

Strategic Environmental Assessment of the MED Operational Programme 2014-2020

Non technical summary of the SEA report (second version)

Based on the V3 issue of the PO

March 2014

Introduction

The transnational cooperation programme MED 2014-2020 supports the sharing of experience, knowledge, and the improvement of public policies between national, regional and local authorities and other territorial actors. It is co-funded by the European Regional Development Fund (ERDF) and includes the following territories (in alphabetical order):

Cyprus: the entire country

Croatia: the entire country

Spain: 6 autonomous regions - Andalusia, Aragon, Catalonia, Balearic islands, Murcia, Valencia - and the two autonomous cities - Ceuta and Melilla.

France: 5 regions - Corse, Languedoc-Roussillon, Midi-Pyrénées, Provence Alpes Côte d'Azur, Rhône-Alpes

Greece: the entire country

Italy: 19 regions: Abruzzo, Apulia, Basilicata, Calabria, Campania, Emilia-Romagna, Friuli-Venezia Giulia, Lazio, Liguria, Lombardy, Marche, Molise, Piedmonte, Sardinia, Sicily, Tuscany, Umbria, Valle D'Aoste, Veneto.

Malta: the entire country

Portugal: 3 regions: Algarve, Alentejo, Lisbon

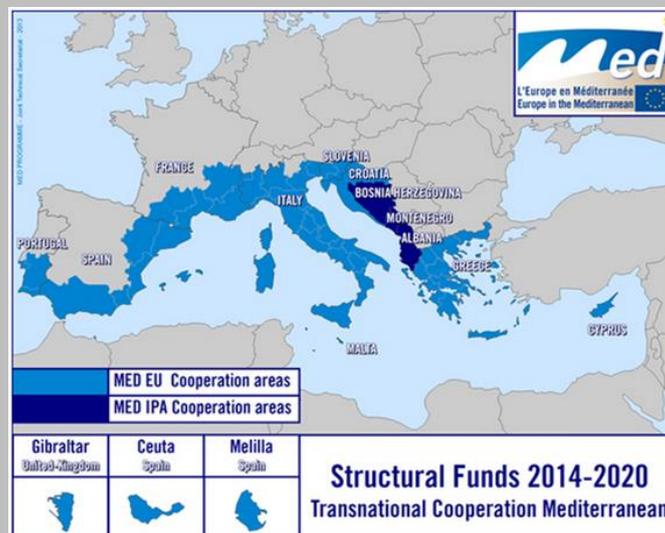
United-Kingdom: 1 region of economic programming- Gibraltar

Slovenia: the entire country

Montenegro: the entire country (participating with the European funds of the IPA - Instrument for Pre-Accession Assistance)

Albania: the entire country (participating with the European funds of the IPA)

Bosnia-Herzegovina: the entire country (participating with the European funds of the IPA)



As part of the new programming process, a Strategic Environmental Assessment of the area covered by the MED Programme has been realised, in compliance with the Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain programmes on the environment. This regulation requires that programmes which are likely to have significant effects on the environment are subjected to an environmental assessment. This assessment specifically enables environmental considerations to be integrated in the preparation and adoption of the MED programme.

The MED Programme 2014-2020

The overall strategy of the MED Programme 2014-2020 fall within the objectives of the European Union (EU), as defined in the EU "2020 Strategy". Moreover, the MED programme must be aligned with the specifications set by the EU Common Strategic Framework for EU Cohesion Policy. Eventually, the MED programme comes under the scope of the strategies of Mediterranean sustainable development. In this particular context; the following objectives¹ have been selected by the future programme:

AXIS 1: Promoting Mediterranean innovation capacities to develop smart and sustainable growth

- To increase transnational activity of innovative clusters and networks of key sectors of the MED area

AXIS 2: Fostering low-carbon strategies and energy efficiency in specific MED territories: cities, islands and remote areas

- To raise capacity for better management of energy in public buildings at transnational level
- To increase the share of renewable local energy sources in energy mix strategies and plans in MED territories
- To increase capacity to use existing low carbon transport systems and multimodal connections among them

