

Strategic Environmental Assessment Good Practices Guide

Methodological Guidance



Maria do Rosário Partidário

Strategic Environmental Assessment
Good Practices Guide
- methodological guidance

Prepared by
Maria do Rosário Partidário
IST
Technical University of Lisbon

Portuguese Environment Agency
Amadora
2007

Title: **Strategic Environmental Assessment Good Practices Guide**
Methodological Guidance

Author: Maria do Rosário Partidário
Instituto Superior Técnico
Technical University of Lisbon

Publisher: Portuguese Environment Agency

Date of publication: October 2007

Printed by:

Design and layout: APA-jmf

ISBN: 978-972-8577-35-3

PT:

Print out:

Contents

How to use this Guide	6
1. Introduction and objective of the Guide	7
1.1 Scope of application of this Guide	7
1.2 Intended Users of this Guide	7
2. Background	9
2.1 Basic concepts	9
2.2 What is SEA	9
2.3 The fundamental differences between SEA and EIA	12
2.4 Requirements of the directive and national legislation	14
3. Strategic-based model for SEA	17
3.1 Functions and expected outcomes of SEA	17
3.2 Components of a strategy-based model	18
3.3 Structural elements of the strategy-based model	18
3.4 Methodological principles	23
4. SEA strategic-based methodology	24
4.1 Description of the three methodological phases	24
4.2 Description of the methodology	26
4.3 Preparation of documents	32
4.4 Building up a team to perform SEA	33
5. Closing remarks	35
References	36
Bibliography	37
Glossary	38
Suggestions and Comments	40
Annex I - Decree-Law 232/2007 of 15 June	41
Annex II - Directive 2001/42/EC of 27 June	48
Annex III - How the Guide's methodology satisfies the legal requirements concerning the content of the Environmental Report	57
Annex IV - Suggest layout for the Critical Factors for Decision-Making Report	58
Annex V - Suggested layout for the Environmental Report	59

Acknowledgements

To Prof. António Gonçalves Henriques, Eng^a Bertília Valadas and Eng^o Júlio de Jesus for their comments to draft versions of this Guide.

Foreword

Strategic Environmental Assessment is a powerful and important tool whose implementation is just starting in the European Union.

Although some countries have traditionally utilized this tool and the Directive 2001/42/EC entered into force in 2004, the general use of this mechanism is very recent and was coincident with the preparation of near 400 Operational Programmes by several Member States, regarding the 2007-2013 programming period for the Structural Funds.

Portugal had already adopted this procedure even before Directive was transposed into national legislation – Decree-Law 232/2007, of 15 June and may feel proud of the historical reference to impact assessment of plans in Portuguese Framework Environmental Law (Law 11/87, of 7 April).

Traditional “Environmental Impact Assessment” of plans is commonly used as a valuable tool to support decision making. By adopting the same principle, we hope that Strategic Environmental Assessment will successfully expand its role in the preparation of policy decisions, using the necessary flexibility to go ahead with projects, plans and programs towards strategies and policies.

So, it will be necessary to enable it with new capacities to promote efficient methodologies concerning this strategic tool.

Directive 2001/42 defines European Union criteria and is focused on procedural transparency absolutely essential in a true participative democracy, throughout the planning and programming process. To turn the application of European and national legislation more efficient, not only a technical procedure is required but also innovation, shared experiences and the adoption of good practices are desirable.

With the publication of Decree-Law 232/2007, Portuguese Environment Agency assumes the initiative for the publication of this Good Practices Guide aiming to support all the assessment process of plans and programs and hopes that may it open new perspectives, empowering the integration of environment matters in an early stage of decision making.

António Gonçalves Henriques

General Director of the Portuguese Environment Agency

How to use this Guide

Scope of application (chapter 1)

- defines a methodological approach to SEA as the object of the Guide
- clarifies the scope of application
- identifies the target-audience

Concepts and requirements (chapter 2)

- clarifies the concept and the objectives of SEA, as well as its basic concepts and general principles
- highlights the fundamental differences in relation to project EIA
- details the legal requirements established through Directive 2001/42/EC, of 27 June, and through Decree-Law no. 232/2007, of 15 June

SEA Model (chapter 3)

- defines the functions of the SEA and the expected outcomes, the methodological components, structural elements and methodological principles

Strategic-based SEA methodology (chapter 4)

- defines the SEA methodology, the process phases and the technical activities
- describes the methodology according to the three main components of the SEA methodology: technical, process and communication

Additional information:

- Bibliography
- Directive 2001/42/EC, of 27 June
- Decree-Law no. 232/2007, of 15 June
- Suggested layout for the Report on the Critical Factors for Decision-Making
- Suggested layout for the Environmental Report

1. Introduction and objective of the guide

Environmental assessment of plans and programmes has been a compulsory procedure in Portugal since Decree-Law 232/2007, of 15 June, was published. This Decree-Law establishes in national law European legal requirements defined by Directive 2001/42/EC, of 27 June,.

Decree-Law 232/2007, of 15 June, further ensures the application of the Aarhus Convention of 25 June 1998, transposing Directive 2003/35/EC, of 26 May, which provides for the participation of the general public in the preparation of environmental plans and programmes. It also takes the Kiev Protocol into account, which was approved in 2003, concerning strategic environmental assessment in a transboundary context.

The procedure for the environmental assessment of plans and programmes as established in the above mentioned legislation can be implemented with a strategic environmental assessment (SEA) methodology. SEA methodologies can take the form of the more traditional environmental impact assessment (EIA), in which the objective is to verify the impact that the proposed solutions, and respective alternatives, defined in plans and programmes have on the environment, as well as propose mitigating measures for these impacts and a monitoring programme. SEA is, nonetheless, more efficient with respect to its objectives if more strategically oriented methodologies are used. With a strategic-based methodology the objective is to include environmental issues in the planning and programming cycle as early as possible, discuss and assess the major strategic options and ensure an iterative tracking to assist in the decision of choosing the best options that allow sectoral, environmental and sustainability objectives to be achieved, and assist in the implementation of strategic decisions.

The objective of the SEA Guide is to provide methodological guidance for good practices in SEA, thus ensuring that a strategic-oriented assessment is carried out, in compliance with European and domestic legislation. The European directive lays down the minimum requirements, which are transposed in Decree-Law 232/2007, of 15 June, which should not be an obstacle to the use of good practices in performing the SEA. The Guide distinguishes between that which is legally required and that which can or must be done to ensure good practice.

1.1 Scope of application of this Guide

The Guide can be used in association with all the plans and programmes for the sectors and in the situations set forth in Article 3 of Decree-Law 232/2007 of 15 June (Annex I). In relation to land management instruments (LMI), environmental assessment regulations established in Decree-Law 316/2007, of 19 September, on the drawing up, approval, execution and assessment of LMI further define specific requirements. Moreover, the strategic impact assessment in land use planning was the subject of a guide published in 2003 by the Portuguese General Directorate for Spatial Planning and Urban Development (DGOTDU, 2003).

The methodology set out in this Guide, which is described as a guide for good SEA practices, can likewise be used in relation to all plans and programmes that do not come under the scope of Decree-Law 232/2007, of 15 June. The use of SEA can improve the quality of plans and programmes through better environmental integration, using strategic, holistic and cross-sectoral approaches, and steering plans and programmes towards sustainability objectives, thus contributing to an improvement of the development context.

1.2 Intended Users of this Guide

The Guide is intended for public institutions promoting plans and programmes that require environmental assessment under the provisions of the Decree-Law 232/2007. It is also intended for consultancy teams that draw up these plans or programmes and conduct the necessary studies for environmental assessment.

The Guide is also intended for public and private organisations using the Strategic Environmental Assessment (SEA) tool as a means of facilitating the inclusion of environment-related issues into planning and investment strategies, with the objective of generating more sustainable processes and solutions.

Lastly, the Guide can also provide useful assistance to non-governmental organisations and all those seeking to broaden their capacities, with a view to better informed public participation.

2. Background

This section starts by describing four basic concepts in SEA: Environment, Sustainability, Strategy and Assessment. This is then followed by the concept of SEA, the general objectives and principles of good practices, and highlights the fundamental differences between SEA and EIA, a tool with which SEA shares general principles but from which it must be operationally distinguished. Lastly, the legal requirements for environmental assessment of plans and programmes are detailed, i.e. those set forth in EU legislation and national legislation derived from it.

2.1 Basic concepts

Environment is defined in the Portuguese Framework Environmental Law (Law 11/87, of 7 April) as the set of physical, chemical and biological systems and their relationships with economic, social and cultural factors with direct or indirect, gradual or immediate effect on living beings and human's quality of life. The Academia de Ciências de Lisboa (Lisbon Academy of Sciences) (2001) dictionary defines environment as that which surrounds, envelops or is related to the physical, social or moral surroundings in which humans live.

Sustainability is a relative concept that is based on the term 'sustainable', which according to Heinberg (2007) means "that which can be maintained over time". It is associated to the concept of sustainable development, which has a number of formal definitions, the most well-known being that given by the World Commission on Environment and Development in the Brundtland Report: "the development that satisfies the needs of the present generation without compromising the capacity of future generations to satisfy their own needs". Wikipedia (26/08/2007) defines sustainability as the characteristic of a process or state that can be indefinitely maintained at a certain level. The term 'sustainability' in this Guide is used to designate the state or the process resulting from the achievement of sustainable development objectives over a long period of time.

Strategy is a concept that originated in military science and generally refers to the study and planning of means to achieve policy objectives. It can also be defined as a set of actions deemed to be important means of achieving objectives (Academia das Ciências de Lisboa, 2001). Strategic approaches in policy and planning, according to Mintzberg (1994), are not intended to find out what can happen in the future but aim to plan and steer actions that make up possible routes to a desirable future.

Assessment is the action of assessing. It is to ascertain the value attributed to something, by more or less meticulous calculation, expressing a value judgement. It is also the approximate determination of magnitude or a quantity without resorting to direct measurement, by estimation (Academia das Ciências de Lisboa, 2001). Assessment entails the assumption that an object of assessment exists, the value of which is estimated, and that there is an assessor, expert or any other qualified person that knows how to gauge the value or qualities of something (Academia das Ciências de Lisboa, 2001).

2.2 What is SEA

Strategic Environmental Assessment (SEA) is an impact assessment tool that is strategic in nature and has the objective of facilitating environmental integration and the assessment of the opportunities and risks of strategic actions in a sustainable development framework. The strategic actions are strongly linked to the formulation of policies, and they are developed in a context of planning and programming procedures. The general objectives of SEA that have been quoted in relevant literature are indicated in Table 1.

Table 1 - Objectives of SEA

1. Contribute to an environmental and sustainable decision-making process
2. Improve policy, plan and programme quality
3. Strengthen and facilitate project's EIA
4. Foster new means of making decisions.

SEA has undergone a fast evolution worldwide and its current practice is much diversified. A number of methodological approaches exist depending on whether SEA is more influenced by project environmental impact assessment (EIA) practices or by policy assessment and strategic planning processes. These methodological approaches have different outcomes regarding the capacity of the SEA to influence strategic decision.

International experience and the literature on SEA have underlined principles of good practice in the application of this tool, which emphasise the need for SEA to be flexible and strategic irrespective of its scale and scope of application, ensuring consistency also with its own terminology. The principles of accountability, participation and transparency become fundamental in SEA. Also fundamental to SEA is its capacity to monitor, in an iterative and facilitating manner, the planning and programming cycles that engage the preparation, implementation and review of plans and programmes, so as to influence the formulation and discussion of strategies, as well as to support decisions taken on major development options when the same are still open.

The SEA performance criteria (Table 2) defined by the IAIA (International Association for Impact Assessment) in 2002, reflect these internationally accepted principles, which are deemed to be axiomatic of SEA good practices.

Table 2 - SEA performance criteria (IAIA, 2002)

The SEA must be:	<ul style="list-style-type: none"> * Integrated * Sustainability-led * Focused * Accountable * Participative * Iterative
------------------	--

A strategic approach is strongly linked to the decision cycle concept. This concept of cycle establishes the notion of continuity, in which strategic decisions (concerning prioritisation, planning, choice or implementation) are taken several times throughout a planning and programming process, at critical moments of the decision process (decision windows). The development of new strategies results from an informal re-analysis of previous strategies, in the context of evolving scenarios and priority objectives, thereby influencing the following planning or programming cycle. This notion of continuity is crucial to SEA since the object of assessment is an on-going and iterative process.

SEA must share this continuity behaviour in order to better influence a decision process (either planning or programming). SEA is accordingly referred to as a tool articulated in the form of a process that accompanies the planning and programming process (Partidário, 2007). SEA preferentially acts on the policy, plan and programme design process, to facilitate the integration of environmental and sustainability issues, as illustrated in Figure 1, and not on their outcomes. SEA must be strategically adapted to the decision-making process to increase its effectiveness, as described in the so-called decision-centred SEA model (Caratti et al, 2004; Partidário, 2007).

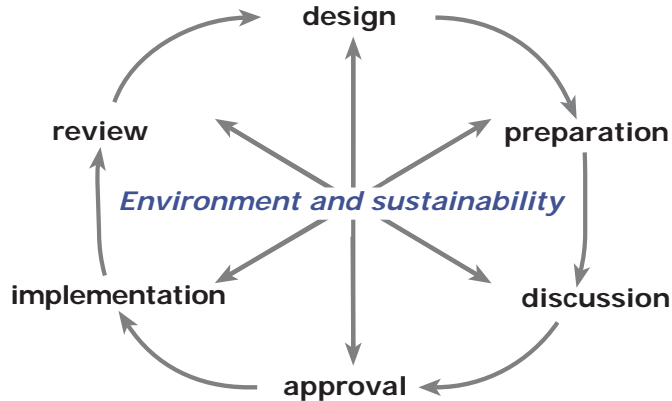


Figure 1 - SEA facilitates the integration of environmental and sustainability issues in decision-making processes (either planning or programming)

This is, as it happens, established in the introduction to Decree-Law 232/2007, of 15 June: “the environmental assessment of plans and programmes can be considered as a process integrated into the decision-making procedure, the intention of which is to incorporate a series of environmental values into that same decision (...) and it constitutes an on-going process (...)”.

Impact factors in SEA relate to the intentions, or the strategic development objectives, corresponding to land, economic and social development models, with objectives and targets that are defined in view of a long-term vision, based on a framework of major development options that allow these same objectives and targets to be achieved. The SEA can consider the concrete actions in plans and programmes, that are proposed as planning or programming solutions, as means of achieving the proposed objectives, but not as ends. The object of SEA assessment must always be kept fully centred on the development strategy that is implemented through that set of actions. The purpose of assessment through SEA should never be each one of the actions or projects that comprise the solution for plan or programme implementation.

The SEA methodology described in this Guide adopts a strategic approach based on a long-term, holistic and cross-sectoral perspective that is highly focused on few, though significant, factors of analysis that are strategic for decision-making. The scope of SEA includes physical, ecological, social, cultural and economic aspects, to the extent that they are relevant in determining the quality of the context in which we live and the risks and opportunities for sustainable development. SEA in a strategic approach usually has three very concrete objectives:

1. Ensure the integration of environmental, social and economic aspects in planning, programming and policy-making processes;
2. Detect opportunities and risks, assess and compare alternative development options while these are still open for discussion;
3. Contribute to the establishment of development contexts that are more appropriate to nest future development proposals.

Through these objectives, SEA may further contribute to:

- Ensure a strategic view and a wide-ranging perspective in relation to environmental issues, within a sustainability framework;
- Assist in identifying, selecting and justifying win-win options relative to the environmental and development objectives;
- Contribute to the discussion of major options and to a more sustainable decision (in environmental, social and economic terms);

- Detect strategic problems and opportunities in the options under analysis and facilitate the appraisal of cumulative effects;
- Suggest follow-up programmes, through strategic management and monitoring;
- Ensure participative and transparent processes that involve all relevant stakeholders;
- Foster more integrated decisions in relation to the array of relevant viewpoints (defined according to technical factors and political-cultural values).

