<b>Data source</b>
Spatial considerations	To maintain the quality of landscapes and coastal areas	<ul style="list-style-type: none"> <li>• Will it improve coastal management practices?</li> <li>• Will it promote better zoning to reduce the impact of aquaculture on the environment?</li> <li>• Will it promote efficient land and resource use?</li> </ul>	<ul style="list-style-type: none"> <li>• Conformity to local plans and other land use policies including designation of land and marine areas</li> <li>• Compliance with principles of Integrated Coastal Zone Management</li> </ul>	MEPA
Marine	<ul style="list-style-type: none"> <li>• To minimise pollution of the marine environment</li> <li>• To avoid litter generation</li> <li>• To avoid deterioration of water bodies</li> <li>• To maintain sea-floor integrity</li> </ul>	<ul style="list-style-type: none"> <li>• Will it reduce the impact of fisheries on the marine environment?</li> <li>• Will it help reduce contamination?</li> <li>• Will it ensure protection of species and protected areas?</li> <li>• Will it maintain and enhance the integrity of the benthos habitat?</li> </ul>	<ul style="list-style-type: none"> <li>• Indicators of good environmental status as specified in the Marine Strategy Framework Directive (MSFD) including benthic habitats, water column habitats, contamination, nutrient enrichment etc.</li> <li>• Designated or potential marine protected areas</li> </ul>	MEPA, reporting under the MSFD, MARC
Resource efficiency and waste	<ul style="list-style-type: none"> <li>• To make more efficient use of unwanted catches</li> </ul>	<ul style="list-style-type: none"> <li>• Will it reduce unwanted catches?</li> <li>• Will it make more efficient use of discards?</li> </ul>	<ul style="list-style-type: none"> <li>• Data on discards</li> <li>• Waste as a result of aquaculture activities</li> </ul>	MEPA, NSO, Wasteserv, MARC
Water	<ul style="list-style-type: none"> <li>• To minimise aquatic pollution arising from fishing aquaculture and processing activities</li> <li>• To conform to the Water Framework Directive and the Water Catchment Management Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Will investments financed under the EMFF result in water pollution?</li> </ul>	<ul style="list-style-type: none"> <li>• Quality of water in the vicinity of aquaculture operations.</li> </ul>	MEPA – Monitoring results from aquaculture operations.
Socio-economic welfare	<ul style="list-style-type: none"> <li>• To promote diversification of activities</li> <li>• To promote diversification of species</li> <li>• To promote employment</li> </ul>	<ul style="list-style-type: none"> <li>• Will it improve the viability and competitiveness of the sector?</li> <li>• Will it improve public perception of aquaculture activities?</li> <li>• Will it promote diversification?</li> </ul>	<ul style="list-style-type: none"> <li>• Fish consumption of different species</li> </ul>	NSO, Malta Aquaculture Research Centre



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## *Impact Assessment*

The impact assessment is provided in Section 6 of this report. Each measure proposed in the Draft OP was evaluated against the expected interactions it will have with the SEA themes. The magnitude and nature of the impact on each theme is expressed using symbols for magnitude, positive or negative impact, duration, probability of occurrence and reversibility of an impact (refer to Table 4 in main report).

The measures proposed in the Draft OP are not expected to create any significant negative environmental impacts. Some major positive impacts have been identified particularly in relation to biodiversity. Minor negative impacts have been identified as potentially resulting from measures relating to investment in infrastructure (port and shelters).

The SEA was undertaken based on the programme principles, high-level priorities and process. At the time of drafting the SEA the specific projects resulting from the proposed measures were yet to be defined. On this basis, the SEA could not examine the implications of proposed measures at specific sites or for that matter the environmental characteristics of specific sites. The baseline data is therefore restricted in scope to information at a national level. More detailed baseline assessments will therefore be required at a project level through Environmental Impact Assessments (EIAs), Appropriate Assessments (AAs) or other form of assessments for those measures that will require them.

It is anticipated that the investment in fish shelters and the upgrading of port infrastructure may require such project-level environmental studies. Such studies and the permitting process itself should mitigate the potential negative impacts during the construction phase. In case of projects on new sites, biodiversity may be negatively affected as a result of a loss of seabed species. On the other hand, the construction of and repair of infrastructure (e.g. a breakwater) is needed to provide shelter for fishing vessels and other equipment and may also lead to a more stable marine environment on the protected side.

The construction of a marine hatchery constitutes another infrastructural development proposed in the Draft OP. This measure can contribute significantly to the future sustainability of aquaculture in Malta. As with the above infrastructure measures, this measure will also be subject to MEPA planning and processes and may also require an EIA which in turn will enable a more detailed assessment of potential impacts and result in mitigation measures and conditions which need to be adhered to post-development. This measure is expected to contribute to the prevention of future depletion of wild stocks through the production of species specifically bred as substitute stock, with an overall very positive influence, particularly for a variety of fish species.

