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&
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ABBREVIATIONS AND ACRONYMS

Aarhus Convention	UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, done at Aarhus (Denmark), 1998
EECCA	Eastern Europe, Caucasus and Central Asia
EC	European Commission
EIA	Environmental Impact Assessment
EIA Directive	EU Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, as amended by European Council Directive 97/11/EC of 3 March 1997
Espoo Convention	UNECE Convention on Environmental Impact Assessment in a Transboundary Context, done at Espoo (Finland), 1991
EU	European Union
GIS	Geographical Information Systems
MCA	Multi-Criteria Analysis
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
REC	Regional Environmental Center for Central and Eastern Europe
SEA	Strategic Environmental Assessment
SEA Directive	EU Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment
SEA Protocol	UNECE Protocol on Strategic Environmental Assessment to the Espoo Convention
SER	State Environmental Review
SWOT	Strengths, Weaknesses, Opportunities, Threats
UK	The United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
WHO	World Health Organization

INTRODUCTION TO THE MANUAL

0.1 PREAMBLE

1. The United Nations Economic Commission for Europe (UNECE) Protocol on Strategic Environmental Assessment (SEA) was adopted in Kiev in May 2003 and subsequently signed by 36 States and the European Community. However, signature is only the first stage – 16 UNECE member States need to ratify, accept, approve or accede to the Protocol for it to enter into force. To find out the latest status of the Protocol, see the website http://www.unece.org/env/sea/. Once in force, any Member State of the United Nations may accede upon approval to the Protocol.[1]

2. This *Resource Manual to Support Application of the UNECE Protocol on Strategic Environmental Assessment* – **the Manual** – was developed as decided by the Meeting of the Signatories to the Protocol in June 2004.

3. The Manual does not constitute formal legal or other professional advice, but instead provides guidance to those applying the Protocol or supporting others in doing so.

[1] For an explanation of these terms, see the *United Nations Treaty Handbook*, available at http://untreaty.un.org/English/TreatyHandbook/hbframeset.htm.

0.2 PURPOSE, TARGET AUDIENCE AND STATUS

4. The Manual:

   - Highlights the main requirements of the Protocol on SEA
   - Outlines the key issues for applying the Protocol in practice
   - Provides materials for training and capacity-development programmes supporting application of the Protocol

5. The Manual is expected to be used by:

   - Those who want to learn about the Protocol and the theory of its application, including government and other officials working on the application of the Protocol, practitioners carrying out SEAs and stakeholders wishing to participate in the SEA process
   - Those who want to advise and train others on the Protocol's requirements and the application of SEA

6. This dual audience is reflected in the structure of the Manual (see below).

7. The UNECE region includes the Member States of the European Union (EU). The EU Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (commonly referred to as the SEA Directive) was to be implemented by July 2004. The mandatory provisions of the Protocol are broadly equivalent to those of the SEA Directive and the authors have tried to indicate differences in the course of this Manual. In 2003, the European Commission (EC) produced a publication to help the EU Member States with the implementation of the SEA Directive: 'Implementation of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment' – the EC Guide. The elements of this Manual that focus on the application of SEA in practice may also be of use to those applying the SEA Directive.

8. **However, this Manual does not serve as formal interpretative guidance for the SEA Protocol or for the SEA Directive**.

9. Reference is also made in this Manual to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, hereafter referred to as the Aarhus Convention.

10. The Manual is produced in English and Russian. As French is one of the official languages of the UNECE, the Manual will be translated into French, provided additional resources become available. It is hoped that the Manual will be made available in other languages, either in this form or as adapted by countries to match their individual needs (see section 0.4 below).

0.3 STRUCTURE

11. The Manual is divided into two parts, reflecting the dual nature of the target audience:

- **Part A** for those applying the Protocol
- **Part B** for trainers and others developing capacity to apply the Protocol

12. These two parts each comprise a series of chapters that are autonomous but interlinked and that reference other resources, with each chapter being accompanied by a set of slides:

Part A: Application of the Protocol

- Chapter A1 introduces SEA aims and outlines the concepts, roles and evolution of SEA

A series of four chapters provide assistance with the application of the Protocol to plans and programmes:

- Chapter A2 identifies linkages between SEA and plan- and programme-making processes
- Chapter A3 describes how to determine whether SEA is required under the Protocol
- Chapter A4 describes the SEA of plans and programmes under the Protocol
- Chapter A5 provides an overview of basic applicable tools that may be used in the practical undertaking of SEA

And for policies and legislation:

- Chapter A6 describes how the Protocol may be applied to policies and legislation

Part B: Trainer's Guide

- Chapter B1 outlines the broad concept of capacity development for the Protocol
- Chapter B2 offers a set of tasks that can be used to design practical work on case studies within SEA training and capacity-development programmes

13. **Annexes** provide additional materials for the above chapters.

14. [Annex] [Chapter] [XX] addresses health issues. [In addition, a companion volume on the consideration of health in SEA [is being] [has been] prepared under the lead of the World Health Organization.]

15. The Manual includes the UNECE Protocol on Strategic Environmental Assessment (Kiev) – the SEA Protocol (see Annex A0.1) – and refers to the following resources:

International instruments and guidance

- UNECE Convention on Environmental Impact Assessment in a Transboundary Context (Espoo) – the Espoo Convention
- UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus) – the Aarhus Convention
- EU Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment – the SEA Directive
- Implementation of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment – the EC Guide
- Health Impact Assessment as part of Strategic Environmental Assessment, World Health Organization[2]

Examples of SEA practices

- This resource will grow as countries supply examples.