AXIS 3: Protecting and promoting Mediterranean natural and cultural resources

- To enhance sustainable development policies for more efficient valorisation of natural resources and cultural heritage in coastal and adjacent maritime areas
- To maintain biodiversity and natural ecosystems through strengthening the management and networking of protected areas

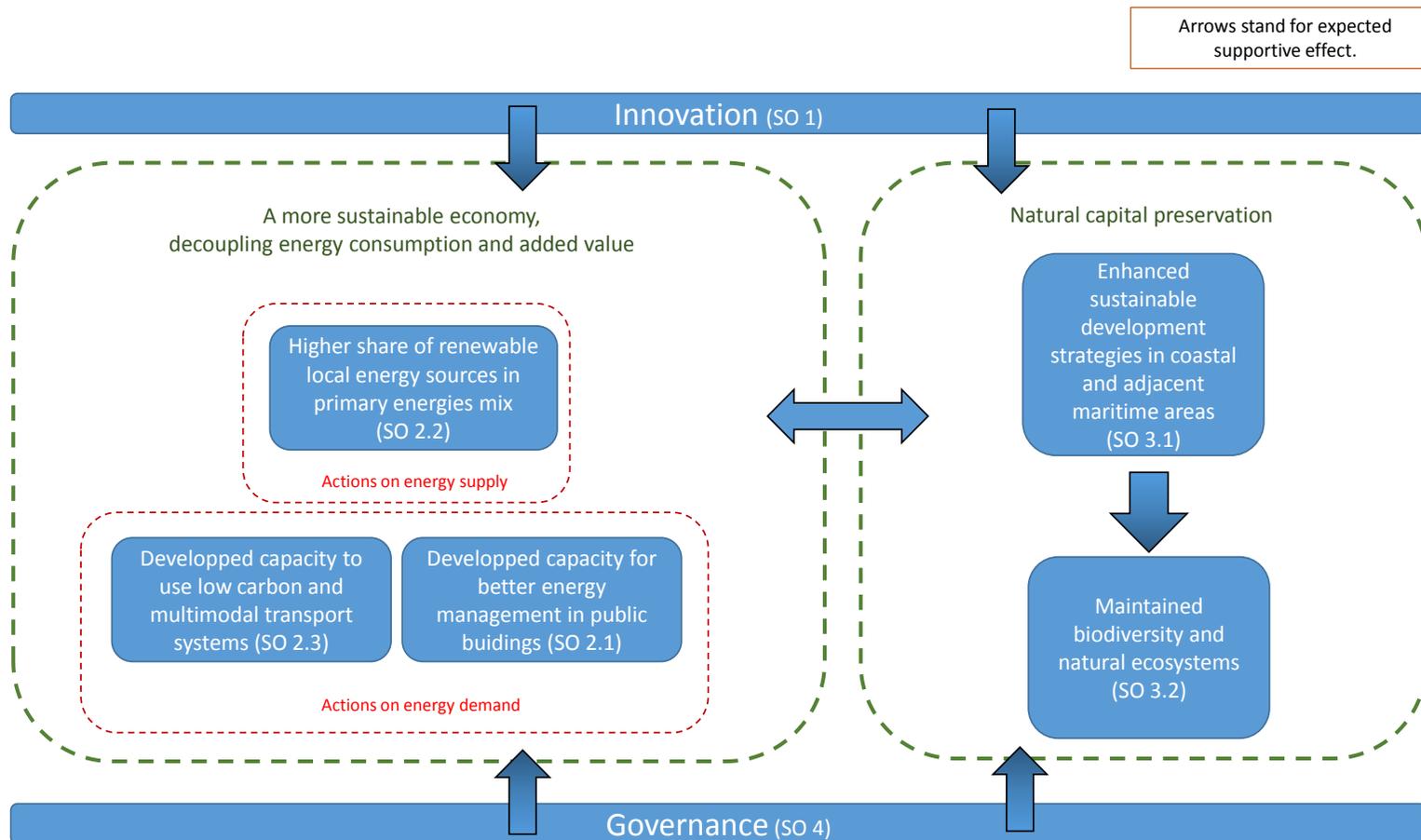
AXIS 4: A shared Mediterranean Sea

- To support the process of developing multilateral coordination frameworks and strengthening the existing ones in the Mediterranean for joint responses to common challenges

¹ Called « Specific Objectives » or SO

Interactions between the fields of actions of the Operational Programme

The following scheme illustrates interactions between these actions and enlightens the global consistency of the 2014-2020 MED programme, as well as its environmental logic.