At this stage, the location of these two proposed projects has not been defined. The siting decision will be subject to the national environmental and planning process which will be supported by findings from the EIAs and AAs which may be required as part of this process. This process and subsequent conditions and regulations within which such developments would need to operate, should ensure minimal negative effects to the environment.

There are a number of measures that are expected to have significant positive impacts on the environment. These include the research with fishermen on the selectivity of gear and the diversification of activities for fishermen. Other measures proposed in the Draft OP are expected to have minor positive impacts.

### *Cumulative and synergistic impacts*

Measures could have a cumulative or synergistic impact with other measures in the OP and/or other measures planned as part of existing policies.

The Draft OP presents a number of measures (including research and improved data collection) which together will contribute towards a better understanding of the status of marine areas and improved knowledge of the operations of the fisheries sector. Considered collectively, these actions should have positive synergistic impacts. In addition, these measures are expected to build upon existing policy and management tools, such as the management plans and have positive cumulative impacts on the sustainability of this sector.

The research with fishermen on sustainable fishing methods (M4), the temporary cessation measures (M8) and the training and awareness programme (M9) are expected to result in positive synergies as all three measures should contribute positively to biodiversity. In addition, these measures within the context of the fisheries

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management plans and the national biodiversity action plan are expected to result in positive cumulative impacts on biodiversity.

## *Assessment of alternatives*

The identification and assessment of alternatives is an important stage in the SEA process as it helps in challenging the programme and identifies potential opportunities of mitigating its expected impact. The analysis of alternatives in the SEA process focuses on identifying any alternative approaches (to the OP or its measures) that can result in a better environmental outcome.

The OP objectives were found to be quite consistent with the SEA objectives. In the light of the degree of consistency at the objective-level, the SEA process has considered potential alternatives at measure level. The majority of measures are envisaged to contribute positively to the environment and to the overall sustainability of the sector. The measures being proposed in the Draft OP (refer to Table 1) address seasonal restrictions, input and output controls and other measures for preventing or minimising environmental impacts. There are however a number of measures, which could have negative, or both positive and negative impacts on the environment and which may benefit from consideration of alternative approaches. Potential alternatives for these measures are discussed in Section 7.

## *Mitigation*

The impact mitigation stage reviews the impacts identified as part of the evaluation stage and aims to minimise any negative impacts, optimise any positive ones and improve the sustainability of the OP overall. The Draft OP measures are not expected to create any significant negative environmental impacts. Some minor negative impacts are expected and other significant positive impacts are expected particularly in terms of biodiversity.

In proposing mitigation measures, the SEA considers existing controls and measures, such as the ones inbuilt in the development and environmental permitting process, which are already established and are regulated by other authorities.

The proposed measures in the Draft OP were reviewed and mitigation and optimising measures identified. These are provided in Table 8 of the report. Proposed mitigation and optimising measures are summarised below:

- **Measures supporting investment in infrastructure.** Such interventions should consider the impact on landscape and the coastal and marine environment. Mitigation mechanisms in this respect are already inbuilt in the development planning and permitting process, which the project would need to be subjected to if the scale requires it. Mitigation measures may be proposed at project-level through site-specific studies such as an EIA.
- **Control programme.** At project stage, the proponent may consider the different means available to carry out patrol activities and if these can be shared with other functions so as to limit the environmental impact of vessels.
- **Training and awareness measures.** When preparing for the project application stage, the proponent may consider focusing this training on more sustainable fishing practices and introducing evaluation questionnaires (post-training) to further increase awareness of actions that operators can take to improve their practices. This could lead to further positive impacts.
- **Research with fishers on gear selectivity.** To optimise the outcome of this measure, research results could be promoted and communicated either through the training and awareness (measure proposed in the OP) or other channel.
- **Promotional campaigns on local fish consumption.** Proponent could consider re-wording the measure to link the promotion of under-utilised species to the health benefits of fish consumption and increased variety that such species could bring to a healthy diet.

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## *Monitoring*

Article 11 of the SEA Regulations requires the proponent to monitor the identified significant environmental impacts of the programme over time. As part of the SEA process, a monitoring plan needs to be prepared to assist the proponent in monitoring the environmental impact of the OP.

The SEA proposes a set of indicators, which will enable the monitoring of environmental impacts over time. These indicators take into account those proposed in the Draft OP and need to be considered as additional to the ones in the OP. The proposed indicators by SEA theme are provided in Table 7 of the report.

In putting forward indicators, consideration was given to existing data and environmental monitoring arrangements, cost and institutional capacity. The Managing Authority should cooperate with environmental and other authorities responsible for the different themes, to gather existing data and integrate such data within the monitoring system in place for the output and result indicators. This should avoid duplication of effort and unnecessary burden on the proponent's administrative capacity.