16. The above-mentioned resources, recommended reading and further useful resources relevant to each section of the Manual are to be provided on websites, including http://www.unece.org/env/sea/.

[2] Breeze, C.H. (Public Health Strategy Division – The National Assembly for Wales) & K. Lock (London School of Hygiene and Tropical Medicine (eds.) (November 2001), *A review of health impact assessment concepts, methods and practice to support the development with adequate coverage of health of the SEA Protocol*, advanced copy, available at http://www.euro.who.int/document/e74634.pdf.

0.4 REVISION AND ADAPTATION OF THE MANUAL

17. This Manual will be revised and developed as decided by the Signatories and, later, by the Parties to the Protocol.

18. The Manual is being made available in electronic form through websites and on CD-ROMs. This allows the flexibility of adding links to new resources as they become available. These new resources are expected to include guidance, methods, reviews, case studies and examples of good practices.

19. In addition, adaptation of the Manual for different contexts is encouraged. For example, in 2005, national versions of the Manual were developed in Georgia, Ukraine and Moldova.

20. Those wishing to adapt the Manual for their specific use are encouraged to pay attention to the following issues:

- Before adapting the Manual, one should analyze thoroughly the current environmental assessment systems for plans, programmes, policies and legislation operating in the given context and then adapt the Manual accordingly
- Adaptation can be more than just translation of the Manual, with the inclusion of additional chapters and sections and important issues for the local context, as well as the exclusion of materials considered unnecessary
- Examples from a particular region or country can be used to make the Manual more understandable and relevant to the target audience
- Both the Protocol and the SEA Directive are legal instruments, in the countries where they are in force, and care should be taken to avoid representing their provisions incorrectly

21. The adapted materials should acknowledge the Manual and the copyright holders.

PART A: APPLICATION OF THE PROTOCOL

CHAPTER A1:
A BRIEF INTRODUCTION TO STRATEGIC ENVIRONMENTAL ASSESSMENT

A1.1 INTRODUCTION TO THE CHAPTER

The Protocol refers throughout to 'the environment, including health'. To avoid repetition, the Manual refers only to 'the environment', but this should always be understood to include health. For more information on health issues, please see [Annex] [Chapter] [XX].

1. This Chapter provides a short introduction to strategic environmental assessment (SEA), beginning by answering the question 'what is SEA?' (section A1.2), what is it supposed to achieve and how it compares with environmental impact assessment (EIA), the widely used tool for the environmental assessment of projects.

2. The Chapter then looks at the costs and benefits of SEA (section A1.3) and at some guiding principles for SEA (section A1.4).

3. Finally, the Chapter looks at some broader considerations (section A1.5), including:

   - SEA as a sustainability tool
   - Links between SEA and other assessment tools
   - SEA at more strategic levels of decision-making

A1.2 WHAT IS SEA?

4. Various definitions of SEA are enshrined in law or policy or referenced in the literature on the topic. As generally understood, SEA is a systematic and anticipatory process, undertaken to analyze the environmental effects of proposed plans, programmes and other strategic actions and to integrate the findings into decision-making.

5. In this Manual, the term 'SEA' has a specific meaning that is consistent with the definition contained in the Protocol on SEA to the UNECE Convention on EIA in a Transboundary Context (hereafter the SEA Protocol). It refers to:

> *the evaluation of the likely environmental, including health, effects, which comprises the determination of the scope of an environmental report and its preparation, the carrying-out of public participation and consultations, and the taking into account of the environmental report and the results of the public participation and consultations in a plan or programme* (art. 2, para. 6).

A1.2.1 What is the purpose of SEA?

6. The purpose of SEA, broadly stated, is to ensure that environmental considerations inform and are integrated into strategic decision-making in support of environmentally sound and sustainable development. In particular, the SEA process assists authorities responsible for plans and programmes, as well as decision-makers, to take into account:

- Key environmental trends, potentials and constraints that may affect or may be affected by the plan or programme
- Environmental objectives and indicators that are relevant to the plan or programme
- Likely significant environmental effects of proposed options and the implementation of the plan or programme
- Measures to avoid, reduce or mitigate adverse effects and to enhance positive effects
- Views and information from relevant authorities, the public and – as and when relevant – potentially affected States

A1.2.2 What is the added value of SEA compared with EIA?

7. SEA has evolved largely as an extension of EIA principles, process and procedure and this is certainly the case with respect to the SEA Protocol (see Annex A1.1 for key legal and policy milestones in the development of the field). But it also offers a number of advantages compared to the EIA of projects. These follow from SEA application to the higher level of plan and programme making, which sets a framework for projects subject to EIA and potentially many other actions that may have an impact on the environment. At this level, SEA facilitates consideration of the environment in relation to fundamental issues (why, where and what form of development) rather than addressing only how an individual project should be developed. The potential for environmental gain is much higher with SEA than with EIA.