Acting in SEA requires strategic thinking in the decision-making process and in the organisations involved. Defining a vision, major objectives, targets and follow-up indicators are typical ingredients of strategic approaches, which require a strategic culture and flexibility in decision-making in order to permit the rapid adjustment to changes in context.

One of SEA's major challenges is the capacity to assess the possible opportunities and risks of sectoral and territorial development strategies, having regard to sustainable development objectives. SEA aims to "judge" the merit (opportunity) or the risks of pursuing those sectoral and territorial development strategies and it may propose better "directions" for these strategies to follow. In the strategic context in which SEA develops, its application requires a stable policy framework and guidelines (e.g. National Sustainable Development Strategies) in relation to what may be a desirable and sustainable future, which may serve as a benchmark to provide a sounder reference for assessment.

As a corollary of the strategy-based logic that this section has sought to develop, it is understood that:

SEA is a strategic facilitator of sustainability process

Table 3 contains seven essential underlying principles that provide the fundamental basis for the strategic-based methodology advanced in this SEA Guide.

<i>Table 3 - Seven underlying principles of a strategic-based approach to SEA</i>
<ol style="list-style-type: none"> 1. Understand the strategy that is the object of SEA and the assessment context 2. Ensure a long-term horizon and a holistic, cross-sectoral and integrated perspective 3. Focus solely on critical factors for decision-making (preferentially between 3 and 8) and work with trends (processes) rather than current situations 4. Adopt an attitude that facilitates decision-making, supporting the decision-maker and encouraging sustainable decisions 5. Regularly inform decision-making in a strategic and pragmatic manner (in the critical decision-making windows), with the purpose of assisting decision-making 6. Use communication strategies, consider multiple perspectives and act through good governance 7. Ensure the tracking of decisions taken (monitoring and systematic review of objectives)

2.3 The fundamental differences between SEA and EIA

SEA and EIA are tools that share a common root - impact assessment, but have different assessment foci: strategies for future development with a high level of uncertainty in SEA; proposals and measures, concrete and objective, for the execution of projects in EIA. This difference between SEA and EIA in the object of assessment generates different methodological requirements related to the scale of assessment and to the decision-making process.

The previous section highlighted a number of characteristics of SEA. Table 4 presents some fundamental differences between SEA and EIA, which help to corroborate the different methodological approaches that SEA and EIA must have.

Table 4 - Some fundamental differences between SEA and EIA

SEA	EIA
The perspective is strategic and long-term	The perspective is of execution in the short and medium-term
The process is cyclical and continuous	The process is discrete, motivated by concrete intervention proposals
The purpose is to help build a desirable future, it is not to attempt to know the future	The intervention project has to be known with the suitable level of detail
The definition of what is intended is vague, there is a large amount of uncertainty and the data are always quite insufficient	The definition of what intends to be done is relatively precise and data are reasonably available or can be collected through fieldwork
Follow-up in SEA is performed through the preparation and development of policies, plans, programmes and projects	Follow-up in EIA is performed through the construction and implementation of the project
The strategy may never be put into practice given that the actions established in plans and programmes may never be implemented	Projects requiring an EIA are executed, once their environmental feasibility is guaranteed.

This different perspective of SEA and EIA is illustrated in Figure 2.

Figure 2a) represents the behaviour of an SEA methodology that follows a traditional EIA-based model - the objective is to assess the solutions proposed by a plan or programme and their effects. The solutions proposed in a plan or programme are taken as outcomes, not as means to achieve objectives, and SEA is going to assess the impact of these outcomes on a set of environmental factors. This approach has very limited or even zero capacity to influence the major strategic options.

Figure 2b) represents the behaviour of an SEA methodology that follows a strategic-based model - the objective is to assess the proposed strategies during a planning and programming process in relation to the manner in which these strategies seek to respond to strategic problems and objectives. In this case, the aim of SEA is to analyse and discuss strategic alternative options that provide a response to the same strategic problems and objectives in an environmentally more integrated and sustainable context. The analysis is centred on how the plan or programme seeks to resolve the development objectives or the problems in an environmental and sustainable way, and not to assess the actions proposed as solutions or outcomes in the plan or programme. This approach increases the opportunity of SEA to facilitate the integration of environmental and sustainability issues in these strategic processes.

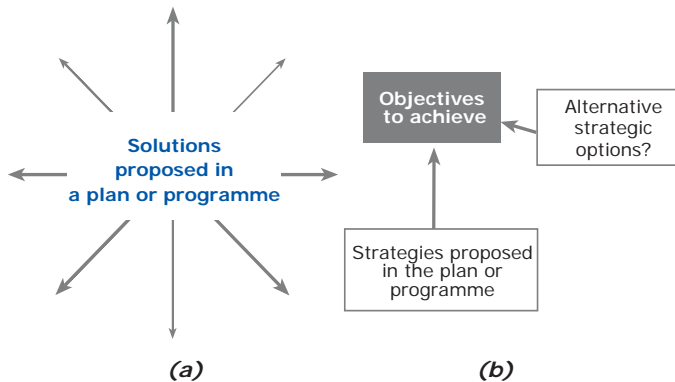


Figure 2 - (a) EIA-based methodology and (b) Strategic-based methodology (Partidário, 2007).

What becomes essential in SEA is to help reflect on the opportunities and risks of opting for certain development directions in the future (Fig. 2b) and not, as is the case in EIA, taking expected outcomes of plans and policies to be highly probable, in order to assess their positive and negative impacts, and to propose measures to minimise or compensate for the negative impacts (Fig. 2a).

A strategic-based stance needs to be adopted in SEA in order to increase the possibilities of success. There are at least two ways of integrating a strategic-based approach into SEA.

One relates to the process of selection of what needs to be studied and analysed, in other words, what should be within the scope of SEA. The strategic-based methodology presented in the Guide suggests that this is achieved through the adoption of the Critical Factors for Decision-Making (CFD) concept (see section 3.3). The bottom-line is that analysing few, though relevant factors is much more important than carrying out exhaustive descriptions that, generally, are not compatible with the deadlines of a strategic decision.

The second way of being strategic relates to the moment in which the decision can be influenced. SEA must be strategic with respect to the decision-making moments in which a technical contribution, or a procedural recommendation, may be critical to the decision and to the choice of an environmentally more integrated and sustainable option and pathway. SEA must influence a planning and programming process a number of times during the preparation and drawing up of plans and programmes, and not just at the end, when the Environmental Report is produced. This is actually a requirement of Directive 2001/42/EC of 25 June (Articles 1 and 4), and Decree-Law 232/2007 of 15 June (Article 2), which states in its introduction: "The performance of an environmental assessment (...) ensures that the environmental effects are taken into consideration during the preparation of a plan or programme (...) thus contributing to more effective and sustainable innovative solutions (...)".

2.4 Requirements of the directive and national legislation

The SEA methodology that is introduced in this Guide has regard to the requirements of Directive 2001/42/EC, of 25 June, (Annex II), relative to the impact of certain plans and programmes on the environment, as well as to the national legislation transposing that Directive, Decree-Law 232/2007, of 15 June, (Annex I). Notwithstanding a greater detail in the interpretation of the requirements of the Community Directive and national legislation, the fundamental aspects to be taken into consideration in the practical application of the SEA are as follows:

Objective (Article 1 of the Directive) - to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.

Environmental assessment (Article 2(b) of the Directive; Article 2(a) of Decree-Law 232/2007) - the identification, description and assessment of the likely significant impact on the environment of implementing a plan or a programme, carried out during the preparation and design of the plan

or programme, described in a report and through consultation processes, and in the appraisal of the results obtained reporting the final decision on the plan or programme, and the public disclosure of the final decision.

Environmental report (Article 5 of the Directive; Article 6 of Decree-Law 232/2007) - the final report, in which the results of the environmental assessment are presented, namely the identification, description and assessment of the likely significant effects on the environment of implementing the plan or programme, and the reasonable alternatives that take into account the objectives and the geographical scope of the plan or programme.

Content of the environmental report (Annex I of the Directive; Article 6 of Decree-Law 232/2007) - outlines the content of the report, including the description of the content and the main objectives of the plan or programme and relationships with other relevant plans and programmes and with environmental protection objectives, the relevant environmental problems, the environmental characteristics and the likely significant effects on the environment relative to biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage (including architectural and archaeological heritage), landscape and the interrelationship between the above mentioned factors, measures that prevent significant adverse effects, justification for the considered alternatives, description of the monitoring measures and the non-technical summary.

Definition of the content of the environmental assessment (Article 5(4) of the Directive; Article 5(3) of Decree-Law 232/2007) - the authorities responsible for preparing the plan or programme decide on the scope and level of detail of the information which must be included in the environmental report through the consultation of authorities with environmental responsibilities, which must issue an opinion within the timeframe of 20 days.

Consultation of the Environmental Report and the plan or programme (Article 6 of the Directive; Article 7 of Decree-Law 232/2007) - the authorities responsible for preparing the plan or programme supply the environmental report and the plan or programme, prior to the approval of the plan or programme, to the authorities with specific environmental responsibilities, institutions and specialists of renowned merit and to the public, for a period of no less than 30 days, in order to provide for their opinions.

Transboundary consultation (Article 7 of the Directive; Article 8 of Decree-Law 232/2007) - the authorities responsible for preparing the plan or programme enter into consultation with Member States potentially affected, according to the likelihood of significant transboundary environmental effects.

Authorities with specific environmental responsibilities (Article 3(3) of Decree-Law 232/2007) - Portuguese Environment Agency, Institute of Nature Conservation and Biodiversity, Institute of Water, Administrations of Hydrographical Region, Regional Development and Coordination Commissions, health authorities and municipalities of the area covered by the plan or programme.

Influence on decision making (Article 8 of the Directive; Article 9 of Decree-Law 232/2007) - the authorities responsible for preparing the plan or programme take into account the environmental report and the opinions expressed as a result of the consultations during the preparation of the final version of the plan or programme .

Environmental declaration - Information on the decision (Article 9 of the Directive; Article 10 of Decree-Law 232/2007) - the authorities responsible for preparing the plan or programme prepare an environmental declaration which is published and sent to the Portuguese Environment Agency, in which they state how the environmental considerations and the opinions obtained from the public consultation have been included and considered in the plan or programme. This declaration also details the monitoring measures envisaged. The declaration is made available to the public.

Evaluation and Monitoring (Article 10 of the Directive; Article 11 of Decree-Law 232/2007) - the authorities responsible for preparing the plan or programme monitor the significant environmental effects resulting from the respective application and execution, verifying the adoption of the measures envisaged in the environmental declaration. The monitoring results shall be disclosed at least once per year and the evaluation and monitoring results is submitted to the Portuguese Environment Agency.

Figure 3 illustrates the procedure defined in Decree-Law no. 232/2007 and its connection to planning and programming procedures.

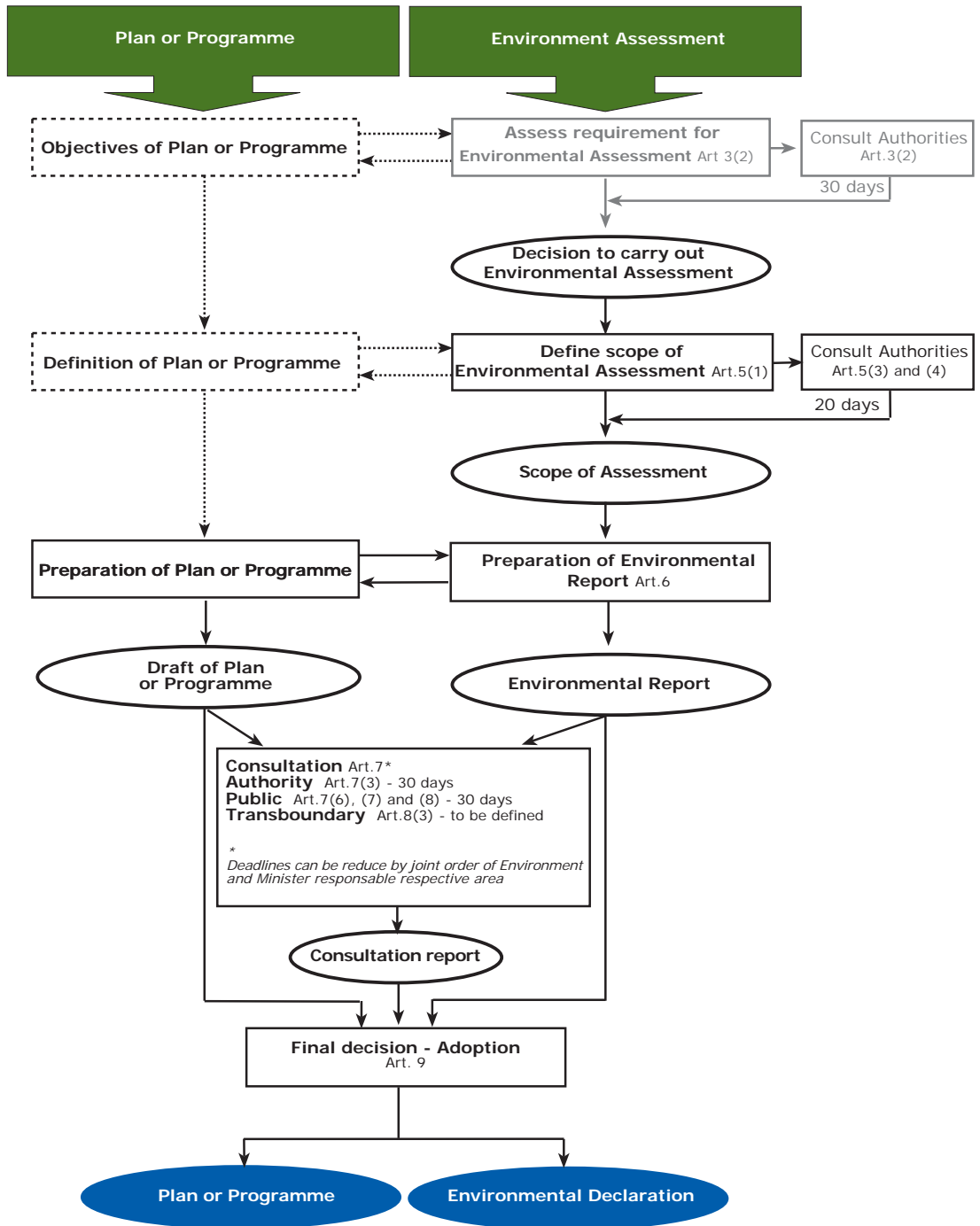


Figure 3 - Environmental Assessment Procedure defined by Decree-Law no. 232/2007

3. Strategic-based model for sea

The fundamental aspects underlying the establishment of a strategic-based methodology for SEA are described in this section, namely the functions and expected outcomes, the methodology components, the structural elements and the methodological principles.

3.1 Functions and expected outcomes of SEA

SEA plays three fundamental, complementary and non-exclusive functions relative to the decision-making process, in a strategic approach (Table 5): the integration function, of environmental and sustainability issues into the cyclical strategic processes of planning and programming, allowing for the improvement of current and future decisions; the assessment function of strategic options relative to the opportunities and risks to the environment and to the sustainability processes inherent to the follow-up of certain strategies; and the validation function of how SEA contributes to greater efficiency in strategic processes and for better quality in the expected outcomes.

Table 5 - Three functions of SEA in a strategic approach

- | |
|--|
| <ol style="list-style-type: none"> 1. Integration of environmental and sustainability objectives and issues into planning and programming procedures; 2. Assessment of strategic options with respect to opportunities and risks. 3. Validation of SEA performance. |
|--|

The integration function is decisive of the success of remaining functions and of SEA as a whole. There are fundamental aspects to be taken into account in the integration function. These include: understanding which are the critical factors for decision-making (CFD), identifying the critical moments at which fundamental decisions must be made and where SEA contributions are relevant, and ensuring that those contributions are made available for decision-making in an iterative, useful and timely manner. It further includes defining the structure and interconnection of the SEA and planning or programming teams, ensuring the sharing of techniques, approaches and the integration of procedures. In the integration function particular mention should be made to the involvement, in different ways, of individual agents and organisations, which ought to be seen as an SEA technique and not just as a mere procedural obligation of public and institutional consultation in order to comply with legal requirements.