State of the environment in the territories covered by the programme and existing problems

Wide and quite diversified, the MED cooperation is considerably heterogeneous. Nevertheless, the different regions covered by the programme also present common characteristics; and therefore allow pointing out major trends regarding environmental issues.

Generally speaking, MED territories are relatively densely populated, more particularly as regards coastline and important urban centres, putting aside sparsely populated rural areas.

From an economic point of view, tourism is a major challenge for the MED area, due to its exceptional natural and cultural heritage. Agriculture and fishery sectors are also quite dynamic. A dense industrial fabric in coastlines and large floodplains completes this economic picture. Different activities related to these sectors, along with an important demography, create pressures on environmental resources (water, air, soil, biodiversity, etc.) of the area. In terms of demands; these pressures have an impact on the quality of resources (pollutions), but represent also a potential source of significant hazards (shortage and drought, erosion, fires). These effects are moreover worsened by climate change that affects all the area (increase of average temperatures and decrease of rainfalls).

Regarding energies, consumption, even still in the European average, remains quite high, and fossil energy (petrol, coal and gas) still dominates energy supply in MED countries. Transition to energy mix and renewable energies production is not increasing sufficiently regarding sustainable development strategies.

Air pollution: between 1990 and 2009, greenhouse gas emissions from fossil fuel keep increasing in most Mediterranean countries, in spite of a slowing this last decade. Presence of polluting industries and increasing use of terrestrial transport (above all: individual vehicles), but also maritime transport, are the main causes of this evolution.

Soil quality: amongst all types of territories, coastal soil quality is particularly threatened in the MED area. Coastline stability is affected by the increase of artificial structures, both within water catchment areas and along coastline. Coastline is furthermore impacted by erosion, partially controlled by seawalls. From a general point of view, the soil in the MED area is impacted by an intensive and non-sustainable use (over-use of good quality soil in an arid environment).

Water quality: On the whole, the evolution in water demand is alarming in the Mediterranean because of scarcity of the resource. The share of water for agriculture remains high; and summer tourism also represents a main pressure on the coastline. The resort to efficient water sanitation (waste water treatment plants) is not systematic in MED main cities, which worsens land-based pollution around the coasts. Moreover, organic matter in coastal and marine waters originates mostly from urban/domestic and industrial wastewater entering marine waters through direct point-source discharges or through rivers. Sea water quality is also impacted by maritime transport (tourism, freight), but also by punctual pollutions (discharge of hydrocarbons).

Biodiversity: if the Mediterranean climate allows the existence of a very rich biodiversity, terrestrial and marine, the numerous pressures issued from human activities remain threatening for numerous species. Regarding marine biodiversity, this phenomenon can be observed in particular with fish fauna, quite diversified; even if fish stock levels are generally declining. Of the 900 or so known fish species, approximately 100 are commercially exploited. The globally dry climate of the MED area, worsened by climate change during these last decades, is also threatening biodiversity, e.g. Mediterranean forest facing increased fire hazard. Indeed, the MED area covers European territories most affected by this risk.

Assessment of potential effects of the MED programme on environment

The following analysis presents the likely significant effects of the programme on environment. It emphasizes a substantial range of uncertainty, as the Operational Programme only defines the framework and type of actions and/or projects supported by the programme. The implementation of the action plan, the nature and scope of projects that will be effectively supported are not yet known. Analysis is thus focusing here on an estimate of potential and non-quantifiable impacts. The effectiveness of these potential risks will depend on the orientations followed by the projects, but also on external forces.

The objective of this report is therefore to carry out a strategic and qualitative assessment of potential effects of the programme, and to highlight items requiring particular attention.

The analysis of impacts on environment is based on a synoptic grid of questions; that will show, for each action, positive as well as negative effects on environment.

On October 24, 2013, the European Parliament and the Council adopted a general action programme regarding environment and covering the period up to December 31, 2020, called «Seventh EU Environment Action Programme ». This plan is based on a list of priority objectives.²

The assessment of potential impacts on environment, through its main tool - a question grid -, is built using these objectives as an intervention logic.