8. In that regard, the specific value added by SEA of plans and programmes includes:

- The opportunity to consider a wider range of alternatives and options at this level compared with the project stage
- Influencing the type and location of development that takes place in a sector or region, rather than just the design or siting of an individual project
- Enhanced capability to address cumulative and large-scale effects within the time and space boundaries of plans and programmes as opposed to the project level
- Facilitating the delivery of sustainable development through addressing the consistency of plan and programme objectives and options with relevant strategies, policies and commitments
- Streamlining and strengthening project EIA by 'tiering' (see Box A4.3) this process to the SEA report and thereby avoiding questions (whether, where and what type of development should take place) that have been decided already with environmental input

A1.3 BENEFITS AND COSTS OF SEA[3]

A1.3.1 Benefits of SEA

9. The immediate benefits of SEA application can be found in information that assists sound decision-making and in the consequent gains achieved in environmental protection and sustainable development. In addition, there are other, secondary benefits that are integral to the participatory approach and transparent procedures followed in accordance with the SEA Protocol. When properly implemented, the SEA process should:

- Provide for a high level of environmental protection
- Improve the quality of plan and programme making
- Increase the efficiency of decision-making
- Facilitate the identification of new opportunities for development
- Help to prevent costly mistakes
- Strengthen governance
- Facilitate transboundary cooperation

SEA provides for a high level of environmental protection

10. This is the stated objective of the SEA Protocol (art. 1); it defines the reason why SEA is undertaken. A high level of environmental protection may be subject to different interpretation but, at a minimum, SEA should ensure avoidance of irreversible and severe effects, safeguard protected areas and sites, and maintain critical habitats and other areas that are important for the conservation of biodiversity.

SEA improves the quality of plan and programme making

11. Whether undertaken in parallel to or as an integral part of plan and programme making, SEA has the potential to improve or reinforce the quality of the plan or programme, leading to better outcomes. It does so in a number of ways but particularly by helping to ensure that the process is focused, rigorous, open to alternatives and considers the full range of potential effects and opportunities for achieving more sustainable forms of development.

SEA increases the efficiency of decision-making

12. SEA helps to streamline decision-making by enabling environmental issues to be taken into account consistently at the different stages or tiers of decision-making. Time efficiency (and as a consequence cost effectiveness) is expected to be improved by better and more consistent decision-making at the plan or programme level, leading to fewer appeals and less discussion at the operational or EIA level. Ultimately, SEA supports project-level decisions as these can be based on previously optimized plans and programmes. The shared use of information produced at different stages of the planning hierarchy may also increase the efficiency of decision-making.

[3] Based on REC and UNDP (2003), *Benefits of a Strategic Environmental Assessment*, Briefing paper. http://www.rec.org/REC/Programs/EnvironmentalAssessment/pdf/BenefitsofSEAeng.pdf, Szentendre (Hungary); and on OECD/Development Assistance Committee (2006), *Applying Strategic Environmental Assessment: Good Practice Guidance for Development Co-operation*, available at http://www.sourceoecd.org/development/9264026576.

SEA facilitates the identification of new opportunities for development

13. SEA facilitates the improved consideration of environmental limits in the formulation of plans and programmes. It helps in considering alternatives and encourages the search for win-win options that open opportunities for new developments within the carrying capacity of ecosystems. SEA thus supports a shift of decision-making towards genuine sustainable development.

SEA helps to prevent costly mistakes

14. SEA provides early-warning signals about environmentally unsustainable development options. A sound application of SEA may therefore limit the risk of costly remediation of avoidable harm or corrective actions, such as relocating or redesigning facilities. SEA also helps in saving human and financial resources in the development of plans and programmes as unsustainable options can be disregarded early on.

SEA strengthens governance

15. SEA increases the overall transparency of strategic decision-making and allows the early consideration of the opinions of key stakeholders in the plan- or programme-making process. Properly undertaken and accountable SEA enhances the credibility of plans and programmes. It may mobilize public support for implementation – a plan or programme may be more effective when the values, views, opinions and knowledge of the public have become part of the decision-making process.

SEA facilitates transboundary cooperation

16. SEA can provide an important arena for regional cooperation to address difficult issues concerning, for example, shared protected areas, waterways, transport connections and transboundary pollution.

A1.3.2 Costs of SEA

17. An EC study on the costs and benefits of EIA[4] indicated that introducing SEA to regional and local land-use planning usually increased planning costs by 5-10%. This study also found examples of good SEAs that increased planning costs by less than 5%, but the costs depend on the amount and detail of alternatives elaborated and their assessment. A more recent study on the first year of application of the SEA Directive in the United Kingdom,[5] which surveyed 201 authorities that had conducted SEAs, concluded that most SEAs required approximately 70-80 person days to complete (roughly half for scoping and half for the environmental report). At the same time, the majority of respondents consulted in this study agreed or strongly agreed with the statement that 'SEA was an effective use of time and resources'.

18. The main costs associated with the operation of an SEA system occur during the initial applications of SEA when appropriate approaches and tools are tested and developed, and when basic data sets are compiled. Subsequent SEAs tend to be less costly as they can build on previous experience and may require only standard analytical work and process

[4] European Commission (1996), *A study on costs and benefits in EIA/SEA*, out of print, but summary available at http://ec.europa.eu/ environment/eia/eia-studies-and-reports/eia-costs-benefit-en.htm.
[5] Therivel, R. and F. Walsh (2005) 'The Strategic Environmental Assessment Directive in the UK: One Year On', submitted to *Environmental Impact Assessment Review*, available at http://www.levett-therivel.fsworld.co.uk/.

management. (Indeed, respondents to the latter above-mentioned study indicated that they expected future SEAs to take considerably less time.) These costs can be regarded as marginal compared with the overall costs of implementation of plans and programmes.