The assessment function corresponds most typically to the assessment of impacts, deemed in a strategic context to be opportunities and risks that must be considered in the selection of the best strategic action. It requires the contextualisation in a strategic macro-framework of environmental policy and sustainability, creating the benchmark for strategic assessment, as well as an objective focus on critical factors for decision-making (CFD), which are associated to criteria and indicators for assessment. It further requires an analytical component that enables assessment in great uncertainty contexts.

The validation function corresponds to the verification of SEA performance in relation to evolving trends, strategic options, risks and opportunities during the preparation of plans and programmes, and the follow-up and verification of uncertainties during implementation. It encompasses the validation of the assessment and of respective estimates of uncertainties and assumptions by means of a systematic follow-up programme that tracks the decision-making cycle in its implementation and review phases. The varied involvement of third party institutions, civil society and the general public is equally fundamental in validation, in a participative context appropriate to the nature of a strategic approach.

The outcomes that can be expected with the application of a strategic-based SEA, considering these three functions, are summarised in Table 6.

Table 6 - Expected outcomes of a strategic-based SEA

1. An institutional and communication strategy aimed at creating the socio-political context required for strategic decision-making and for SEA
2. The strategic reference framework, defined by global environmental and sustainability macro-objectives, establishing the benchmark for integration and assessment
3. The critical factors for decision-making that provide the structure, the focus and the content to integration and assessment in SEA
4. The real-time suggestion of situations or initiatives that ensure the proactive integration of environmental and sustainability issues
5. An assessment of the risks and opportunities of the development strategy, supported on the compared assessment of major strategic options
6. Planning, management, monitoring and assessment guidelines
7. An effective follow-up programme that safeguards the strategic approach and allows validation of the choices made.

3.2 Components of a strategy-based model

The innovative nature of the proposed strategic approach model for SEA is also evident in the combination of an array of technical, procedural and communication aspects forming the component parts of the model:

- (1) A **technical** component underpinning the definition of objectives, targets and indicators, that identifies and carries out relevant studies for each of the critical factors for decision-making, allowing the necessary and sufficient information to be collected from within the available data. The technical component must be directed to providing a contribution at critical decision moments, which are specified in the procedural component, and it selects the appropriate assessment techniques.
- (2) A **process** component that ensures the linking of an SEA process and the decision-making planning and programming processes, establishing the governance rules for the integration of the processes. This articulation between an SEA process and the strategic decision-making processes is what makes the SEA a flexible process that is adaptable to each case.
- (3) A **communication** component, which is crucial for public participation and involvement, that assures the exchange of information and the cross-referencing of the multiple perspectives, the opinion making, an integrated vision and participative processes suited to the problem and to the critical decision moments. The communication component is adjusted to the characteristics of the target groups.

3.3 Structural elements of the strategy-based model

The structural elements of the SEA model are described in this section. Success in the application of a strategic-based SEA methodology depends on how these structural elements are defined and applied.

Critical factors for decision-making (CFD) - These constitute the fundamental decision-making factors that should be under SEA focus, since they identify the aspects that must be considered in the decision process concerning the strategy design and the implementing actions, in order to best meet environmental objectives and a more sustainable future. These factors satisfy the scope of the SEA (legal requirements) and are generated out of an integrated analysis of the following elements (Fig. 4):

- Strategic Reference Framework (SRF)
- Strategic issues (SI) (strategic objectives and core principles) of the object of assessment
- Environmental factors (EF)

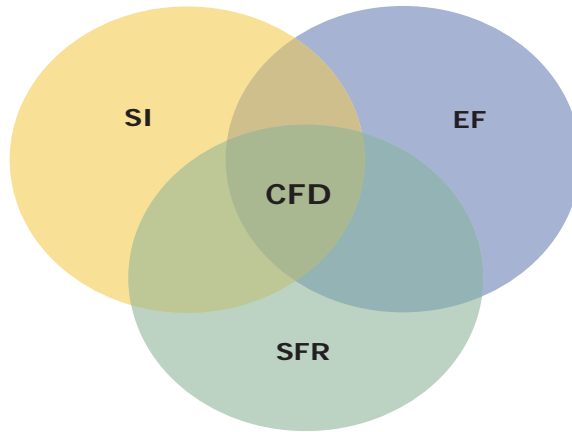


Figure 4 - Critical Factors for Decision-Making as an integrating and structuring element of SEA

The resulting CFD will provide the structure to the analysis and assessment of opportunities and risks in SEA, defining the technical studies that need to be performed under the SEA in order to gather the information required for a decision. They must preferably undergo public participation and the authorities with environmental responsibilities established in legislation must, at the very least, be consulted. Concrete examples of the use of CFD are indicated in Table 7.

Table 7 - Examples of Critical Factors for Decision-Making

<p>Different CFD are considered in the SEA of the Portugal Logístico Programme, to provide for two assessment levels (IDAD, 2007):</p> <ul style="list-style-type: none"> • The following CFD were used for the logistics network strategy: <ul style="list-style-type: none"> - Climate Change - Land Use Planning - Competitiveness - Governance • The following CFD were used for the national logistics Solution (intent relative to logistic network nodes): <ul style="list-style-type: none"> - Governance - Regional and local economic development - Territorial Management - Biodiversity • The following CFD were considered in the National Dam Programme (REN, 2007): <ul style="list-style-type: none"> - Climate Change - Biodiversity - Natural and Cultural Resources - Natural and Technological Risks - Human development - Competitiveness
--

Object of assessment in SEA and strategic issues (SI) - An SEA must start-off with a clear identification and definition of the object of assessment, which must preferentially coincide with the objectives and the major strategic options considered in the planning and programming process. The strategic issues or the driving forces contributing to the definition of the CFD are associated with the object of assessment. These structural elements ensure compliance with legal requirements concerning the outline of the contents and main objectives of the plan or programme. Table 8 provides an example of the identification of the object of assessment and the respective strategic issues.

Table 8 - Examples of the definition of the object of assessment and strategic issues in SEA

The object of assessment in the SEA of the NSRF Operational Plans were the development intentions proposed in the operational plans which have a territorial expression. The strategic (priority) issues included (Resolution of Council of Ministers 25/2006, of 10 March):

- Foster the development of the Portuguese public skills;
- Promote sustained growth;
- Guarantee social cohesion;
- Ensure the qualified development of the territory and cities;
- Improve governance efficiency.

In the SEA of the Portugal Logístico Programme two assessment levels are defined (Partidário, 2006):

- Level 1: Strategy of the logistics network
- Level 2: National logistics solution (intention in relation to the logistics network nodes)

The strategic issues (objectives) included (IDAD, 2007):

- Streamline the logistics activity;
- Foster intermodality;
- Promote environmental gains;
- Contribute to the development of the national economy;
- Transform the opportunity provided by the country's geo-strategic position into a competitiveness asset.
- Develop a network of infrastructures (National Logistics Platform Network);
- Supply an info-structure to the Portugal Logístico (Single Logistics Window);
- Supply Portugal Logístico with a regulatory and technical framework that clarifies stakeholders participation.

Strategic reference framework (SRF) - Constitutes the strategic macro-framework of the SEA, creating an assessment benchmark. It gathers under its umbrella the sustainability and environmental policy macro-objectives established in an international, European and national context that are relevant to assessment and are legally required. It also links to other plans and programmes with which the SEA object of assessment establishes relationships, which is also a legal requirement. Table 9 illustrates some of the reference themes in an SRF.

Table 9 - General themes for the identification of SEA strategic macro-framework targets and objectives - examples

- Sustainable development
- Land use planning
- Population, employment, education and health
- Eradication of poverty
- Climate change
- Biodiversity
- Desertification
- Water
- Oceans and Coastal Zones
- Forests and Rural Development
- Landscape
- Cultural heritage
- Technology
- Energy
- Transport

Environmental factors (EF) - Defines the relevant environmental scope, guided by the definition of legally established environmental factors. These are a legal requirement. The environmental factors to be analysed, and which contribute to the CFD, must be adjusted to each specific case according to the strategic focus, the assessment scale and, as a result, their relevance. An example of the adjustment of environmental factors established in national legislation to a concrete case is depicted in Table 10.

Opportunities and risks - These correspond to the positive and negative strategic impacts. They indicate the direction of a trend as the result of selecting a specific pathway. The opportunities (positive strategic impacts) and the risks (negative strategic impacts) provide the assessment on how the environmental, social and cultural values are expected to be used and their integrity affected, and what this can mean in relation to sustainable development processes.

Follow-up - Ensuring the checks of assumptions and estimates, and how the environmental, social and economic systems respond to the stimuli generated by the adopted strategies is fundamental in contexts of great uncertainty. Likewise it is important to track the strategy and detect the changes that occur upon its implementation, or even when it is put into practice. This timely detection allows a rapid reaction to strategic route changes, thus ensuring the continuity in the facilitating role of SEA. SEA follow-up relies heavily on monitoring and on the assessment of performance, frequently and swiftly adjusting to the decision cycle, which means that the SEA must follow the strategy's drive.

Perspective - The creation of transparency processes regarding strategy decisions is one of the assets of SEA. The transparency not only consists of clear information relative to the decisions taken, and the reasons behind the same, but also the fact that different perspectives representing the values of society are taken into consideration, which is fundamental in sustainability processes. The SEA must thus ensure an ample, holistic, cross-sectoral and integrated perspective in a long-term horizon.

Table 10 - Examples of the selection of relevant environmental factors and their relationship with the legally identified environmental factors

SEA of the Electricity Transport Network Development and Investment Plan (PDIRT) 2009 - 2014 (IST-REN, 2007)		
Environmental factors in national legislation	Environmental factors relevant vis-à-vis the PDIRT	Critical Factors for Decision-Making
Biodiversity Fauna Flora	Fauna and Protected Areas	Fauna Land Use Planning
Landscape Cultural heritage	Landscape and Heritage	Land Use Planning
Climate factors	Energy	Energy
Population Human health	Health and Populations Noise	Land Use Planning
Material assets	Urban network and large infrastructures	Land Use Planning Energy
Soil Water Air	not relevant	-

SEA of the Portugal Logístico Programme, IDAD, 2007

Key: Directive 2001/42/CE

		Biodiversity	Population	Health	Fauna	Flora	Soil	Water	Air	Climate factors	Material assets	Cultural heritage	Landscape
Themes of Analysis (SEA of Portugal Logístico Programme)	STRATEGY												
	Climate change								✓				
	Land use planning	✓	✓						✓				✓
	Competitiveness		✓							✓			
	Governance		✓										
	SOLUTION												
	Governance		✓								✓		
	Regional and local economic development		✓										
	Land management		✓	✓			✓	✓	✓			✓	✓
	Biodiversity	✓			✓	✓							

Decision facilitator - The capacity to facilitate decision making is one of the fundamental characteristics of strategic-orientated SEA processes. The purpose of SEA is not to control, but rather to create the conditions that ensure the formulation of environmentally sound and sustainable action strategies. SEA therefore encourages sustainable decisions, it is strategy, and not results. oriented, works with processes instead of products and uses decision windows to frequently and systematically influence the decision-making process.

Communication strategies - Communication is a structural part of SEA. Above and beyond all technical and analytical studies that can be carried out, there is the way to communicate and to encourage the adoption of different attitudes and development options, essential in sustainable processes. SEA acknowledges different perspectives when it adjusts to the target group the way it communicates, using dialogue, persuasion and negotiation as working techniques, and establishing a framework of institutional governance and participation.

The suggested strategic-based SEA model thus encompasses an innovative approach, whereby:

- It uses dialogue, persuasion and negotiation as techniques throughout the entire process.
- It establishes a framework of institutional governance and participation and recognises different perspectives.
- It creates a strategic reference framework (SRF) - Working on a sustainable future and development objectives and creating an assessment benchmark.
- It identifies Critical Factors for Decision-Making (CFD) - focusing on the fundamental strategic issues (SI) in the proposal, the environmental factors (EF) and the macro-framework defined by the SRF.
- It analyses trends and not moments. The description of the starting point is based on an analysis of trends. What matters is the dynamic analysis, not the static analysis.
- It performs studies that contribute to the analysis of the CFD and provide information to the decision, it is not just an SEA study that ends in an environmental report.

- It analyses strategies and assesses strategy options for different future scenarios.
- It prioritises the exploration of options that permit a choice, and not only mitigation, foreseeing and avoiding risks (or negative impacts) and exploring opportunities (or positive impacts).
- It is strongly based on follow-up. It takes on the form of a process: design, assessment, monitoring - following the planning or programming cycle.
- It produces diverse short and successive opinions and reports that track the various SEA phases and activities and provide information on decision windows.

3.4 Methodological principles

The following methodological principles pertinent to the Guide can be defined, having regard to the strategic nature of the SEA model, as described:

1. SEA preparation is concurrent to the design and formulation of the planning and programming drafts and is dependent on contents prepared in that context, and on the respective scale of planning and programming, ensuring a sound inter-linkage with the inherent decision processes.
2. The integration of SEA in the planning and programming process translates into the articulation of processes, timings, consultations, and the sharing of data and information.
3. A separate report on plans and programmes is required in SEA.
4. The information to be used in SEA should be available at a reference scale that embraces the entire plan. The appropriate detail with respect to SEA information and outcomes must not be greater than that of the respective plans and programmes.
5. National, European and international strategy and policy documents relevant to the application scope of the respective plans and programmes are deemed to be SEA benchmarks.
6. Public consultation and the consultation of authorities with environmental responsibilities is phased and employs multiple methods to ensure the timely integration of the observations collected into plans and programmes.
7. The proposed methodology complies with the provisions of Decree-Law 232/2007, of 15 June, and Directive 2001/42/EC, of 25 June, with necessary adaptations to the scale of the planning and programming process strategies.

4. SEA strategic-based methodology

A strategic-based methodology for SEA is described in this chapter. This methodology meets legal requirements while simultaneously providing incentive for SEA good practices. The methodology is structured into three fundamental phases (Fig. 5):

- 1) SEA Critical Factors for Decision-Making and Context,
- 2) Analysis and Assessment, and
- 3) Follow-up.

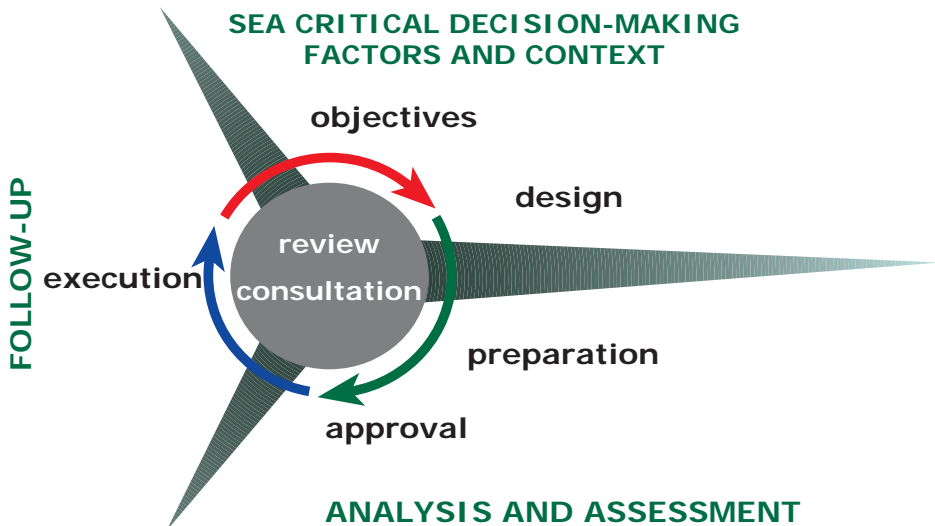


Figure 5 - Three phases in the SEA strategic-based methodology

The general structure of the SEA methodology based on a strategic approach and on the structural elements, functions, components and principles presented in chapter 3, are described in Table 11 and Figure 6.