The list of questions is not exhaustive³. Many topics, yet part of environmental issues, are not addressed: for instance no question addresses hazardous substances, or natural predators' management.

By contrast, the main environmental issues are addressed: biodiversity, water, air, soil, climate as well as issues related to human health and well-being.

Above all, the list of questions covers the issues identified as being the main challenges (regarding sustainable growth) faced by the MED area in the OP diagnosis:

Answers to these questions allowed us to describe the likely impacts of programme's actions, regarding their **nature**.

Moreover, this estimation was completed by assumptions on each potential impact⁴:

*With which **probability** may this impact occur?*

*If it happened, would the impact be **frequent** and/or occur in numerous areas? (Frequency throughout space and/or time)*

*If it happened, would it **last** on a long-term or short-term?*

*If it happened, would the impact be **reversible** (or not)?*

*If it happened would the impact have **cross-border** effects? (We are talking here of the borders of the MED area)*

Detailed analysis grids as well as complete comments are available in the full report and its annexes.

² Listed in the full report

³ Presented in annex 1

⁴ The grading scale is presented in annex 2

Impacts analysis: synthesis

The following table enumerates the potential impacts ratings regarding the nature of incidence⁵. This counting is not mathematically weighted by the other elements of evaluation.

Axes and actions priorities		Positive impact	Negative impact	Neutral impact	Mixed impact	Lack of rating
Axis 1	TO 1 – IP 1b « Innovation »	10	2	5	9	0
Axis 2	TO 4 – IP 4c « Better management of Energy in public buildings »	4	0	20	2	0
	TO 4 – IP 4e 1 « Share of renewable energy in the primary energy production»	9	5	7	5	0
	TO 4 – IP 4e 2 « Low carbon transports»	7	0	14	5	0
Axis 3	TO 6 – IP 6c « Sustainable development policies in coastal and coastline areas»	13	0	9	1	3
	TO 6 – IP 6d « Biodiversity and natural ecosystems»	12	0	14	0	0
Sub-total (without TO 11)		55	7	69	22	3
Axis 4	TO 11 – « MED Governance»	2	0	0	0	24
Total		57	7	69	22	27

It appears that:

- Only few measures are judged completely negative, regarding their impacts on the environment.
- Concerning the “mixed” or “contrasted” ratings: they concern mostly the objective related to innovation, then, in a lesser extent, SOs related to energy mix strategies and to low carbon transports.
- Regarding measures from axes 2 and 3, the share of “neutral” impacts is rather high: fields of actions are well targeted.
- Thematic Objective 11’ drafting (axis 4) is particularly wide. Without more (environmental) targeting, we could not rate many potential impacts.

Moreover, the deeper analysis of the most probable impacts gives more understanding elements:

- There is no very probable (VP) negative incidence.
- Only one “mixed” incidence is considered as “very probable”.
- There is no issue on which would cumulate only negative impacts. On the contrary, there is one issue for which “contrasted” ratings are not counterbalanced by positively rated measures: it concerns the **waste production issue**.
- Issues for which several positive incidences (probable and very probable) cumulate are the following :
 - **Water resources withdrawals**
 - **Continental water quality**
 - **Domestic energy efficiency (including buildings)**
 - **Increase of the renewable energies share in the primary energy production**
 - **Energy efficiency for the productive sector**
 - **Urban planning sustainability.**

⁵ Detailed grids, per SO, are to be found in Annexes

Outline per priority axis

Axis 1: Promoting Mediterranean innovation capacities to develop smart and sustainable growth

The programme aims at strengthening innovation capacities, in the sectors covered by « green » and « blue » growth.

Potential impacts on the environment are widely **indirect** (*impact of the activities developed thanks to innovation support*) and will probably take place with a time delay.

Potential impacts are mainly rated positive or mixed, with several items requiring vigilance:

-The development of **certain Blue Growth-related activities**, which could induce harmful impacts on the environment, for example cruise (including new harbours), but also the construction and exploitation of energy producing facilities or the development of fishery and aquaculture. Other Blue Growth-related activities have not been taken into account in this assessment⁶ but their evolution could also produce negative environmental effects (e.g.: shipbuilding, short sea shipping).