A1.4 GUIDING PRINCIPLES FOR APPLICATION OF SEA

19. In this Manual we are looking at the specific requirements of applying the SEA Protocol and, to a lesser extent, the SEA Directive. Nonetheless, a number of more general guiding principles for the application of SEA are available and may be of value. These include various statements in national guidance materials or in the literature of the field. In addition, reference can be made to the performance criteria for a good quality SEA process developed by the International Association for Impact Assessment (see Annex A1.2).

20. Despite some differences, there is a measure of agreement on the basic principles of SEA and the actions that need to be taken for its effective application. These include the following:

- SEA should be **undertaken by the authority responsible for a plan or programme**. Ideally it should be integrated into and customized to the logic of the plan- or programme-making process.
- SEA should be **applied as early as possible in the decision-making process** when all the alternatives and options remain open for consideration.
- SEA should **focus on the key issues** that matter in the relevant stages of the plan- or programme-making process. This will facilitate the process being undertaken in a timely, cost-effective and credible manner.
- SEA should evaluate a **reasonable range of alternatives**, recognizing that their scope will vary with the level of decision-making. Wherever possible and appropriate, it should identify the best practicable environmental option.
- SEA should **provide appropriate opportunities for the involvement of key stakeholders and the public**, beginning at an early stage in the process and carried out through clear procedures. Ideally, it should employ easy-to-use consultation techniques that are suitable for the target groups.
- SEA should be **carried out with appropriate and cost-effective methods and techniques of analysis**. It should achieve its objectives within the limits of the available information, time and resources and should gather information only in the amount and detail necessary for sound decision-making.

21. These guiding principles should be applied in concert as a package in order to meet the aims and deliver the benefits of SEA as described above. If applied in this way, they should assist in undertaking a good quality process that satisfies the spirit of the SEA Protocol and helps delivery of its specific requirements. The legal provisions, of course, must be paramount in governing SEA process design and application.

A1.5 SOME BROADER CONSIDERATIONS

22. In concluding, it should be noted that there are interpretations of the role and scope of SEA that extend beyond the framework of the SEA Protocol, although these are by no means universally shared. These are briefly introduced here because they are the focus of ongoing debate in the field and because of process developments underway or proposed in certain countries and international organizations.

A1.5.1 SEA as a sustainability tool

23. A major and controversial issue concerns whether SEA should explicitly address the sustainability implications of plans and programmes (or other strategic actions) or continue to focus only on their environmental effects. With regard to the former position, there are then a number of critical questions as to how such an approach could be undertaken. For present purposes, there are two broad schools of thought on these issues (and many shades of opinion in between):

1) SEA should address only or primarily environmental effects and concentrate on implementing what has been agreed to already in accordance with legal requirements and widely-accepted principles of good practice. In this way, the process can best contribute to sustainable development. This might be termed the mainstream or majority position and is probably held by many SEA administrators and practitioners. A variant is to consider certain social aspects as well within the context of the environment. Some social aspects are already considered part of the environment, e.g. health and material assets (housing).

2) SEA should make an explicit, 'best effort' attempt to address the sustainability implications in addition to environmental effects, while recognizing the limitations of such an approach. In this context, arguments have been put forward to reorient SEA in two main directions, namely toward:

   - Environmental sustainability assurance of proposed plans, programmes and other strategic actions, for example through the evaluation of impact significance within a framework of precautionary principles on the one hand and safe-minimum or threshold criteria on the other, including provision to ensure damage (residual impact) is compensated or made good. This approach, developed in an international study of environmental assessment effectiveness, remains a minority position, although facets are applied nationally and internationally.

   - Sustainability assessment or appraisal of the environmental, economic and social effects of proposed plans, programmes and other strategic actions, for example as now implemented in the United Kingdom (UK) as part of regional and local land-use planning[6] and in the internal European Commission (EC) process of impact assessment of policy and regulatory initiatives. The UK approach has been initiated as part of a major reform of planning that also implements the provisions of the SEA Directive. As

[6] UK Office of the Deputy Prime Minister, 2005, *Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents*, available at http://www.communities.gov.uk/index.asp?id=1161341

such, it might be followed closely as a 'road test' of how the relationship between SEA and sustainability assessment can be given practical effect.

A1.5.2 Logical links between SEA and related assessment tools

24. Despite recent developments, sustainability assessment of plans and programmes presents a number of institutional and methodological challenges that are largely outside the scope of this Manual. However, the framework of the SEA Protocol provides a number of potential links with socio-economic assessment, recognizing these follow a similar analytical logic even though they have a different substantive focus. The SEA Protocol is also consistent with the basic principles of integrated assessment and planning for sustainable development as outlined in the framework developed by UNEP.[7] A series of pilot projects to test this framework has highlighted windows of opportunity for linking various assessment tools. These are broadly outlined in Table A1.1 below, which illustrates how SEA might be linked to socio-economic or sustainability assessment. In the present context, of course, the SEA process undertaken as part of such an approach must conform fully to the fundamental purpose and requirements of the SEA Protocol.

A1.5.3 SEA at more strategic levels of decision-making

25. The issue of whether and how SEA should be applied at more strategic levels of decision-making continues to be a subject of debate. Strong arguments have been made in the literature for SEA to be applied to all types of strategic proposals, beginning at the highest level of policy formulation and particularly where this sets a context or framework for plans and programmes. However, there is no consensus on this position. Many SEA practitioners have noted there are practical and institutional barriers that stand in the way of this course of action, generally and in particular countries. There are also various shades of opinion on how SEA should be applied to policymaking, recognizing the often iterative, flexible nature of this process compared to plan and programme making.