4.1 Description of the three methodological phases

The objective of the first phase - establishment of the Critical Factors for Decision-Making (CFD) and definition of the SEA Context - is to ensure the focus of the SEA and comprehend the background, or, in other words, the context in which the SEA is performed. The object of the assessment, i.e. the strategy underlying the plan or programme, must be clearly identified and understood at this stage. The CFD that will provide the structure and focus of the strategic analysis and assessment must also be selected, thus establishing the scope of environmental assessment, the institutional context and the roster of stakeholders involved, as well as the communication strategy. The procedural interlinkage between the SEA and the planning and programming procedures must also be established. This phase must amount to a fundamental information moment in the planning and programming process, ensuring the involvement of all relevant stakeholders as established in legislation, namely the authorities with environmental responsibility relative to the CFD that define the SEA scope, and setting the level of detail of the SEA via the respective assessment criteria. The CFD that will form the SEA analysis and assessment structure shall be generated in this phase.

Table 11 - SEA strategic-based methodology**1- SEA Critical Factors for Decision-Making and Context**

- Identify the object of assessment
- Identify the Critical Factors for Decision-Making
- Identify the SEA objectives
- Establish the appropriate forum of actors and the communication and involvement strategy
- Establish the integration between processes and identify decision windows

2- Analysis and assessment

- Use possible future scenarios and consider options and alternatives to achieve the proposed objectives
- Analyse the main trends associated to the CFD
- Assess and compare options that enable choices
- Assess opportunities and risks
- Propose planning, monitoring, management and assessment guidelines

3- Follow-up

- Develop a follow-up programme (planning, monitoring, management and assessment guidelines) and the institutional adjustments required for good governance

Source: Partidário, 2006b

The objective in the second phase - SEA Analysis and Assessment - is to perform the technical studies in accordance with the selected CFD and established level of detail and scope, thereby allowing trends to be analysed and the assessment of environmental and sustainability opportunities and risks, as well as the establishment of guidelines for implementation in the follow-up phase. The modelling of desirable futures, through scenarios development, has a core role in this phase in the identification and assessment of strategic options and, subsequently, of the proposals that shape the development strategy. The involvement of all relevant stakeholders in the discussion of the strategic risks and opportunities of the plan or programme in preparation is also a fundamental moment in this phase. The conclusions vis-à-vis the decision on the strategic options of the plan or programme that best integrate environmental and sustainability questions, as well as the guidelines to be followed and the monitoring measures to be applied in the follow-up phase, must be produced in this phase.

The sole and very clear objective of the third phase - Follow-up - is to proceed with a follow-up programme that must track the planning and programming cycle over the subsequent two, three, four or more years, and warrant its implementation. This follow-up programme is of vital importance in working the multiple dimensions of uncertainty that typify any strategic decision process, and in being able to carry on the SEA contribution relative to the integration of environmental and sustainability issues in the decision-making process.



Figure 6 - SEA Methodological Sequence

4.2 Description of the methodology

The application of the SEA methodology requires the simultaneous steering of the three fundamental components of the SEA model:

- technical component;
- process component;
- communication component.

as referred to in section 3.2. The aim is the suitable integration of SEA processes and transparency. For practical reasons and to facilitate descriptions each one of these components shall be tackled herein separately. The SEA activities relative to each of the three phases of the SEA methodology, as identified in Table 11, shall be discussed. These activities do not necessarily have to be developed in the stated order, but they must comply with the SEA process phase that they are associated to.

4.2.1 Technical component

Objective: The aim is to ensure the technical focus of the SEA that define its scope, to discuss the strategic options, to assess the opportunities and risks and to establish guidelines that comprise recommendation of the SEA and are subject to verification under the follow-up. The technical component includes the performance of relevant, yet brief, diagnosis for each of the CFD, the analysis of trends regarding possible future scenarios, the assessment of risks and opportunities in a way that is clear and qualified, and the execution of an SEA follow-up action programme. The following basic activities are included, according to the phases of the SEA methodology (Table 11):

Phase 1 - Critical Factors for Decision-Making and Context for SEA

1. Identification of, and understanding, the object of assessment

Method: The strategic dimension in the object of assessment (plan or programme) must be sought - focusing on what is intended to be achieved, on the intentions and objectives to be met, on the strategic options. Understand the object of assessment paying particular attention to its different dimensions, driving forces and strategic objectives. Ensure that the causes, and not just the symptoms, of problems that are underneath the objectives to be achieved, as established in the plans or programmes, are understood in the analysis of the object of assessment.

2. Definition of Critical Factors for Decision-Making (CFD). The CFD provide the structure to the strategic assessment and are directly dependent on the scale and context of the SEA. CFD are identified on a case-by-case basis and result from the cross-related analysis of the following elements (Figure 4):

- Strategic reference framework (SRF) for the SEA, with the international, European and national (plus regional and local, where relevant) macro-policy framework, and the long-term targets and objectives established for environmental and sustainability matters;
- Fundamental strategic issues (SI), that express the strategic objectives of the plan or programme and its potential for environmental implications. The interpretation of the object of assessment aids the identification of the SI;
- Environmental factors (EF) relevant for the assessment, selected according to the scope and scale of the object of assessment (select only the relevant environmental factors - see examples in Table 10).

Method: Perform a preliminary, brief diagnosis of the situation. The positive and negative inter-relations with the environment must be identified in the diagnosis. The potential inter-sectoral conflicts and opportunities that the plan or programme may create with other plans or programmes, must likewise be included in the diagnosis. It is therefore essential that the object of assessment is clearly and fully understood from the outset and that its SI and identified. Cumulative processes must likewise be investigated and considered. This preliminary diagnosis must identify the most relevant topics to be considered in the SEA, which allow the identification of the macro-policies, plans and programmes that must be included in the SRF to establish the assessment benchmark, as well as select the most relevant SI and EF.

The CFD must be few in number but relevant in order to ensure strategic focus (no less than three or more than eight in total, is recommended). The CFD are then expressed in assessment criteria and indicators that assist in the establishment of the scope, as well as in the level of detail of the information for analysis and assessment, which is a legal requirement.

A reference scale must be adopted for SEA, which is compatible with, and never more detailed than, the scale of the object of assessment. It is acceptable, in certain situations, to adopt a more detailed scale to confirm aspects that are relevant to understand the analysis, however the assessment must always be done at the reference scale. The analysis and assessment methods and techniques for each CFD, in phase 2, must also be defined.

Outcome: The identification of the CFD that will structure the assessment must result from this phase, as well as the sound and measurable assessment criteria and indicators and the methods and techniques for analysing and assessing each CFD.

Phase 2 - Technical analysis and assessment

Technical analysis and assessment must be carried out for each CFD, based on practical and objectives studies, which allow the relevant information to be gathered that will support the assessment. At the outset a synthesis of the assessment will consolidate the analysis and assessment of each CFD.

3. Use of possible future scenarios and consideration of options and alternatives to achieve the proposed objectives;

Method: SEA must consider the scenarios developed in the context of planning and programming, or request them if they have not been prepared. The scenarios are essential to perform a strategic analysis and assessment, as they allow the understanding of how each plan or programme will evolve in each scenario, as well as the likely significant effects of the plan or programme for each scenario and the options that can be considered in order to avoid or reduce those effects, while ensuring compliance with the strategic objectives.

The scenarios can be assessed using the CFD and respective assessment criteria and indicators, in order to obtain an environmental and sustainability appraisal of the scenarios and thus find out which scenario is more favourable for integrated and sustainable development.

Iteration with the planning and programming process to adjust the strategic development models, taking the outcome of scenario assessments into consideration, is fundamental.

4. Analysis of the main trends linked to the CFD

Method: The studies underpinning the analysis and assessment of the CFD must develop diagnoses that are adjusted to the analysis and assessment scale, considering the relevant environmental problems for the plan or programme, which is a legal requirement. Three key moments must be considered for the analysis of trends - past history, current situation and future trends. The consideration of the evolution that leads to the current situation is fundamental to the analysis. On the other end, the assessment of future trends must consider planning and programming scenarios, and also consider the expected trends in the absence of the plan or programme that is the object of assessment. This too is a legal requirement. Ensuring a dynamic analysis of each CFD is therefore essential.

5. Assessment and comparison of options that enable choice

Method: The information required for the assessment and comparison of the plan or programme's major options is provided by the past and future evolution trends (with and without plan or programme) and by the scenario assessment. The assessment criteria and indicators established for each CFD can be further detailed using the knowledge created and the information gathered, as well as the comments received during the participation and consultation processes throughout the SEA. Iteration with the planning and programming processes, to adjust the actions identified for the major strategic options, is fundamental. The aim is to identify the reasonable options of the plan or programme that best provide environmental benefits, that avoid or prevent negative effects and that ensure processes of sustainability. A SWOT analysis can be used to compare options.

6. Assess opportunities and risks

Method: The national, European and international SRF is the adopted referential for the assessment of opportunities and risks. The SRF includes the objectives and targets established for environmental protection (which is a legal requirement) as well as the sustainable development objectives and targets.

The assessment of opportunities and risks is based upon reasonable options that enable choices, considering the potential conflicts with sectoral, environmental and land use planning policies, and the consideration of cumulative processes. This is what is required by law to assess the significant effects of the plan or programme. A SWOT analysis can be used to synthesize the analysis and assessment.

The assessment of the institutional governance framework for the implementation of the strategy must also be considered, having regard to the institutional barriers that may create strategic conflicts vis-à-vis plan or programme implementation.

7. Propose planning or programming guidelines for monitoring, management and assessment

Method: Guidelines aimed at preventing, avoiding or reducing adverse effects must be established for each CFD and identify topics for the follow-up programme. The guidelines must address different phases of the planning and programming process, as well as the follow-up monitoring, management and assessment.

The guidelines establish a follow-up programme for planning or programming, for monitoring, for environmental and sustainability management and for assessment of the implementation of the plan or programme.

A framework for institutional governance that ensures compliance with the guidelines and the effective performance of SEA follow-up, must be established.

The plan or programme implementation monitoring programme is a legal requirement.

Outcome: The synthesis of the analysis and assessment must be a result in this phase, bridging together all the CFD relative to the assessment of opportunities and risks (significant effects of a strategic nature) and guidelines, including the contributions from the involvement of interested authorities and stakeholders, carried out before and during the analysis and assessment. The environmental report is also an outcome at this stage, preferentially using a preliminary version, which shall be corrected or updated following the legally required consultation and participation procedures.

Phase 3 - Follow-up

8. Develop a follow-up programme and the institutional arrangements required for good governance

Method: The application of a follow-up programme is crucial to “walk” with the planning and programming cycle, confirm and resolve crucial uncertainties, detect unexpected situations that have not been previously envisaged, including changes in strategic orientation that frequently occur in strategic processes, and ensure compliance with planning or programming, monitoring, management and assessment guidelines.

Follow-up must rely on the strategic assessment indicators developed in Phase 1 and subsequently adjusted in Phase 2, during analysis and assessment. A manual of good practices in environmental and sustainability management, to support the implementation of the plan or programme may be included in the follow-up programme. The follow-up programme must further include means of public engagement as well as the establishment of institutional framework for implementation, particularly in relation to the inter-linking of SEA processes and the planning and programming, environmental management and sustainability process management cycles.

Outcome: An environmental and sustainability management action programme for the strategy, which includes operational indicators, environmental and sustainability management measures and an institutional framework linked to the governance framework for the plan or programme implementation.

4.2.2 Process component

Objective: The intention of this component is to ensure the linkage between the SEA process and the planning or programming process. It comprises activities which aim to ensure that SEA performs closely in line with the planning and programming cycle, as well as the technical and political conditions to conduct the SEA. It includes:

- Linkage and management of processes, particularly in relation to the link between SEA activities and the development of the planning or programming processes, namely the identification of opportunities for environmental integration, the establishment of adequate timings for iteration and the responsibility framework;
- Overview of the process of preparation of technical studies that support decision-making;
- Overview of institutional and stakeholders participation and engagement processes;

- Provision of systematic and iterative decision-focused suggestions or recommendations throughout the planning process.

The following activities must be developed according to the SEA methodology phases (Table 11):

Phase 1 - Critical Factors for Decision-Making and Context for SEA

1. Identification and establishment of the SEA objective jointly with the proponent of the object of assessment;
2. Establishment of an SEA process and respective time frame, subsequent to the analysis of the process underlying the preparation-implementation-review cycle of the object of assessment, vis-à-vis activities and respective objectives, timings, authorities involved and responsibilities;
3. Identification of the possible contribution of SEA at critical decision-making moments - analysis of the planning or programming cycle and the type of information that can be prepared to inform decision-makers on environmental and sustainability issues;
4. Preparation of guiding suggestions and conclusions that provide information to the planning and programming process in a timely manner;
5. Definition of the framework of competent authorities and relevant stakeholders for involvement in the SEA, which should be consulted on the pertinent issues that may permit a more precise analysis of the CFD and assessment of opportunities and risks, improved SEA guidelines and a follow-up programme.
6. Preparation and discussion of the CFD, respective criteria and indicators, ensuring the involvement of the relevant stakeholders and, at the very least, the authorities with environmental responsibility as legally required.

Phase 2 - Analysis and Assessment

7. Definition of the content and format of the SEA studies and input (guiding suggestions and conclusions, CFD Report, preliminary Environmental Report for consultation, Environmental Report and Environmental Statement);
8. Overview of studies to be performed per CFD, taking the results of the participative processes into account;
9. Ensuring the linkage between the SEA processes and the planning or programming processes relative to the preparation and analysis of scenarios and discussion of the major options;
10. Consultation of the institutions identified as being critical and fundamental to the process and discussion on the merits and advantages of integrating the environmental and sustainability dimension through SEA, and what are its contributions.

Phase 3 - Follow-up

11. Overview of the process throughout a decision cycle, ensuring the institutional and procedural coordination with the execution of the plan or programme.

4.2.3 Communication component

Objective: The purpose with this component is to ensure that the SEA is accessible to all types of interested public. The following fundamental aspects should be considered: the type of public to be involved, the form of communication, the method and the scheduling of their involvement.

The participation and involvement of the authorities with specific environmental responsibilities, and the interested public, is legally required. The organization responsible for preparing the plan

or programme is also responsible for establishing the consultation processes required by law, in particularly with respect to:

- whether the plan or programme is subject to environmental assessment, requesting, as a minimum, the opinion of the authorities with specific environmental responsibilities;
- the scope of the SEA, requesting, as a minimum, the opinion of the authorities with specific environmental responsibilities;
- the content of the environmental report, which is submitted to public and institutional consultation, as well as to other Member States whenever the plan or programme is likely to produce significant impact in those Member States.

Nonetheless, as previously stated, public engagement namely through information, dialogue, negotiation and persuasion, is also a technique in participative strategic approaches. According to the principles of transparency, accountability and participation, good practice recommends that communication strategies be adopted to ensure the active and constructive involvement of different target groups, which may become strategic to the success of the implementation of the plan or programme. Table 12 provides types of target public that may be relevant in SEA.

The communication strategy must take into account issues of confidentiality often imposed by certain strategic decision processes. The information that may be conditioned or made available shall be considered, as well as when it can be made available vis-à-vis the timing of the SEA and of the planning or programming processes, to ensure participation and prevent the absence of involvement and the rise of social conflicts as a result of insufficient, or deficient, communication.

Quadro 12 – Tipos de público-alvo relevantes em AAE

For broader involvement: the general public.