-The development of **ICT**, due to the complexity of IT waste recovery.

-The development of **biomass-based energy**, which has already given birth to a reflection on land usage as well as on the use of land for non-agricultural purposes (as well as research on second and third-generation biofuels).

Axis 2: Fostering low-carbon strategies and energy efficiency in specific MED territories; cities, islands and remote areas

Axis 2 combines, on the one hand, measures targeting the reduction of the society's demand for energy (buildings' energy efficiency and sustainable low-carbon transports), and, on the other hand, actions aiming to develop the supply of renewable energy. Axis 2 is thus consistent and rather well-targeted.

Items requiring specific attention are the following:

-**All methods for producing renewable energy are not equivalent**, as far as their potential effects on environment are concerned. Whatever the choice of energy to study and develop is, the implementation of production facilities would induce impacts, even at a very local scale (during works, then during exploitation phases). Potential negative impacts must be taken into account, in particular during the projects selection phase, as well as in the impact studies prior to the deployment of pilot demonstration activities.

-Interconnection of transports and optimisation of existing networks have very positive leverage effects. But the development of **coastal accessibility by boat**, if not avoidable, has to be studied thoroughly, because the effects of maritime transports are rated rather negatively.

Axis 3: Protecting and promoting Mediterranean natural and cultural resources

Axis 3 gathers measures targeting the protection of MED area's natural heritage, and the strengthening of development strategies which would integrate human pressures (among which tourism) as well as natural hazards.

Potential effects are rated positive.

Axis 4: A shared Mediterranean Sea

For most of investment priorities, the programme's impact is positive regarding the consolidation of MED knowledge database that will support environmental policies of the MED area. Moreover, the programme advocates quite efficiently in favour of integration and consistency of environmental dimension in the building up of policies.

The Specific Objective 4 (« **To support the process of developing multilateral coordination frameworks and strengthening the existing ones in the Mediterranean for joint responses to common challenges** ») therefore presents a very positive impact. Nevertheless, the qualification of impacts is only based on cross-cutting criteria, as the definition of the SO is rather open.

A narrower targeting of actions would allow a more thorough evaluation.

⁶ Se reporter au rapport complet, pages 50 et 51

Description of measures to avoid, reduce and compensate significant impacts of the Programme on the environment

Cross-cutting measures:

The section 8 of the programme (« horizontal principles») underlines the importance of criteria regarding sustainable growth in **the project selection process**.

But in the drafting of the « guiding principles for the selection of operations », for each priority axis, quality criteria should precise the “effects in the mid-term” notion, and include **the direct and indirect effects on environment**.

Moreover, the dedicated chapter in the application forms already constitutes an interesting tool for the **prior environmental assessment of projects**.

The Programme indicates that “A special eye (will be) kept to project proposals giving clear measurable output indicators on environmental issues (where applicable according to the objectives of the project)”. Project partners could present a **Logical Framework**, in their applications.

Typical structure of a Logframe Matrix (source: EuropeAid⁷)

Project Description	Indicators	Source of Verification	Assumptions
Overall Objective – The project's contribution to policy or programme objectives (impact)	How the OO is to be measured including Quantity, Quality, Time?	How will the information be collected, when and by whom?	
Purpose – Direct benefits to the target group(s)	How the Purpose is to be measured including Quantity, Quality, Time	As above	If the Purpose is achieved, what assumptions must hold true to achieve the OO?
Results – Tangible products or services delivered by the project	How the results are to be measured including Quantity, Quality, Time	As above	If Results are achieved, what assumptions must hold true to achieve the Purpose?
Activities – Tasks that have to be undertaken to deliver the desired results			If Activities are completed, what assumptions must hold true to deliver the results?

This logical framework should identify, per project, its **environmental objectives (overall objectives and purposes)**.