26. The SEA Protocol encourages but does not oblige the Parties to ensure that the environment is integrated to the extent appropriate in policy- and law-making and to consider its principles and elements in doing so (for further information see Chapter A6). A number of UNECE member States, as well as the EC, already have SEA systems or near-equivalent appraisal-type processes that apply to policies and legislation. Experience at this level is less than that for the SEA of plans and programmes but it is not inconsiderable. SEA practice at the policy level in selected countries is described in a volume prepared on behalf of the Czech Ministry of Environment, as additional information to this Manual.[8] The volume also includes a brief notional review of how the key elements of the SEA Protocol might be applied to policy and legislation, as well as other possible approaches. This material and particularly the reviews of national experience in seven UNECE member States may be of interest to those who want to place the requirements of the SEA Protocol in a broader context.

[7] UNEP (2004) *Integrated Assessment and Planning for Sustainable Development: Guidelines for pilot project*, UNEP, Geneva, available at http://www.unep.ch/etb/events/Events2005/midTermReview/IAPGuidePilPro.pdf

[8] Sadler, B. (ed.) (2005), *Strategic Environmental Assessment at the Policy Level – Recent progress, current status and future prospects*, prepared by the Regional Environment Center for Central and Eastern Europe, on behalf of the Czech Ministry of Environment. Available at http://www.unece.org/env/eia/documents/PolicySEA/SEA of Policies volume.pdf

Table A1.1: Logical linkages between usual tasks in SEA, social and economic assessments and sustainability assessments[9]

SEA	Social and economic assessments	Sustainability assessment
Environmental baseline	Economic and social baseline	Evaluation of sustainability of current development trends and patterns
Determination of relevant environmental objectives and evaluation of how they were considered in the plan or programme making	Determination of relevant economic and social objectives and evaluation of how they were considered in the plan or programme making	Determination of relevant sustainability objectives and principles and evaluation of how they were considered in the plan or programme making
Assessment of environmental impacts of proposed options and inputs into their optimization	Assessment of economic and social impacts of proposed options and inputs into their optimization	Assessment of economic, social and environmental impacts of proposed options with reference to relevant sustainability objectives (aspirations) and limits (bottom lines), suggesting win-win options or options that optimize trade-offs
Outline of measures for mitigation of significant adverse effects and their monitoring during implementation of the plan or programme	Outline of measures for mitigation of significant adverse effects and their monitoring during implementation of the plan or programme	Outline of measures for mitigation of significant adverse effects and their monitoring during implementation of the plan or programme

[9] For an extensive discussion of such linkages, see OECD/Development Assistance Committee *Good Practice Guidance on Applying Strategic Environmental Assessment (SEA) in Development Co-operation*, available at http://www.seataskteam.net/index.cfm?module=Forums&page=Forum&ForumID=237.

CHAPTER A2: INTEGRATION OF SEA INTO PLAN AND PROGRAMME MAKING

A2.1 INTRODUCTION TO THE CHAPTER

The Protocol refers throughout to 'the environment, including health'. To avoid repetition, the Manual refers only to 'the environment', but this should always be understood to include health. For more information on health issues, please see [Annex] [Chapter] [XX].

1. This Chapter looks at how the SEA of a plan or programme may be integrated into, or otherwise linked to, the plan- or programme-making process.

2. This Chapter therefore examines key issues for the application of the Protocol within the specific plan- or programme-making context. It comprises three parts:

   - Section A2.2 provides a general description of a typical plan- or programme-making process. It then turns to the key elements of SEA in the Protocol, including an examination of why integration of SEA into plan and programme making is needed for the effective application of the Protocol. (The benefits of integration are discussed further in Chapter A6 on policies and legislation.) The section ends by highlighting the logical links between plan- or programme-making processes and SEA. These links are seen as opportunities for coordinating the two processes and, ultimately, for integration of SEA into plan and programme making.

   - Section A2.3 looks at how these links may be identified in a practical, rather than a theoretical, plan- or programme-making process. It also looks at some practical reasons for seeking to integrate SEA into plan or programme making.

   - Finally, section A2.4 discusses three options for integration: no integration, partial integration and full integration.

A2.2 PLAN AND PROGRAMME MAKING, SEA AND THE LINKS BETWEEN THEM

3. This section looks first at the usual tasks in plan and programme making, then at the key elements of the SEA of plans and programmes. The section concludes by examining the logical links between the plan- and programme-making tasks, on the one hand, and the SEA elements, on the other. Section A2.3 and section A2.4 examine these links further, looking at how the SEA may be integrated into plan and programme making.