For more oriented and selective involvement:

- Central government agencies with relevance to the pertinent topics or sectors in each case
- Regional Development Coordination Committees
- Local authorities
- Environmental and Development Non-Governmental Organisations (NGOs)
- Professional Associations
- Business Associations
- Parliamentary and Political Groups
- Universities
- Private Companies
- Individual experts

The following activities must be carried out according to the SEA methodology phases (Table 11):

Phase 1 - Critical Factors for Decision-Making and Context for SEA

1. Definition of a strategy for communication and involvement of competent authorities and relevant stakeholders in the SEA process, who must be engaged in the CFD discussion process, in the assessment of opportunities and risks, in the formulation of SEA guidelines and in the follow-up programme;
2. Involvement of institutions and stakeholders deemed to be critical and fundamental to the process, and discussion on the merits and advantages of integrating the environmental and sustainability dimensions through the SEA and its outcomes;
3. Application of communication techniques that facilitate the involvement and consultation of institutions and stakeholders in the definition of the CFD.

Phase 2 - Analysis and assessment

4. Consultation of competent authorities and other relevant stakeholders regarding the identification of opportunities and risks vis-a-vis the object of assessment;
5. Application of the forms of communication that facilitate the involvement and consultation of institutions and stakeholders with an interest in the analysis and assessment of the plan or programme.

Phase 3 - Follow-up

6. Review and implementation of a communication strategy and the involvement of competent authorities and relevant stakeholders to overview the plan or programme implementation.

Method: Different communication and public involvement methods must be used, depending on the characteristics of the relevant type of target groups, using appropriate communication means, both written and pictorial. The timing for this involvement is a function of the SEA and the planning and programming processes. Some possible public involvement methods are suggested, without excluding the possibility of using others, and notwithstanding legal requirements:

- Preparation of informative newsletters, using accessible language and with a frequency suited to the planning and programming process.
- Consultation of a set of authorities and selected public via questionnaire in order to obtain feedback on the CFD.
- Meetings aimed at specific target groups, such as non-governmental organisations and business associations, which may prove to be strategic in different process phases, both during the identification of CFD, during the analysis and assessment of risks and opportunities, and during consultation on the environmental report, to obtain substantial input and debated thoughts.
- Broader reflection and discussion with relevant authorities and selected public through forum or workshop-like sessions, for the discussion of analysis and assessment results and preliminary plan and programme proposals, through dedicated discussion groups.
- Dissemination, via electronic media (for example through dedicated web sites), of documents and information to the general public, particularly from the CFD, SRF, environmental report and environmental statement, inviting general comment.

4.3 Preparation of documents

Documents providing the necessary information to the decision-making process must be prepared throughout the SEA procedure. The following documents, which meet legal requirements, must be prepared as a minimum:

- 1- Critical Factors for Decision-Making Report (CFDR) - this corresponds to the conclusion of the first phase of the SEA process and its purpose is to establish the scope of the SEA as well as the level of detail of the information to be included in the final report, this being a legal requirement. The CFDR must be subject, according to law, to the opinion of the authorities with specific environmental responsibility, though good practice advises that the CFDR must also be made available to all relevant stakeholders for consultation. Annex IV comprises a suggested layout for the CFDR.
- 2- Environmental Report (ER) - The drafting of the ER must comply with legal requirements, which are safeguarded through the application of this methodology (see Annex III), to the detail and on a scale that is compatible with the object of assessment, and corresponding to the analysis and assessment carried out. Preferably a preliminary ER should be prepared, together with a draft of the plan or programme in the respective public discussion phase, in order to obtain the comments of the relevant stakeholders. This enables the subsequent consideration in the final report of all relevant contributions and comments from relevant stakeholders.

The preparation of the ER must constitute the corollary of all activities carried out, taking into account the analyses and assessments implemented and the contributions resulting from the

involvement of the competent authorities and relevant stakeholders in those phases. The final environmental report must be a written record of the entire process up to submittal to the plan or programme approval process. It must accompany the final version of the plan or programme, as legally required. Annex V comprises a suggestion layout for the environmental report.

- 3- Environmental Statement (ES) - The Environmental Statement is a legal requirement that need to be prepared after the final decision regarding the plan or programme. It aims to inform the public and the consulted authorities on the decision made, particularly as to how the environmental considerations were taken into account during the preparation and drafting of the plan or programme, and it presents the plan or programme and the monitoring measures. This declaration must contain the following items, pursuant to national legislation:
- i) How environmental considerations and the environmental report were included in the plan or programme;
 - ii) The observations of the authorities and the public on the environmental report, made during the consultation, and the results of the respective weighting given to these observations.
The reasons for the non-inclusion of those observations must be provided;
 - iii) The outcome of the transboundary consultations performed;
 - iv) The reasons for approving the plan or programme in light of other reasonable alternatives dealt with during its drafting;
 - v) The monitoring measures envisaged.

Good practice recommends, notwithstanding the formal preparation of these documents, that diverse and successive remarks or short reports should be produced over the entire SEA process, with the objective of inputting critical information to the decision-making process that may strategically influence the decision. These successive remarks or reports may be used, depending on the communication strategy adopted, to keep the relevant stakeholders informed, for example through newsletters. These inputs are needed at critical decision moments that are identified or in response to specific requests during the planning or programming process.

4.4 Building up a team to perform SEA

The team that shall perform the SEA must be set up so that it may respond to the iterative, cyclical nature and multidisciplinary engaged in an SEA. There is much more that need to be done than just preparing an Environmental Report and an Environmental Statement, if the purpose is to guarantee SEA efficiency. The planning process requires assistance and support, regular inputs to ensure a strategic approach relative to the decision making process. Thus, the build up of the SEA team must ensure resources that satisfy the three main SEA components - technical, process and communication.

Technical component - the expertise that need to be brought together in a SEA team is set by the necessary studies to be performed for each CFD. This team must have skills in the technical fields that are relevant to analyse the CFD in order to guarantee a multidisciplinary assessment, and it must be managed in an interdisciplinary manner. The team must have professional experience and scientific and technical know-how in the technical areas that are relevant for SEA and for the object of assessment, but above all, the team must be able to understand the difference between SEA and EIA to avoid the level of detail inherent to EIA and to ensure the necessary focus and analysis, and the flexibility, that the strategic approach requires.

Process component - process coordination must be carried out by the SEA team management, which takes up this role of performing the activities assigned to this component, including designing and maintaining the interlinkage between the SEA and the planning and programming processes. The team responsible for process coordination shall be alerted to identify critical decision moments - the decision windows, and to ensure that a contribution from the SEA, even if only small, is fundamental in influencing, in a constructive and encouraging manner, the strategic pathway being drawn. The SEA team management is also responsible for coordinating the SEA studies being performed for each CFD, to ensure their focus and interconnection. Both the SEA team management and the process coordination must be carried out by a strategy and impact assessment specialist. This specialist may create a small support team to assist his/her work. In more complex processes it is advisable that a

dedicated specialist or a small team, independent from the SEA technical studies management, is set up for steering the process component.

Communication component - The recruitment of specialists exclusively devoted to the preparation of documents for communication to all relevant stakeholders, namely by internet, as well as the processing of all information resulting from the involvement of the authorities and relevant public, is recommended to be included in the SEA team. Public involvement in SEA is, as already stated, also a technique and not only a legal obligation. The objective of the communication strategy can just be informational, but it can also be an interaction objective, depending on the moment in the interlinked SEA and planning or programme processes. Dialogue, negotiation and persuasion are important techniques in SEA, whether or not they are applied to consensus-driven approaches. The participation and involvement techniques must, in particular, be adjusted to the different target groups and their characteristics.

5. Closing remarks

The methodology presented and described in the Guide has been tested in a number of situations (namely IDAD, 2007; REN, 2007; IST/REN, 2007 and Partidário, 2006c) and its applicability as a structuring strategic-based methodology is being confirmed. The range of stated examples account for just some of its diverse applications.

Nevertheless, the methodology must not be seen as the recipe for application *ipsis verbi* in all cases. The SEA, as already mentioned, must be adjusted to the different decision making contexts, to the different scales and objects of assessment. The SEA methodology is thus flexible, in order to increase the possibilities of success. It must be adjusted on a case-by-case basis.

The Guide establishes the basic concepts, components and elements of the methodology, and the activities that are fundamental in conducting an SEA that is strategic in nature. In order to meet different decision-related realities and requirements, the methodology is adjustable yet strongly dependent on its key success factors, which are its fundamental structural elements, described in section 3.3.

Some of the methodological aspects that shall surely vary according to the SEA context and decision needs are: the structuring of the object of assessment for SEA (in strategic objectives, options or proposals), the type of options and alternatives used (integrated or single), the application of techniques (such as scenario assessment, cost-effectiveness or SWOT analysis), the formulation of assessment criteria, indicators or parameters, the relationship between the SEA reference scale and the analysis scales, the identification of the relevant environmental factors, the diversity and detail of the strategic reference framework or the capacity to reduce the number of critical factors for decision-making to the essential minimum. But the methodological concept for SEA is certainly that of a strategic and flexible approach that must, above all, respond to decisional needs in a timely manner.

References

- Academia das Ciências de Lisboa. 2001. *Dicionário da Língua Portuguesa Contemporânea*, Verbo, Lisboa.
- Caratti P, Dalkmann H and Jiliberto R 2004. *Analysing Strategic Environmental Assessment*, Edward Elgar, Cheltenham.
- DGOTDU (Direcção-Geral do Ordenamento do Território e Desenvolvimento Urbano) (2003), *Guia para Avaliação Estratégica de Impactes em Ordenamento do Território*, MCOTA - DGOTDU, Lisboa.
- Heinberg, R. 2007. *Five axioms of sustainability*. <http://globalpublicmedia.com/articles/851>.
- IAIA (International Association for Impact Assessment) 2002. Strategic Environmental Assessment Performance Criteria. IAIA. (<http://www.iaia.org>).
- IDAD (Instituto do Ambiente e Desenvolvimento), 2007. Avaliação Ambiental Estratégica do Programa Portugal Logístico - Relatório Ambiental. Associação dos Portos de Portugal. Lisboa.
- IST/REN (Rede Eléctrica Nacional, S.A.), 2007. Avaliação Ambiental Estratégica do Plano de Desenvolvimento e Investimento da Rede Nacional de Transporte de Electricidade (PDIRT) 2009 - 2014 (2019) - Relatório de Factores Críticos para a Decisão, REN, Lisboa.
- Mintzberg, H. 1994. *The Rise and Fall of Strategic Planning*. Prentice Hall International, Cornwall.
- Partidário, 2006a, M.R. Programa Portugal Logístico - Termos de Referência e Especificações Técnicas para Avaliação Ambiental Estratégica, Administração do Porto do Douro e Leixões.
- Partidário, M.R. 2006b. Metodologia de base estratégica para AAE - uma proposta, *Actas da 2ª Conferência Nacional de Avaliação de Impactes*, APAI, Castelo Branco, 18-20 de Outubro.
- Partidário, M.R. 2006c. Termos de Referência e Metodologia para Avaliação Ambiental Estratégica das propostas de Programas Operacionais, no âmbito do Quadro de Referência Estratégico Nacional, QCA IV (2007-2013) e Directiva Europeia 2001/42/CE, Observatório do QCAIII, Lisboa.
- Partidário, M.R. 2007. Scales and associated data - what is enough for SEA needs?, *Environmental Impact Assessment Review*, 27: 460-478.
- REN (Rede Eléctrica Nacional, S.A.) 2007. Programa Nacional de Barragens com Elevado Potencial Hidroeléctrico - caderno de encargos. Lisboa.

Bibliography

- Dalal-Clayton, B. and Sadler, B., 2005, *Strategic Environmental Assessment, a sourcebook and reference guide to international experience*, Earthscan, London.
- DG Energy and Transport, 2005, *Beacon Manual on Strategic Environmental Assessment of Transport Infrastructure Plans* (<http://ec.europa.eu/environment/eia/sea-support.htm>)
- EC (European Commission), 2001, *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*, Luxembourg, 27 June 2001, (PE-CONS 3619/3/01 REV 3), <http://europa.eu.int/comm/environment/eia/sea-support.htm> (04/07/01).
- GRDP (Greening Regional Development Programmes network), 2006, *Handbook on SEA for Cohesion Policy 2007-2013* (<http://www.grdp.org>).
- Hong-Kong Environmental Protection Department, 2004. *SEA Manual*, HKSAR-EPD.
- Jones, C., Baker, M., Crater, J., Jay, S., Short, M. and Wood, C. 2005. *Strategic Environmental Assessment and Land Use Planning - an international evaluation*, Earthscan, London.
- OECD-DAC, 2006. *Good Practice Guide on applying Strategic Environmental Assessment (SEA) in Development Cooperation*, OECD, Paris. (<http://www.seataskteam.net/>).
- Nilsson, M. and Dalkmann, H., 2001. Decision Making and Strategic Environmental Assessment, *Journal of Environmental Assessment Policy and Management*. Vol. 3 (3), 305-327.
- Partidário, M.R. (1999) *Strategic Environmental Assessment - principles and potential*. In *Handbook of Environmental Impact Assessment*, Vol. Blackwell. (Ed, Petts, J.) London.
- Partidário, M.R. (2005). The contribution of Strategic Impact Assessment to Planning Evaluation, in D. Miller, D. and D. Patassini (eds.), *Accounting for non-market values in planning evaluation*, Ashgate Publishing.
- Sadler, B., Aschmann, R., Dusik, J., Fischer, T., Partidário, M.R. and Verheem, R. (2008), *Handbook on SEA*, Earthscan, London (in press),
- Schmidt, M., João, E. and Albrecht, E. (Eds) (2005), *Implementing Strategic Environmental Assessment*, Springer-Verlag.
- Sheate, W., Byron, H., Dagg, S. and Cooper, L. 2005, *The relationship between the EIA and SEA Directives - final report to the European Commission*, Contract n. ENV.G.4/ETU/2004/0020r, Imperial College London Consultants, London (<http://ec.europa.eu/environment/eia/>)
- Therivel, R., 2004, *Strategic Environmental Assessment in Action*, London: Earthscan.
- UNECE/REC, 2006. *Resource Manual to Support Application of the UNECE Protocol on SEA Draft for consultation*, UNECE and REC.

Glossary

Assessment - the action of assessing. It is to ascertain the value attributed to something, by more or less meticulous calculation, expressing a value judgement. It is also the approximate determination of magnitude or a quantity without resorting to direct measurement, by estimation (Academia das Ciências de Lisboa, 2001). Assessment entails the assumption that an object of assessment exists, the value of which is estimated, and that there is an assessor, expert or any other qualified person that knows how to gauge the value or qualities of something (Academia das Ciências de Lisboa, 2001).

Assessment criteria - that which serves to make distinctions or choices; serves to distinguish values; forms the basis for a judgement, reason, rationale; a necessary and sufficient condition (Porto Editora, 2007).

Critical Factors for Decision-Making (CFD) - constitute the fundamental topics for the decision upon which SEA must be focused, they structure the analysis and assessment of opportunities and risks in SEA, identify the technical studies that need to be carried out to gather the information required for a decision. The CFD result from the integrated analysis of the Strategic Reference Framework, the strategic issues of the object of assessment and the environmental factors. They transpose the concept of scope used in EIA to a strategic level assessment, and satisfy the requirements on the scope and level of detail of the environmental assessment, as legally required. They must preferably be subject to public participation.

Decision windows - moments in the decision process in which critical decisions are taken and which can benefit from SEA input. They comprise a strategic opportunity to influence decision and to ensure the integration of environmental issues and sustainability guidelines.

Environment - defined in the Portuguese Basic Environment Law (Law 11/87, of 7 April) the set of physical, chemical and biological systems and their relationships with economic, social and cultural factors with direct or indirect, gradual or immediate effect on living beings and man's quality of life. The Academia de Ciências de Lisboa (2001) (Lisbon Academy of Sciences) dictionary defines environment as that which surrounds, envelops, which is relative to the physical, social or moral surroundings in which humans live.