The programme could thus impose that the following issues appear in the analysis led by the project partner:

- Contribution to efficiency in the use of resources (e.g. energy efficiency, renewable energy use, reduction of greenhouse gas (GHG) emissions, efficient water supply, waste-water treatment and water reuse, sustainable land use, waste management and recycling etc.)
- Contribution to the development of green infrastructures
- Contribution to sustainable integrated urban and regional development
- Contribution to better awareness for the adaptation to climate change and risk prevention
- Promotion of employment opportunities, education, training and support services in the context of environment protection and sustainable development.

The programme could also impose that the applications integrate **environmental impact indicator(s)**, defined in respect to the environmental objectives of the Programme. These indicators would then be common to all projects.

⁷ European Commission (2004). Aid Delivery Methods. Volume 1: Project Cycle Management Guidelines.

Furthermore, in case of **pilot demonstration activities' launchings/deployments**, each project should present a **prior study for environmental impacts**. This impact assessment shall study, in particular, how the project localisation is related to protection areas classified in respect to environmental regulations.

Concerning Natura 2000 sites:

The « Habitats » Directive describes the required impacts assessment measures when a Natura 2000 site may be affected.

Article 6

(...)

Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

4. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.

Article 7

Obligations arising under Article 6 (2), (3) and (4) of this Directive shall replace any obligations arising under the first sentence of Article 4 (4) of Directive 79/409/EEC in respect of areas classified pursuant to Article 4 (1) or similarly recognized under Article 4 (2) thereof, as from the date of implementation of this Directive or the date of classification or recognition by a Member State under Directive 79/409/EEC, where the latter date is later.

For the purposes of Article 6 assessments, Natura 2000 sites are those identified as sites of Community importance under the habitats directive, or classified as special protection areas (SPAs) under the Birds Directive⁸. The European Commission released an interpretation document⁹. This document makes clear that where a project is likely to have significant effects on a Natura 2000 site, it is also likely that both an Article 6 assessment and an EIA (in accordance with Directive 85/337/CE, 97/1/CEE, Directive 2003/35/EC et Directive 2009/31/EC) will be necessary¹⁰.

Moreover, in case of the use of **public procurements** (especially for **works**), the payers shall use the tools offered by respective national procurement regulations in order to select offers which would minimize the environmental effects of (construction) works: mobility plans, noise and odour pollution prevention plans, waste prevention and treatment plans, grey waters treatment, in particular.

Objective « To increase transnational activity of innovative clusters and networks of key sectors of the MED area »:

Reinforce the “eco-targeting” of innovation-related projects. Innovation related to Blue Growth should be explicitly directed towards projects aiming to develop eco-friendly solutions (eco-management, eco-design, decrease of carbon print foot, production and exploitation processes sustainability, etc.). What is at stake is to eco-condition the purpose of the innovation and not only the cooperation project in itself.

The concept of eco-innovation could thus appear explicitly in the detailed drafting of the specific objective, and in the expected results drafting, as well.

⁸ European Commission, Environment DG (November 2001) Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 92/13/CEE

⁹ « Managing Natura 2000 sites : The provisions of article 6 of the « Habitats » Directive 92/43/CEE »

¹⁰ European Commission, Environment DG (November 2001) Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 92/13/CEE

Objective « To increase the share of renewable local energy sources in energy mix strategies and plans in MED territories »:

The particular points to consider, which have been described in the previous chapter, underline the potential negative impacts of energy production facilities and/or infrastructures, regarding several environment dimensions¹¹. Preventive measures described above (*cross-cutting measures*) apply particularly well to that field of actions.

Moreover, in the description of the « *types and examples of actions and expected contribution to the specific objectives* », the **assessment of potential environmental impacts** for energy mixes **should be more explicitly integrated to the strategy (models, plans ...)** and **feasibility studies**.

Furthermore, studies concerning forest and/or agricultural **biomass** should include comparisons between different generation of solutions (e.g.: log vs pellet).

Finally, in addition to studies related to energy production, attention could be paid to **energy transportation and distribution** modes (e.g.: underground networks or not, integration of undersea networks)

Objective « To increase capacity to use existing low carbon transport systems and multimodal connections among them »:

The particular points to consider, which have been described in the previous chapter, underline the potential negative impacts of the maritime accessibility development, especially regarding marine water quality, marine habitats integrity and air pollution.