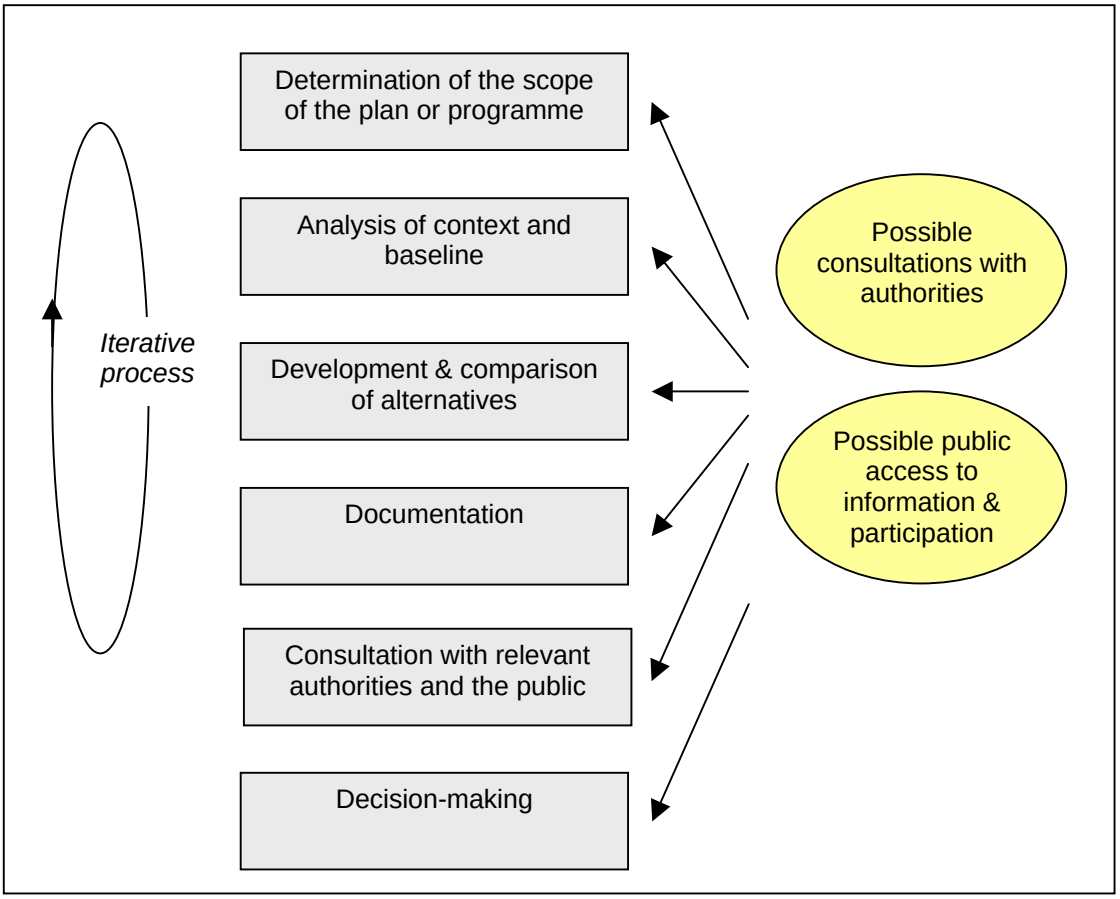
A2.2.1 Usual tasks of plan and programme making

4. Plan and programme making is usually an iterative process involving the following tasks (see Figure A2.1):

- The **scope of the plan or programme is normally clarified** during initiation when the expected nature of the respective plan or programme, its broad objectives and the issues to be addressed are determined
- The **analysis of the context and baseline** usually includes the review of current development trends that should be taken into account, constraints and opportunities for future development, and other specific issues to be addressed in the plan or programme
- The **development and comparison of alternatives of the plan or programme** often takes place through consideration of optional objectives of the plan or programme, optional priorities proposed in the plan or programme, options for activities proposed to implement these objectives or options for implementation arrangements (i.e. criteria for support to eligible actions, terms of reference for subsequent assessments, etc.)
- **Documentation**, which may include defining the roles and responsibilities for implementation of the plan or programme and designing monitoring arrangements
- **Consultation** with relevant authorities and the public
- The draft plan or programme is then finalized for **decision-making**

5. These tasks are only illustrative and may not occur as distinct steps. Indeed they may be merged or further split based on the logic of the specific plan- or programme-making process and its formal procedural stages. The specific logic, tasks and formal stages in the plan- or programme-making process can be determined through an analysis of the plan- or programme-making process, as outlined in subsection A2.3.1 below.

Figure A2.1: Usual tasks in plan and programme making



A2.2.2 Elements in the SEA of plans and programmes

6. The Protocol sets out a process for carrying out the SEA of plans and programmes in its articles 6 to 12:

- Scoping to determine the content of the environmental report (art. 6)
- Environmental report (art. 7)
- Public participation (art. 8)
- Consultation with environmental and health authorities (art. 9)
- Transboundary consultations (art. 10)
- Decision on the adoption of the plan or programme (art. 11)
- Monitoring of effects (art. 12)

7. Though the description in this Manual is sometimes in terms of a process, in practical terms the above will be **elements** integrated within a plan- or programme-making process (as described later in this Chapter), rather than a separate, parallel process.

8. This integration is necessary if SEA is to be a proactive instrument that influences the development of the plan or programme, as required by the Protocol:

- The preamble of the Protocol declares that 'strategic environmental assessment should have an **important role in the preparation and adoption** of plans, programmes, and, to the extent appropriate, policies and legislation …'.

- Article 1 states that the objective of the Protocol is 'to provide for a high level of protection of the environment, including health, by … ensuring that environmental, including health, considerations are **thoroughly taken into account in the development of plans and programmes**; …'

- Article 2.6[10] defines SEA as a process that stretches beyond evaluation of the likely environmental effects to include the '**taking into account** of the environmental report and the results of the public participation and consultations **in a plan or programme**'.