Environmental Assessment - the identification, description and evaluation of the likely significant effects on the environment of implementing a plan or programme, carried out during the preparation and design of the plan or programme and before its approval or its submittal to legislation, described in a report and through consultation processes and the appraisal of the results obtained in the final report on the plan or programme, and the public disclosure of the final decision (Decree-Law 232/2007 of 15 June)

Environmental Factors (EF) - The legally established environmental factors define the relevant environmental scope, adjusted to the topic, context and scale of the object of assessment.

Environmental Impact Assessment - the process of identifying, forecasting, assessing and mitigating the biophysical effects (combined physical and ecological effects), social effects and other relevant effects of development proposals before fundamental decisions are taken and commitments made (IAIA, 1999).

Object of assessment - the SEA object of assessment must empathize with the objectives and major strategic options included in the planning and programming process

Follow-up - the process of tracking the planning and programming cycle, ensuring the on-going contribution of the SEA as a facilitator of the integration of environmental and sustainability issues in the decision-making process. It works on the multiple dimensions of uncertainty that typify any strategic decision process. SEA follow-up is heavily based on performance assessment and monitoring, frequently and swiftly adjusting to the decision cycle, which means that the SEA must follow the strategy's drive.

Governance - the set of rules, processes and practices relative to the exercise of power, essentially in relation to accountability, transparency, coherence, efficiency and effectiveness.

Indicator - that which indicates or provides indication; an analytical form in which the quantity measured in the real space under study is compared to a scientific or arbitrary standard.

Monitoring - the process of observation and systematic collection of data on the state of the environment or on the environmental effects of certain actions, and the periodic description of those effects.

Plan - Result of the planning and management process whenever intentions and rules relative to measures and actions adopted to resolve and prevent problems, which define the plan's scope, are explained. Action proposal, with priorities, options and measures for the allocation of resources, according to its suitability and availability, following the guidance and implementation of relevant global and sectoral policies.

Programme - Organised agenda with objectives, the detailing of investment activities and programmes, defined in the relevant plan and policy framework.

Relevance - that which is important or pertinent, the characteristic of that which is relevant; something standing apart, or emphasised or which is significant (Porto Editora, 2007).

Scenarios - Possible configuration of the system under study in the horizon year, seeking to achieve a framework of objectives, with the detailing of lateral effects resulting from the proposed process. Each scenario corresponds to a systematic vision of forecasts and trends.

Strategy - a concept that originated in military science and generally refers to the study and planning of means to achieve policy objectives. It can also be defined as the set of actions deemed to be important means to achieve objectives (Academia das Ciências de Lisboa, 2001). Strategic approaches in policy and planning, according to Mintzberg (1994), are not intended to find out what can happen in the future but aim to plan and steer actions that make up possible routes to a desirable future.

Strategic Environmental Assessment - a process that integrates environmental and sustainability questions, assessing environmental impact and the impact on sustainability processes, through visions, intentions and strategic proposals, with the final objective of improving the decision.

Strategic Issues (SI) - objectives and core principles associated to the object of assessment and contribute to the definition of the CFD.

Strategic options - alternatives that allow the proposed strategic objectives to be reached.

Strategic Reference Framework (SRF) - It is the strategic macro-framework of the SEA, creating an assessment benchmark. It gathers under its umbrella the sustainability and environmental policy macro-objectives established in an international, European and national context that are relevant to assessment and are legally required. It also links to other plans and programmes that the SEA object of assessment establishes relationships with, also a legal requirement.

Sustainability - is a relative concept that is based on the term 'sustainable', which according to Heinberg (2007) means "that which can be maintained over time". It is associated to the concept of sustainable development, which has a number of formal definitions, the most well-known being that given by the World Commission on Environment and Development in the Brundtland Report: "the development that satisfies the needs of the present generation without compromising the capacity of future generations to satisfy their own needs". Wikipedia (26/08/2007) defines sustainability as the characteristic of a process or state that can be indefinitely maintained at a certain level. The term 'sustainability' in this Guide designates the state or the process resulting from the achievement of sustainable development objectives over a long period of time.

SWOT Analysis - a strategic management technique, adopts a logical, subjective approach that assists in the structuring of ideas. An instrument to foster the comprehension and decision-taking in different situations in business areas and organisations. It allows the strategies, stances and orientation of a proposal or idea to be reviewed.

SWOT - Strengths, Weaknesses, Opportunities and Threats. See SWOT analysis.

Suggestions and Comments

The methodology described in this Guide corresponds to a general orientation that must be adjusted to each specific case, depending on the application context of the SEA and the type of plan or programme that will constitute the object of SEA assessment.

We would be grateful if all doubts or comments arising from the application of this methodology to concrete cases could be sent to the Portuguese Environment Agency (contact details), with the ultimate aim of improving the methodology. The following details must be provided in such a contact:

Name:

Organisation:

Date:

SEA applied to the Plan or Programme:

Context:

Scale:

Plan or programme phase:

Other characteristics of the plan or programme:

SEA application period:

Suggestions or comments relative to the methodology:

Annex I – Decree-Law no. 232/2007 of 15 June

Ministry of the Environment, Spatial Planning and Regional Development

Decree-Law no. 232/2007 of 15 June

The need to subject a series of projects to a prior assessment environmental impact assessment is consecrated in the national legal framework, under the provisions of the Decree-Law no. 69/2000 of 3 May, in follow-up to Decree-Law no. 74/2001 of 26 February, Decree-Law no. 69/2003 of 10 April, by Law no. 12/2004 of 30 March, and Decree-Law no. 197/2005 of 8 November.

Notwithstanding, the national experience – as well as that of other similar legal frameworks which have an similar instrument for project environmental impact assessment – demonstrated from early on that such assessments are carried out at times when the opportunities for taking different options and considering different development alternatives are very limited. Indeed, there are accounts in which a decision regarding the characteristics of a certain project is previously conditioned by plans or programmes which set the framework for future development consent of projects, removing the usefulness and extent of that project's environmental impact assessment.

The Kiev Protocol on Strategic Environmental Assessment in a transboundary context was a response to this reality and is important in the preparation and adoption of plans, programmes and policies as a means of reinforcing the systematic analysis of their significant environmental effects. **Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment**, is transposed to the national legal framework by the present Decree-Law. The purpose of the referred Directive is to ensure that, through the adoption of a procedural model and through the participation of the public and of other authorities with responsibilities in environmental matters, the environmental effects of a certain plan or programme, produced or adopted by an authority in its public undertakings, are previously identified and assessed during the preparation phase and prior to the respective adoption.

Thus, the environmental assessment of plans and programmes is considered an integral process to the decision-making procedure, and which is intended to incorporate a series of environmental values in that same decision. More specifically, the environmental assessment of plans and programmes starting at the beginning of the public decision-making procedure constitutes a continuous and systematic process of environmental quality assessment of alternative visions and development perspectives incorporated in planning or programming which sets the framework for future development consent of projects, ensuring the overall integration of the relevant biophysical, economic, social and political issues which may be under consideration. The implementation of an environmental assessment at the planning and programming level ensures that the environmental effects are taken into account during preparation of a plan or programme and before its adoption, thus contributing to the adoption of more effective and sustainable innovative solutions and of monitoring measures that avoid or reduce significant negative effects on the environment arising from that plan or programme's implementation. In other words, the possible negative environmental effects of a certain development option are taken into account at a phase preceding the assessment of the environmental impact of projects already in force in our legislation.

In this context, particular importance is placed on the preparation of an environmental report by the authority responsible for the preparation of the plan or programme; this does not constitute a final characterisation of the environmental situation, but rather an initial analysis upon which the development of the plan or programme will be based when preparing the final version.

This ensures the application of the Aarhus Convention of 25 June 1998, approved subject to ratification by Resolution 11/2003 of the Assembly of the Republic of 25 February, ratified by the President of the Republic's Decree no. 9/2003 of 25 February, as well as transposing to the national legislation Directive 2003/35/CE of the European Parliament and Council of 26 May providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment. Participation by the public is thus foreseen in the environmental assessment procedure prior to the approval decision for plans and programmes, with a view to raising the awareness of the public on environmental issues as a citizenships right, as well as prior to the preparation of a final declaration, which content is equally public, reporting on the way by which final considerations were reflected in the plan or programme under approval.

In order to ensure coherence and rationality with the project environmental impact assessment process, and to avoid disharmony between assessments, a linkage is established with the legislation relative to the environmental impact assessment (EIA) of the effects of public and private projects.

The environmental assessment of plans and programmes has a different function to that of a project's impact – the former has a strategic function, analysing wide options, while the latter the function of assessing a project's impact in relation to its concrete implementation. However, it is possible that the assessment procedure for plans and programmes yields results which may be useful to the environmental impact assessment of projects set within the framework of those same plans or programmes. Accordingly, there is a duty to take into account the environmental assessment of a plan or programme in the final decision of an EIA procedure relating to a project which implements the options taken in the context of the referred plan or programme. The

environmental assessment of plans and programmes cannot bind the decision of the EIA, but the administration should justify a divergence between such assessment and the EIA decision.

Regulation of the environmental assessment of instruments of territorial management, which also falls under the scope of application of Directive 2001/42/CE of the European Parliament and Council of 27 June, is subject to Decree-Law no. 380/99 of 22 September, amended by Decree-Law no. 310/2003 of 10 December, which determines the framework for urban and spatial planning policy on the provision of Law no. 48/98 of 11 August, and which defines the regime for preparation, adoption, implementation and assessment of the instruments of territorial management. As such, it is preferable to incorporate environmental impact procedures within the procedures for development, monitoring, participation and adoption of those plans, leading to procedural simplification and greater efficiency of the administrative action.

Governing bodies of the Autonomous Regions and the National Association of Portuguese Municipalities were consulted.

Thus:

Pursuant to subparagraph 1 a) of Article 198 of the Constitution, the Government decrees the following:

Article 1 - Objectives

1 – The present Decree-Law establishes the regime by which the environmental effects of certain plans and programmes are assessed, transposing to the national legislation Directive 2001/42/CE of the European Parliament and Council of 27 June, and Directive 2003/35/CE of the European Parliament and Council of 26 May.

2 – The environmental assessment provided in the present Decree-Law does not preclude the implementation of the environmental impact assessment regime for public and private projects, under in the provision of the terms of Decree-Law no. 69/2000 of 3 May, amended by Decree-Law no. 197/2005 of 8 November, notwithstanding the provisions of Article 13 of the present Decree-Law.

Article 2 - Definitions

For the purpose of this Decree-Law, the following definitions apply:

- a) “Environmental Assessment” shall mean the identification, description and assessment of potential significant effects on the environment resulting from a plan or programme, carried out during the preparation and development procedure of the plan or programme prior to its adoption or submission to a legislative procedure, taking into account the environmental report and the results of the consultations in decision-making regarding the plan or programme and the provision of information on the decision;
- b) “Plans and programmes” shall mean plans and programmes, including those co-financed by the European Union:
 - i) which preparation, modification or revision by national, regional or local authorities or other authorities holding public powers, or approval under a legislative procedure, results from a legislative, regulatory or administrative provision; and
 - ii) Which do not have the sole purpose of serving national defense or civil emergency, are not financial or budget plans or are not co-financed under the current respective programming periods for Council Regulation 1989/2006 of 21 December, and Council Regulation 1257/99.

Article 3 - Scope

1 – The following are subject to environmental assessment:

- a) The plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use and which set the framework for future development consent of projects listed in Annexes I and II to Decree-Law no. 69/2000 of 3 May, in its present amendment;
- b) Plans and programmes which, due to likely effects on a site included in the National List of Sites, a site of Community Interest, a site in a Special Area of Conservation or a site in a Special Area of Protection, have been determined to require an assessment of environmental effects under the provision of Article 10 of Decree-Law no. 140/99 of 24 April, amended by Decree-Law no. 49/2005 of 25 February.
- c) Plans and programmes which are not referred to above but which set the framework for future development consent of projects and which are determined as likely to cause significant effects on the environment.

2 – It is the competence of the authority responsible for the preparation of the plan or programme to determine whether an environmental assessment is required.

3 – The determination of the requirement of an environmental assessment by a plan or programme can be subject by the authority referred to above to consultation of authorities which, by reason of their specific environmental responsibilities, are likely to be concerned by the environmental effects of implementing plans and programmes, namely the Portuguese Environment Agency, the Nature and Biodiversity Conservation Institute, the Water Institute, the Hydrographical Region Administrations, the Regional Coordination and Development Commissions, health authorities or Municipalities affected by the plan or programme. These consulted authorities shall have a period of 20 days in which to express their opinions.

4 – Opinions expressed outside the time frame referred to above are not considered by the responsible authority with regard to the decision to submit the plan or programme to an environmental assessment.

5 – Plans and programmes containing provisions relevant to the subsequent decision-making process on adoption, namely regarding need, size, location, nature or operational conditions, are considered as setting the framework for future projects.

6 – The determination of a plan or programme as being likely to have significant effects on the environment, under the provision of 1 c), above, is undertaken by joint order of the member of Government responsible for the environment and the member of Government with competence in relation to the specific subject, in accordance with the criteria included in the annex to the present Decree-Law, of which it is an integral part, after consultation with authorities which, by reason of their specific environmental responsibilities, are likely to be concerned by the environmental effects of implementing plans and programmes.

7 – The determination referred to above shall be made public by the authority responsible for the preparation of the plan or programme by publishing on the corresponding website.

8 – Whenever a plan or programme referred in 1) of the present Article is also subject to an environmental assessment procedure under the terms of specific legislation, only the procedure under the provision of the present Decree-Law shall be applied, and requirements of the legislation will be observed.

9 – The environmental assessment of plans relative to which the assessment of environmental effects is determined to be required under Article 10 of Decree-Law no. 140/99 of 24 April, amended by Decree-Law no. 49/2005 of 24 February, shall include information required to determine its effects on the conservation objectives of a site included in the National List of Sites, a site of Community Interest, a site in a Special Area of Conservation or a site in a Special Area of Protection.

Article 4 - Exemptions

1 – Plans and programmes referred to in 1 a) and b) of the previous Article, which determines the use of small areas at local level or are minor modifications to the above plans or programmes referred therein shall only be subject to environmental assessment in cases where those plans and programmes are likely to have significant effects on the environment, under the provision of section 6 of the previous Article.

2 – The authority responsible for the preparation of the plan or programme may seek, within 30 days, the expression of opinions on the subject referred to above by the authorities which, by reason of their specific environmental responsibilities, are likely to be concerned by the environmental effects of implementing plans and programmes.

Article 5 - Content of the Environmental Assessment

1 – It is the competence of the authority responsible for the preparation of the plan or programme to determine the scope of the environmental assessment, as well as to determine the level of detail of the information to be included in the environmental report.

2 – Likely environmental effects are excluded from the scope of an environmental assessment of a plan or programme integrated within a system of plans or programmes, where these are likely to be more aptly assessed in the environmental assessment of plans or programmes at a different level of the same system.

3 – The authority responsible for the preparation of the plan or programme requests of the authorities which, by reason of their specific environmental responsibilities, are likely to be concerned by the environmental effects of implementing plans and programmes, the expression of an opinion about the scope of the environmental assessment and the extent of information to be included in the environmental report.

4 – Opinions requested as referred to above shall be expressed within 20 days.

5 – Whenever the authority responsible for the plan or programme requests an opinion under the provision of Article 3 (3), that opinion shall refer to the scope of the environmental assessment and the extent of information to be included in the environmental report.

Article 6 - Environmental report

1 – Together with the plan or programme which is subject to environmental assessment, the responsible authority shall prepare

an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated, and the following shall be provided in light of the definition of its scope:

- a) An outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;
- b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;
- c) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Decree-Law no. 140/99 of 24 April, amended by Decree-Law no. 49/2005 of 24 February;
- d) The environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;
- e) The likely significant effects on the environment arising from the implementation of the plan or programme, including secondary, cumulative or synergistic, short, medium and long-term, permanent and temporary, positive and negative, effects on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;
- f) The measures designed to prevent, reduce and, as fully as possible offset any significant adverse effects on the environment resulting from implementing the plan or programme;
- g) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties encountered in compiling the required information;
- h) A description of the measures envisaged concerning monitoring in accordance with Article 11;
- i) A non technical summary of the information provided under the headings referred to above.