Regarding maritime transports: the development of accessibility on peripheral and touristic cities/sites could be more explicitly **conditioned par the concomitant deployment of « green-shipping » solutions** (direct measures, like the use of new technologies, or indirect ones, like the development of new management modes for loading or for energy on-board). The development of maritime transport could also be fostered in the only cases, like **isles**, where this solution is much less avoidable compared to continental areas.

Furthermore, in town, transport optimisation is major for carrying out a sustainable urban planning. One has nevertheless to remain vigilant concerning the estimate for behaviour adaptation time. The **transition and adaptation period** to new mobility plans has to be integrated into diagnoses, especially regarding possible GHG impacts (traffic jams...).

Other objectives (To enhance sustainable development policies for more efficient valorisation of natural resources and cultural heritage in coastal and adjacent maritime areas, To maintain biodiversity and natural ecosystems through strengthening the management and networking of protected areas, To support the process of developing multilateral coordination frameworks and strengthening the existing ones in the Mediterranean for joint responses to common challenges) : no proposal for dedicated corrective measures.

This report does not introduce alternative solutions: mitigation measures have indeed been proposed for the main potential negative effects that have been outlined in the previous detailed assessment.

If other alternatives arose from Consultations (Environmental Authorities and Public), they would then be studied and, if appropriate, be assessed in the final report.

¹¹ Detailed grids are available in the full report annexes

ANNEXES

The question grid, basic tool for environmental assessment

To protect, conserve and improve the natural assets of the MED area	
1	How may the objective or implementation measure impact the loss of biodiversity?
2	How may the objective or implementation measure impact the ecological coherence of territories?
3	How may the objective or implementation measure impact habitats (terrestrial and aquatic)?
4	How may the objective or implementation measure impact the soil sealing and/or artificialisation?
5	How may the objective or implementation measure impact erosion processes?
6	How may the objective or implementation measure impact water withdrawals?
7	How may the objective or implementation measure impact water quality (fresh waters, transitionnal waters, coastal waters) ?
8	How may the objective or implementation measure impact marine water quality?
9	How may the objective or implementation measure improve the resilience of ecosystems to climate change?
10	How may the objective or implementation measure improve energy efficiency of population lifestyle (including buildings) ?
11	How may the objective or implementation measure increase the share of renewable energies in global primary energy production ?
To make of the MED area a more efficient, greener, more competitive and low-carbon economy	
12	How may the objective or implementation measure impact energy efficiency in the productive sector ?
13	How may the objective or implementation measure impact the durability of goods and above all their production methods?
14	How may the objective or implementation measure impact waste production (household and industrial) ?
15	How may the objective or implementation measure impact waste recovery (household and industrial)?
16	How may the objective or implementation measure impact mobility?
To protect the citizens of the MED area from the health and welfare pressures/risks associated with the environment	
17	How may the objective or implementation measure impact atmospheric pollution (GHG, particles...)?
18	How may the objective or implementation measure impact management and resilience to natural hazards ?
19	How may the objective or implementation measure impact management and resilience to industrial risks ?
20	How may the objective or implementation measure impact noise and odour pollution?
21	How may the objective or implementation measure impact landscapes?
22	How may the objective or implementation measure impact the sustainability of urban planingng?
23	How may the objective or implementation measure impact space use?

Cross-cutting issues	
24	How may the objective or implementation measure impact knowledge- and data-bases, which support environment policy in the MED area?
25	How may the objective or implementation measure impact the enhancement of ecosystemic services?
26	How may the objective or implementation measure impact integration and consistency of environmental field in policies?

The qualitative rating scale

Nature of the impact	<ul style="list-style-type: none"> + Possible occurrence of environmental positive effects - Possible occurrence of environmental negative effects +/- Possible occurrence of both environmental positive and negative effects o Likely non-significant environmental effects // No rating, due to lacking or insufficient data <p><u>Intermediate ratings are also possible : o/+ or o/-</u></p>
Probability of the impact	VP (Very Probable), P (Probable), U (Uncertain)
Frequency	C (constant) F (Frequent) O (Occasional)
Duration	LT (long term) ST (short term)
Reversibility	I (irreversible) R (reversible)
Transborder effect	NTE (No Transborder Effect) PTE (Possible Transborder Effect)