- Article 11 requires each Party to ensure that, when a plan or programme is adopted, due account is taken of the conclusions of the environmental report. However, the term 'conclusions of the environmental report' is not defined. The environmental report is likely to include a number of conclusions, for example: on the environmental baseline relevant to the plan or programme; on the environmental objectives in the plan or programme; on measures to prevent, reduce or mitigate negative effects; on reasons for selecting alternatives of the plan or programme; and on monitoring. It is difficult to see how all these various conclusions can be taken into account in a single decision at the end of the plan- or programme-making process, that is in the formal decision-making that concludes the development of the plan or programme. Therefore, it is suggested that the various conclusions of the environmental report be considered during the development of the plan or programme, as and when they become available, as well as due account being taken when adopting the plan or programme. The provisions of the SEA Directive are clearer in this respect, as its Article 8 requires that the environmental report and the results of consultations must be taken into account 'during the preparation of the plan or programme and before its adoption or submission to the legislative procedure'.

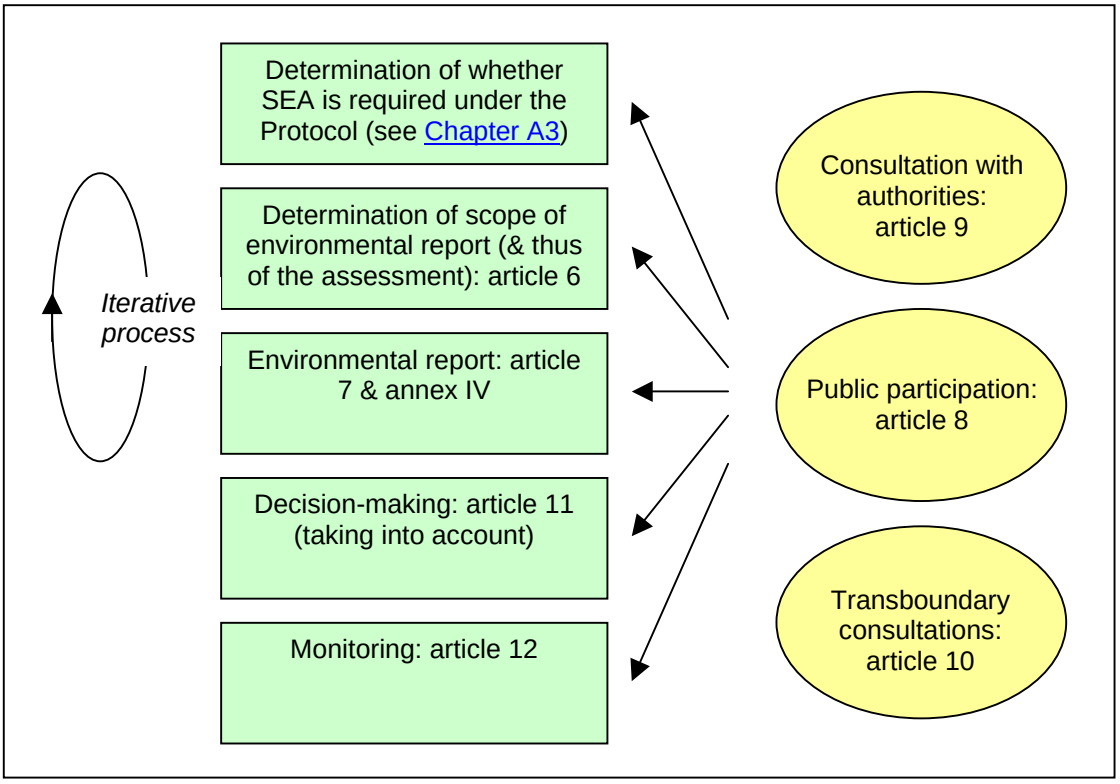
9. The elements in the SEA are summarized in Table A2.1 below and illustrated in Figure A2.2 that follows. These elements are described in greater detail in Chapter A4, which looks at the SEA of plans and programmes. This Chapter examines how these elements may be integrated into plan and programme making.

[10] In this Manual, the term article X.Y (or art. X.Y) is used to reference article X, paragraph Y.

Table A2.1: SEA elements

Element	Description
Scoping	The first element is, having determined that a plan or programme is to be subject to SEA, to determine the **scope** of the environmental report. Determining the scope of the report implies also defining the scope of the analyses that will lead to the preparation of the report. Scoping provides an opportunity to focus the report on the important issues to maximize its usefulness to the public, authorities and decision-makers. It does not preclude changes in the scope of the report if the need for them were to become apparent at a later stage. Environmental and health authorities have to be consulted in scoping, and the public may be provided with opportunities to participate.
Environmental report	The second element is the **preparation of the environmental report** (in line with the scope). The report will provide the public and the authorities consulted with information on the environmental effects of the plan or programme.
Public participation	The third element is the **participation of the public**. This may have already begun during scoping or even during the determination of whether SEA is required under the Protocol for a plan or programme (see Chapter A3). The draft plan or programme and the environmental report must be made available to the public, and the **public concerned** must be consulted and given the opportunity to express its opinion on the draft plan or programme and the environmental report.
Consultation	The fourth element is the consultation with the **environmental and health authorities**, which must be allowed the opportunity to express their opinion on the draft plan or programme and the environmental report. Consultation and public participation may occur at the same time. (The public and the authorities are consulted together under Art. 6 of the SEA Directive.)
Transboundary consultations	If it appears that the plan or programme may have significant transboundary effects (on another Party to the Protocol), or if a potentially 'affected Party' so requests, the affected Party or Parties should be **notified** and invited to enter into consultations. Those transboundary consultations, which may be done at the same time as the public participation and the consultation with the authorities, must lead to an opportunity for the **concerned public and the environmental and health authorities in the affected Party** to express their opinion on the draft plan or programme and the environmental report.
Decision-making	The sixth element is the taking of a **decision** on the adoption of a plan or programme. This decision has to take into account the environmental report and the opinions expressed by the public concerned and the authorities, both domestic and of any affected Party. The decision-maker has to produce a statement summarizing how that information was taken into account and why the plan or programme is being adopted in the light of reasonable alternatives. The adopted plan or programme, the decision and the justification must be made publicly available.
Monitoring	The final element is **monitoring**. SEA does not stop with the decision to adopt a plan or programme. The significant environmental effects of implementation have to be monitored to, among other things, identify unforeseen adverse effects and enable appropriate remedial action to be taken. Monitoring results have to be made available to the authorities and to the public.