2 – The environmental report shall include the information that may reasonably be required for preparing the environmental assessment, taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.

3 – Relevant information available on environmental effects of the plans and programmes and obtained at other levels of decision-making or through other Community legislation may be used in preparing the environmental report.

4 – The Portuguese Environment Agency prepares and submits on a yearly basis to the Government member responsible for the environment a report comprising a general overview of conformity between the environmental reports and the content of the present Decree-Law and proposing measures deemed necessary.

5 – It is the competence of the Portuguese Environment Agency to communicate to the European Commission the adopted improvement measures.

Article 7 - Consultations

1 – Prior to the adoption of the plan or programme and the accompanying environmental report, the authority responsible for the development of the plan or programme shall provide an opportunity for the expression of an opinion to the authorities which, by reason of their specific environmental responsibilities, are likely to be concerned by the environmental effects of implementing plans and programmes.

2 – Depending on the nature and complexity of the plan or programme, the responsible authority may also consult institutions or experts of recognised merit in the respective field.

3 – The proposed plan or programme and the accompanying environmental report are communicated to the authorities referred to above, which have a time frame of 30 days to express an opinion.

4 – If the means are available, and if determined by the authority responsible for preparing the plan or programme, the expressed opinions referred to above can be issued through an electronic inter-service conference.

5 – The expressed opinions referred to above shall be written in the conference minutes signed by all participants, or documented through some other means that attests to the position taken by the representative of the consulted authority.

6 – Associations, non-governmental and other organisations as well as parties with an interest or which may be affected by the adoption of the proposed plan or programme, or by the future adoption of a project which is set in the framework of the plan or programme, shall, by the authority responsible, be provided an opportunity to express opinions and recommendations regarding the proposed plan or programme and corresponding environmental report in the context of a process of public consultation.

7 – The public consultation and respective time frame of at least 30 days shall be announced by electronic means, namely by publishing on the website of the authority responsible for preparing the plan or programme, as well as publishing notices in at least two consecutive editions of a regional or national newspaper as justified by the scope of the plan or programme.

8 – During the time frame of the public consultation, the plan or programme proposal and the corresponding environmental report shall be available to the public at the locations designated by the authority responsible for its preparation, as well as at the concerned Municipalities, or, in the case of national plans, at the Regional Coordination and Development Commissions; electronic dissemination may also be used.

9 – Consultations may be carried out in time frames shorter than those provided in paragraphs 3 and 7 of the present Article, though still adequate to the effective and timely expression of opinions about the proposed plan or programme, where, by joint order of the member of Government responsible for the environment together with the member of Government with competence over the justifying subject-matter, exceptional circumstances are determined as due justification.

Article 8 - Consultations of European Union Member States

1 – Where a Member State considers that the implementation of a plan or programme being prepared in relation to its territory is likely to have significant effects on the environment in another Member State, or where a Member State likely to be significantly affected so requests, the authority responsible for its development shall forward a copy of the proposed plan or programme and the accompanying environmental report to the authorities of that Member State, through the competent services of the Ministry of Foreign Affairs.

2 – Where a Member State wishes to enter into consultations on the likely transboundary environmental effects of implementing the plan or programme and the measures envisaged to reduce or eliminate such effects prior to the adoption of the plan or programme, detailed arrangements on rules and schedule shall be agreed by mutual accord to ensure that the relevant authorities and the public are informed and given an opportunity to express opinions within a reasonable time-frame.

3 – The Portuguese Environment Agency is responsible for carrying out the necessary consultations, under the provisions referred to above, regarding plans and programmes sent to the Portuguese State by other Member States of the European Union, in addition to communicating decisions in cases described by 1 above, and providing information as referred to in Article 10.

Article 9 - Decision-making

The environmental report and the opinions expressed pursuant to Articles 7 and 8 of this Decree-Law shall be taken into account during the preparation of the final version of the plan or programme to be adopted.

Article 10 - Environmental statement

1 Upon adoption of the plan or programme, the authority responsible for its development shall forward to the Portuguese Environment Agency:

- a) The adopted plan or programme, if it is not published in the Official Gazette;
- b) An environmental statement, which shall include:
 - i) A summary on how environmental considerations and the environmental report have been integrated in the plan or programme;
 - ii) The opinions expressed pursuant to Article 7 and the respective results, with justification in case of non-receival of opinions;
 - iii) The results of consultations entered into pursuant to Article 8;
 - iv) The reasons for choosing the plan or programme as adopted, in light of the other reasonable alternatives discussed during its development;
 - v) The measures decided concerning monitoring in accordance with Article 11.

2 – The information referred to above shall be made publicly available by the authority responsible for the preparation of the plan or programme, through the respective website as well as through that of the Portuguese Environment Agency.

Article 11 - Assessment and Monitoring

1 – The authorities responsible for the development of the plans and programmes assess and monitor the significant environmental effects of the implementation of the plans and programmes, verifying the adoption of measures foreseen in the environmental declaration, in order to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action.

2 – Monitoring results are made public by the authorities referred to above through electronic means and brought up to date at least once annually.

3 – Monitoring results under the provision of 1, above, shall be communicated to the Portuguese Environment Agency.

Article 12 - Exchange of information

1 – The Portuguese Environment Agency is the competent authority to process information regarding the environmental assessment of plans and programmes under the provisions of the present Decree-Law and to exchange this information with the European Commission, as well as to make it accessible to all interested parties.

2 – The authorities responsible for the development of the plans and programmes shall forward by electronic means to the Portuguese Environment Agency information necessary to fulfil requirements as referred to above.

Article 13 - Relationship with Project Environmental Impact Assessment

1 – Projects subject to environmental impact assessment under the provision of Decree-Law no. 69/2000 of 3 May, amended by Decree-Law no. 197/2005 of 8 November, set in a detailed framework of a plan or programme, shall, whenever possible, be assessed simultaneously with the environmental assessment of the respective plan or programme.

2 – The results of the environmental assessment of the plan or programme implemented under the provisions of the present Decree-Law shall be taken into account in the scoping, when applicable, of the Environmental Impact Assessment (EIA) of a project which is foreseen in a sufficiently detailed way in that same plan or programme.

3 – The EIA presented by the proponent in the context of the environmental impact assessment procedure of a project which is foreseen in a sufficiently detailed manner in a plan or programme which is subject to environmental assessment, under the provisions of the present Decree-Law, may be accompanied with information contained in the environmental report or environmental statement so long as these are adequate and kept up to date.

4 – The decision regarding the environmental impact assessment procedure of a project which is foreseen in a sufficiently detailed manner in a plan or a programme subject to environmental assessment, under the provisions of the present Decree-Law, shall take into account the results of this assessment, and may refer to its content and conclusions in order to justify any divergence therein.

Article 14 - Autonomous Regions

The present Decree-Law is applicable to the Autonomous Regions of Azores and Madeira, without prejudice of the adaptations arising from the structure of the administration of the autonomous regional.

Read and adopted by the Council of Ministers, 8 March 2007. José Sócrates Carvalho Pinto de Sousa – Eduardo Arménio do Nascimento Cabrita – Luís Filipe Marques Amado – Fernando Teixeira dos Santos – Humberto Delgado Ubach Chaves Rosa

Enacted 30 May 2007.

Let this be published.

The President of the Republic, Aníbal Cavaco Silva.

Countersigned 1 June 2007.

The Prime Minister, José Sócrates Carvalho Pinto de Sousa.

ANNEX

(Referred to in Article 3 (6))

Criteria for determining the likely significance of effects on the environment:

1. The characteristics of plans and programmes, having regard, in particular, to:
 - a) The degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources;
 - b) The degree to which the plan or programme influences other plans and programmes including those in a hierarchy;
 - c) The relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development;
 - d) Environmental problems relevant to the plan or programme;
 - e) The relevance of the plan or programme for the implementation of Community legislation on the environment.

2. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to:
 - a) the probability, duration, frequency and reversibility of the effects;
 - b) The cumulative nature of the effects;
 - c) The transboundary nature of the effects;
 - d) The risks to human health or the environment namely, due to accidents;
 - e) The magnitude and spatial extent of the effects, in terms of geographical area and size of the population likely to be affected;
 - f) The value and vulnerability of the area likely to be affected due to:
 - i) Special natural characteristics or cultural heritage;
 - ii) Exceeded environmental quality standards or limit values;
 - iii) Intensive land-use;
 - g) The effects on areas or landscapes which have a recognised national, Community or international protection status.

Annex II - Directive 2001/42/EC of 27 June 2001

DIRECTIVE 2001/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 June 2001

on the assessment of the effects of certain plans and programmes on the environment

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission ⁽¹⁾,

Having regard to the opinion of the Economic and Social Committee ⁽²⁾,

Having regard to the opinion of the Committee of the Regions ⁽³⁾,

Acting in accordance with the procedure laid down in Article 251 of the Treaty ⁽⁴⁾, in the light of the joint text approved by the Conciliation Committee on 21 March 2001,

Whereas:

(1) Article 174 of the Treaty provides that Community policy on the environment is to contribute to, inter alia, the preservation, protection and improvement of the quality of the environment, the protection of human health and the prudent and rational utilisation of natural resources and that it is to be based on the precautionary principle. Article 6 of the Treaty provides that environmental protection requirements are to be integrated into the definition of Community policies and activities, in particular with a view to promoting sustainable development.

(2) The Fifth Environment Action Programme: Towards sustainability — A European Community programme of policy and action in relation to the environment and sustainable development ⁽⁵⁾, supplemented by Council Decision No 2179/98/EC ⁽⁶⁾ on its review, affirms the importance of assessing the likely environmental effects of plans and programmes.

(3) The Convention on Biological Diversity requires Parties to integrate as far as possible and as appropriate the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans and programmes.

(4) Environmental assessment is an important tool for integrating environmental considerations into the preparation and adoption of certain plans and programmes which are likely to have significant effects on the environment in the Member States, because it ensures that such effects of implementing plans and programmes are taken into account during their preparation and before their adoption.

(5) The adoption of environmental assessment procedures at the planning and programming level should benefit undertakings by providing a more consistent framework in which to operate by the inclusion of the relevant environmental information into decision making. The inclusion of a wider set of factors in decision making should contribute to more sustainable and effective solutions.

(6) The different environmental assessment systems operating within Member States should contain a set of common procedural requirements necessary to contribute to a high level of protection of the environment.

(7) The United Nations/Economic Commission for Europe Convention on Environmental Impact Assessment in a Transboundary Context of 25 February 1991, which applies to both Member States and other States, encourages the parties to the Convention to apply its principles to plans and programmes as well; at the second meeting of the Parties to the Convention in Sofia on 26 and 27 February 2001, it was decided to prepare a legally binding protocol on strategic environmental assessment which would supplement the existing provisions on environmental impact assessment in a transboundary context, with a view to its possible adoption on the occasion of the 5th Ministerial Conference 'Environment for Europe' at an extraordinary meeting of the Parties to the Convention, scheduled for May 2003 in Kiev, Ukraine. The systems operating within the Community for environmental assessment of plans and programmes should ensure that there are adequate transboundary consultations where the implementation of a plan or programme being prepared in one Member State is likely to have significant effects on the environment of another Member State. The information on plans and programmes having significant effects on the environment of other States should be forwarded on a reciprocal and equivalent basis within an appropriate legal framework between Member States and these other States.

(8) Action is therefore required at Community level to lay down a minimum environmental assessment framework, which would set out the broad principles of the environmental assessment system and leave the details to the Member States, having regard

to the principle of subsidiarity. Action by the Community should not go beyond what is necessary to achieve the objectives set out in the Treaty.

(9) This Directive is of a procedural nature, and its requirements should either be integrated into existing procedures in Member States or incorporated in specifically established procedures. With a view to avoiding duplication of the assessment, Member States should take account, where appropriate, of the fact that assessments will be carried out at different levels of a hierarchy of plans and programmes.

(10) All plans and programmes which are prepared for a number of sectors and which set a framework for future development consent of projects listed in Annexes I and II to Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment ⁽⁷⁾, and all plans and programmes which have been determined to require assessment pursuant to Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna ⁽⁸⁾, are likely to have significant effects on the environment, and should as a rule be made subject to systematic environmental assessment. When they determine the use of small areas at local level or are minor modifications to the above plans or programmes, they should be assessed only where Member States determine that they are likely to have significant effects on the environment.

(11) Other plans and programmes which set the framework for future development consent of projects may not have significant effects on the environment in all cases and should be assessed only where Member States determine that they are likely to have such effects.

(12) When Member States make such determinations, they should take into account the relevant criteria set out in this Directive.

(13) Some plans or programmes are not subject to this Directive because of their particular characteristics.

(14) Where an assessment is required by this Directive, an environmental report should be prepared containing relevant information as set out in this Directive, identifying, describing and evaluating the likely significant environmental effects of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme; Member States should communicate to the Commission any measures they take concerning the quality of environmental reports.

(15) In order to contribute to more transparent decision making and with the aim of ensuring that the information supplied for the assessment is comprehensive and reliable, it is necessary to provide that authorities with relevant environmental responsibilities and the public are to be consulted during the assessment of plans and programmes, and that appropriate time frames are set, allowing sufficient time for consultations, including the expression of opinion.

(16) Where the implementation of a plan or programme prepared in one Member State is likely to have a significant effect on the environment of other Member States, provision should be made for the Member States concerned to enter into consultations and for the relevant authorities and the public to be informed and enabled to express their opinion.

(17) The environmental report and the opinions expressed by the relevant authorities and the public, as well as the results of any transboundary consultation, should be taken into account during the preparation of the plan or programme and before its adoption or submission to the legislative procedure.

(18) Member States should ensure that, when a plan or programme is adopted, the relevant authorities and the public are informed and relevant information is made available to them.

(19) Where the obligation to carry out assessments of the effects on the environment arises simultaneously from this Directive and other Community legislation, such as Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds ⁽⁹⁾, Directive 92/43/EEC, or Directive 2000/60/EC of the European Parliament and the Council of 23 October 2000 establishing a framework for Community action in the field of water policy ⁽¹⁰⁾, in order to avoid duplication of the assessment, Member States may provide for coordinated or joint procedures fulfilling the requirements of the relevant Community legislation.

(20) A first report on the application and effectiveness of this Directive should be carried out by the Commission five years after its entry into force, and at seven-year intervals thereafter. With a view to further integrating environmental protection requirements, and taking into account the experience acquired, the first report should, if appropriate, be accompanied by proposals for amendment of this Directive, in particular as regards the possibility of extending its scope to other areas/sectors and other types of plans and programmes,

HAVE ADOPTED THIS DIRECTIVE:

Article 1 - Objectives

The objective of this Directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment.

Article 2 - Definitions

For the purposes of this Directive:

(a) 'plans and programmes' shall mean plans and programmes, including those co-financed by the European Community, as well as any modifications to them:

- which are subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and
- which are required by legislative, regulatory or administrative provisions;

(b) 'environmental assessment' shall mean the preparation of an environmental report, the carrying out of consultations, the taking into account of the environmental report and the results of the consultations in decision-making and the provision of information on the decision in accordance with Articles 4 to 9;

(c) 'environmental report' shall mean the part of the plan or programme documentation containing the information required in Article 5 and Annex I;

(d) 'The public' shall mean one or more natural or legal persons and, in accordance with national legislation or practice, their associations, organisations or groups.

Article 3 - Scope

1. An environmental assessment, in accordance with Articles 4 to 9, shall be carried out for plans and programmes referred to in paragraphs 2 to 4 which are likely to have significant environmental effects.

2. Subject to paragraph 3, an environmental assessment shall be carried out for all plans and programmes,

(a) which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use and which set the framework for future development consent of projects listed in Annexes I and II to Directive 85/337/EEC, or

(b) which, in view of the likely effect on sites, have been determined to require an assessment pursuant to Article 6 or 7 of Directive 92/43/EEC.

3. Plans and programmes referred to in paragraph 2 which determine the use of small areas at local level and minor modifications to plans and programmes referred to in paragraph 2 shall require an environmental assessment only where the Member States determine that they are likely to have significant environmental effects.

4. Member States shall determine whether plans and programmes, other than those referred to in paragraph 2, which set the framework for future development consent of projects, are likely to have significant environmental effects.

5. Member States shall determine whether plans or programmes referred to in paragraphs 3 and 4 are likely to have significant environmental effects either through case-by case examination or by specifying types of plans and programmes or by combining both approaches. For this purpose Member States shall in all cases take into account relevant criteria set out in Annex II, in order to ensure that plans and programmes with likely significant effects on the environment are covered by this Directive.

6. In the case-by-case examination and in specifying types of plans and programmes in accordance with paragraph 5, the authorities referred to in Article 6(3) shall be consulted.

7. Member States shall ensure that their conclusions pursuant to paragraph 5, including the reasons for not requiring an environmental assessment pursuant to Articles 4 to 9, are made available to the public.

8. The following plans and programmes are not subject to this Directive:

- plans and programmes the sole purpose of which is to serve national defence or civil emergency,

- financial or budget plans and programmes.

9. This Directive does not apply to plans and programmes co-financed under the current respective programming periods ⁽¹¹⁾ for Council Regulations (EC) No 1260/1999 ⁽¹²⁾ and (EC) No 1257/1999 ⁽¹³⁾.

Article 4 - General obligations

1. The environmental assessment referred to in Article 3 shall be carried out during the preparation of a plan or programme and before its adoption or submission to the legislative procedure.
2. The requirements of this Directive shall either be integrated into existing procedures in Member States for the adoption of plans and programmes or incorporated in procedures established to comply with this Directive.
3. Where plans and programmes form part of a hierarchy, Member States shall, with a view to avoiding duplication of the assessment, take into account the fact that the assessment will be carried out, in accordance with this Directive, at different levels of the hierarchy. For the purpose of, inter alia, avoiding duplication of assessment, Member States shall apply Article 5(2) and (3).

Article 5 - Environmental report

1. Where an environmental assessment is required under Article 3(1), an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated. The information to be given for this purpose is referred to in Annex I.
2. The environmental report prepared pursuant to paragraph 1 shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.
3. Relevant information available on environmental effects of the plans and programmes and obtained at other levels of decision-making or through other Community legislation may be used for providing the information referred to in Annex I.
4. The authorities referred to in Article 6(3) shall be consulted when deciding on the scope and level of detail of the information which must be included in the environmental report.

Article 6 - Consultations

1. The draft plan or programme and the environmental report prepared in accordance with Article 5 shall be made available to the authorities referred to in paragraph 3 of this Article and the public.
2. The authorities referred to in paragraph 3 and the public referred to in paragraph 4 shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme or its submission to the legislative procedure.
3. Member States shall designate the authorities to be consulted which, by reason of their specific environmental responsibilities, are likely to be concerned by the environmental effects of implementing plans and programmes.
4. Member States shall identify the public for the purposes of paragraph 2, including the public affected or likely to be affected by, or having an interest in, the decision-making subject to this Directive, including relevant non-governmental organisations, such as those promoting environmental protection and other organisations concerned.
5. The detailed arrangements for the information and consultation of the authorities and the public shall be determined by the Member States.

Article 7 - Transboundary consultations

1. Where a Member State considers that the implementation of a plan or programme being prepared in relation to its territory is likely to have significant effects on the environment in another Member State, or where a Member State likely to be significantly affected so requests, the Member State in whose territory the plan or programme is being prepared shall, before its adoption or submission to the legislative procedure, forward a copy of the draft plan or programme and the relevant environmental report to the other Member State.
2. Where a Member State is sent a copy of a draft plan or programme and an environmental report under paragraph 1, it shall

indicate to the other Member State whether it wishes to enter into consultations before the adoption of the plan or programme or its submission to the legislative procedure and, if it so indicates, the Member States concerned shall enter into consultations concerning the likely transboundary environmental effects of implementing the plan or programme and the measures envisaged to reduce or eliminate such effects.

Where such consultations take place, the Member States concerned shall agree on detailed arrangements to ensure that the authorities referred to in Article 6(3) and the public referred to in Article 6(4) in the Member State likely to be significantly affected are informed and given an opportunity to forward their opinion within a reasonable time-frame.

3. Where Member States are required under this Article to enter into consultations, they shall agree, at the beginning of such consultations, on a reasonable timeframe for the duration of the consultations.

Article 8 - Decision making

The environmental report prepared pursuant to Article 5, the opinions expressed pursuant to Article 6 and the results of any transboundary consultations entered into pursuant to Article 7 shall be taken into account during the preparation of the plan or programme and before its adoption or submission to the legislative procedure.

Article 9 - Information on the decision

1. Member States shall ensure that, when a plan or programme is adopted, the authorities referred to in Article 6(3), the public and any Member State consulted under Article 7 are informed and the following items are made available to those so informed:

(a) the plan or programme as adopted;

(b) a statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report prepared pursuant to Article 5, the opinions expressed pursuant to Article 6 and the results of consultations entered into pursuant to Article 7 have been taken into account in accordance with Article 8 and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with, and

(c) the measures decided concerning monitoring in accordance with Article 10.

2. The detailed arrangements concerning the information referred to in paragraph 1 shall be determined by the Member States.

Article 10 - Monitoring

1. Member States shall monitor the significant environmental effects of the implementation of plans and programmes in order, inter alia, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action.

2. In order to comply with paragraph 1, existing monitoring arrangements may be used if appropriate, with a view to avoiding duplication of monitoring.

Article 11 - Relationship with other Community legislation

1. An environmental assessment carried out under this Directive shall be without prejudice to any requirements under Directive 85/337/EEC and to any other Community law requirements.

2. For plans and programmes for which the obligation to carry out assessments of the effects on the environment arises simultaneously from this Directive and other Community legislation, Member States may provide for coordinated or joint procedures fulfilling the requirements of the relevant Community legislation in order, inter alia, to avoid duplication of assessment.

3. For plans and programmes co-financed by the European Community, the environmental assessment in accordance with this Directive shall be carried out in conformity with the specific provisions in relevant Community legislation.

Article 12 - Information, reporting and review

1. Member States and the Commission shall exchange information on the experience gained in applying this Directive.

2. Member States shall ensure that environmental reports are of a sufficient quality to meet the requirements of this Directive and shall communicate to the Commission any measures they take concerning the quality of these reports.

3. Before 21 July 2006 the Commission shall send a first report on the application and effectiveness of this Directive to the

European Parliament and to the Council.

With a view further to integrating environmental protection requirements, in accordance with Article 6 of the Treaty, and taking into account the experience acquired in the application of this Directive in the Member States, such a report will be accompanied by proposals for amendment of this Directive, if appropriate. In particular, the Commission will consider the possibility of extending the scope of this Directive to other areas/sectors and other types of plans and programmes.

A new evaluation report shall follow at seven-year intervals.

4. The Commission shall report on the relationship between this Directive and Regulations (EC) No 1260/1999 and (EC) No 1257/1999 well ahead of the expiry of the programming periods provided for in those Regulations, with a view to ensuring a coherent approach with regard to this Directive and subsequent Community Regulations.

Article 13 - Implementation of the Directive

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 21 July 2004. They shall forthwith inform the Commission thereof.

2. When Member States adopt the measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

3. The obligation referred to in Article 4(1) shall apply to the plans and programmes of which the first formal preparatory act is subsequent to the date referred to in paragraph 1. Plans and programmes of which the first formal preparatory act is before that date and which are adopted or submitted to the legislative procedure more than 24 months thereafter, shall be made subject to the obligation referred to in Article 4(1) unless Member States decide on a case by case basis that this is not feasible and inform the public of their decision.

4. Before 21 July 2004, Member States shall communicate to the Commission, in addition to the measures referred to in paragraph 1, separate information on the types of plans and programmes which, in accordance with Article 3, would be subject to an environmental assessment pursuant to this Directive. The Commission shall make this information available to the Member States. The information will be updated on a regular basis.

Article 14 - Entry into force

This Directive shall enter into force on the day of its publication in the Official Journal of the European Communities.

Article 15 - Addressees

This Directive is addressed to the Member States.

Done at Luxembourg, 27 June 2001.

-
- (1) OJ C 129, 25.4.1997, p. 14 and OJ C 83, 25.3.1999, p. 13.
 - (2) OJ C 287, 22.9.1997, p. 101.
 - (3) OJ C 64, 27.2.1998, p. 63 and OJ C 374, 23.12.1999, p. 9.
 - (4) Opinion of the European Parliament of 20 October 1998 (OJ C 341, 9.11.1998, p. 18), confirmed on 16 September 1999 (OJ C 54, 25.2.2000, p. 76), Council Common Position of 30 March 2000 (OJ C 137, 16.5.2000, p. 11) and Decision of the European Parliament of 6 September 2000 (OJ C 135, 7.5.2001, p. 155). Decision of the European Parliament of 31 May 2001 and Decision of the Council of 5 June 2001.
 - (5) OJ C 138, 17.5.1993, p. 5.
 - (6) OJ L 275, 10.10.1998, p. 1.
 - (7) OJ L 175, 5.7.1985, p. 40. Directive as amended by Directive 97/ 11/EC (OJ L 73, 14.3.1997, p. 5).
 - (8) OJ L 206, 22.7.1992, p. 7. Directive as last amended by Directive 97/62/EC (OJ L 305, 8.11.1997, p. 42).
 - (9) OJ L 103, 25.4.1979, p. 1. Directive as last amended by Directive 97/49/EC (OJ L 223, 13.8.1997, p. 9).
 - (10) OJ L 327, 22.12.2000, p. 1.
 - (11) The 2000-2006 programming period for Council Regulation (EC) No 1260/1999 and the 2000-2006 and 2000-2007 programming periods for Council Regulation (EC) No 1257/1999.
 - (12) Council Regulation (EC) No 1260/1999 of 21 June 1999 laying down general provisions on the Structural Funds (OJ L 161, 26.6.1999, p. 1).
 - (13) Council Regulation (EC) No 1257/1999 of 17 May 1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF) and amending and repealing certain regulations (OJ L 160, 26.6.1999, p. 80).

ANNEX I

Information referred to in Article 5(1)

The information to be provided under Article 5(1), subject to Article 5(2) and (3), is the following:

- (a) an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;
- (b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;
- (c) the environmental characteristics of areas likely to be significantly affected;
- (d) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;
- (e) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;
- (f) the likely significant effects ⁽¹⁾ on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;
- (g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;
- (h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;
- (i) a description of the measures envisaged concerning monitoring in accordance with Article 10;
- (j) a non-technical summary of the information provided under the above headings.

⁽¹⁾ These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

ANNEX II

Criteria for determining the likely significance of effects referred to in Article 3(5)

1. The characteristics of plans and programmes, having regard, in particular, to
 - the degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources,
 - the degree to which the plan or programme influences other plans and programmes including those in a hierarchy,
 - the relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development,
 - environmental problems relevant to the plan or programme,
 - the relevance of the plan or programme for the implementation of Community legislation on the environment (e.g. plans and programmes linked to waste-management or water protection).

2. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to
 - the probability, duration, frequency and reversibility of the effects,
 - the cumulative nature of the effects,
 - the transboundary nature of the effects,
 - the risks to human health or the environment (e.g. due to accidents),
 - the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected),
 - the value and vulnerability of the area likely to be affected due to:
 - special natural characteristics or cultural heritage,
 - exceeded environmental quality standards or limit values,
 - intensive land-use,
 - the effects on areas or landscapes

Annex III - How the Guide's methodology satisfies the legal requirements concerning the content of the Environmental Report

Requirements of Decree-Law no. 232/2007 of 15 June	Strategy-based SEA methodology
<p>a) An outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;</p>	<p><i>Fase de Factores Críticos para a Decisão – questões Critical Factors for Decision-Making Phase - strategic issues of the object of assessment</i></p> <p><i>Critical Factors for Decision-Making Phase - Strategic Reference Framework - other plans and programmes</i></p> <p><i>Description of the object of assessment (chapter 2 or 3 of the Environmental Report)</i></p>
<p>b) The environmental characteristics of areas likely to be significantly affected, the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;</p>	<p><i>Critical Factors for Decision-Making Phase - Selection of the relevant Environmental Factors according to the scale and implications of the sector of the object of assessment</i></p> <p><i>Analysis and Assessment Phase - Studies to be performed for each Critical Factor for Decision-Making</i></p>
<p>c) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Decree-Law 140/99 of 24 April, amended by Decree-Law 49/2005 of 24 February;</p>	<p><i>Critical Factors for Decision-Making Phase - Selection of the relevant Environmental Factors in view of the scale and the sector of the object of assessment</i></p> <p><i>Analysis and Assessment Phase - Studies to be conducted for each Critical Factor for Decision-Making</i></p>
<p>d) The environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;</p>	<p><i>Critical Factors for Decision-Making Phase - Strategic Reference Framework</i></p>
<p>e) The likely significant effects on the environment, including secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects considering issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;</p>	<p><i>Critical Factors for Decision-Making Phase - Selection of the relevant Environmental Factors in view of the scale and the sector of the object of assessment</i></p> <p><i>Analysis and Assessment Phase - Studies to be performed for each Critical Factor for Decision-Making</i></p>
<p>f) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;</p>	<p><i>Analysis and Assessment Phase - planning and management guidelines</i></p>
<p>g) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties encountered in compiling the required information;</p>	<p><i>Analysis and Assessment Phase - Studies to be performed for each Critical Factor for Decision-Making</i></p>
<p>h) A description of the measures envisaged concerning monitoring in accordance with Article 11;</p>	<p><i>Analysis and Assessment Phase - monitoring guidelines</i></p> <p><i>Follow-up Phase - monitoring and follow-up programme</i></p>
<p>i) A non-technical summary of the information provided under the above headings.</p>	<p><i>Annex V - Executive Summary - Environmental Report Structure</i></p>

Annex IV - Suggest layout for the Critical Factors for Decision-Making Report

Executive Summary

Introduction

SEA Objectives and methodology

Object of assessment - history, objectives and strategic issues, major options

Critical Factors for Decision-Making (CFD)

1. Preliminary analysis
 - Strategic Reference Framework (SRF) (summary - details annexed)
 - Environmental Factors (EF)
2. Integrated Analysis (for each CFD)
 - Objectives of CFD
 - CFD assessment criteria and indicators
 - Information and technical sources for CFD analysis and assessment

Public and Institutional Involvement - communication strategy

Bibliography

Annex - SRF

Annex V - Suggested layout for the Environmental Report

Executive Summary

Introduction

SEA Objectives and methodology

Object of assessment - history, strategic issues (strategic objectives, priorities, core principles) and major strategic options

Strategic Analysis and Assessment (by CFD)

1. Description of CFD and their objectives
2. Current state and analysis of tendencies (core principles, pre-development situation, evolution without no action taken, analysis of scenarios)
3. Expected effects (assessment of scenarios and assessment of strategic action)
4. Opportunities and risks (strategic impacts)
5. Action governance framework (institutional and accountability requirements for better performance)
6. Follow-up guidelines: planning or programming, management, monitoring and assessment

Summary of Strategic Environmental Assessment (integration of results)

1. Environmental and sustainability opportunities and risks
2. Follow-up guidelines: planning or programming, management, monitoring and assessment

Conclusions

Non-Technical Summary



PROGRAM  AMBIENTE



Co-financiado pela
União Europeia - FEDER

Portuguese Environment Agency

Rua da Murgueira, 9/9A, Zambujal
Ap. 7585, 2611-865 Amadora
Tel: 21 472 82 00 | Fax: 21 471 90 74
Email: geral@apambiente.pt