Figure A2.2: Elements in the SEA of plans and programmes



A2.2.3 Logical links between plan and programme making and the requirements of the Protocol

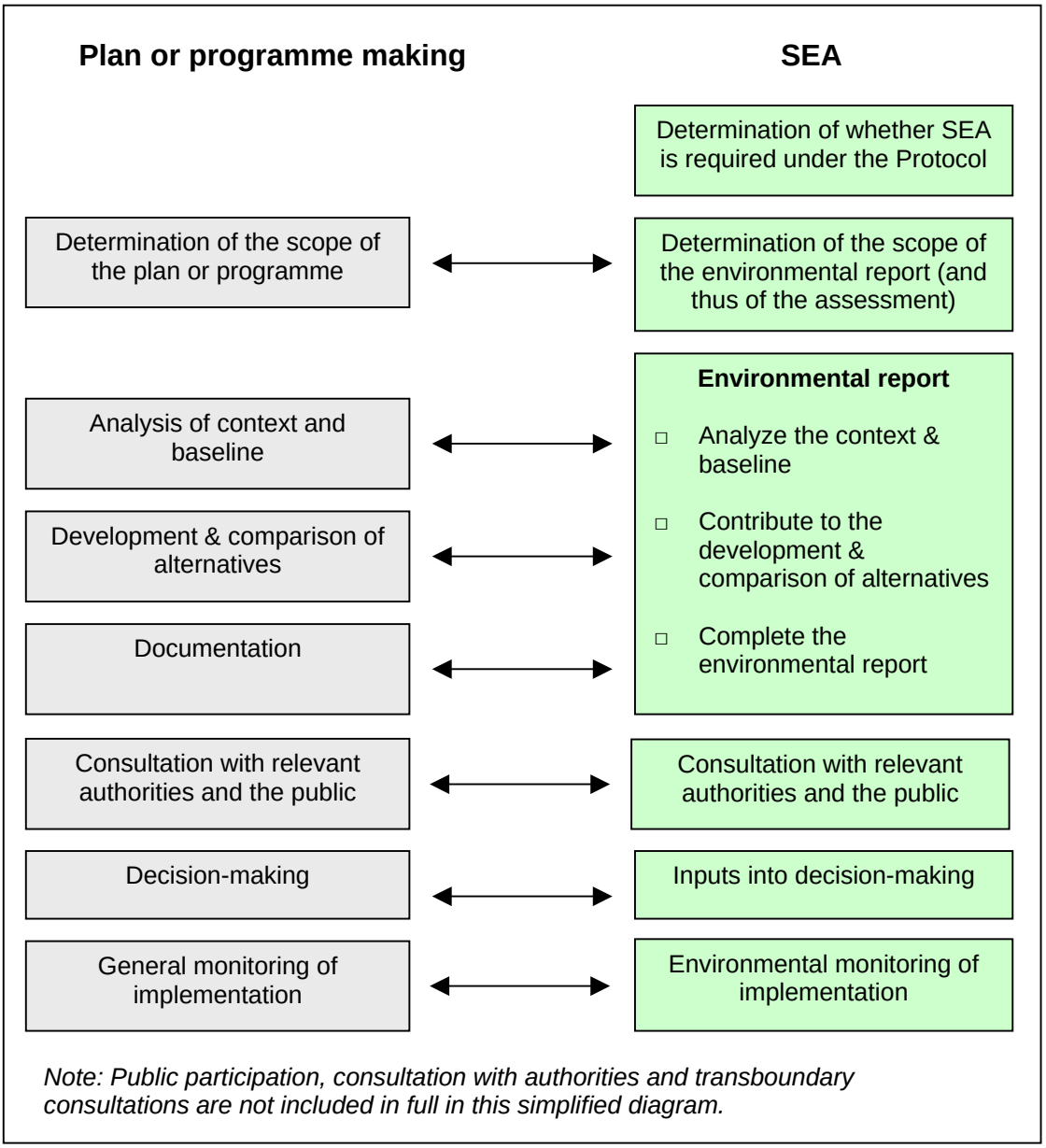
10. The simplified and idealized scheme below shows potential logical links between SEA and tasks that are often performed within the plan- or programme-making process. However, this scheme is only illustrative since many plan- and programme-making processes do not employ such a clear sequence of tasks – indeed they may skip some tasks or may include additional tasks not included in this scheme. In addition, the scheme does not present consultations and public participation since these may occur as an integral part of the plan or programme formulation or may be carried out as distinct procedural stages within the SEA process.

11. Even though the drawing up of a plan or programme and the SEA naturally differ in purpose – i.e. the purpose of the plan- or programme-making is to develop the plan or programme whereas the aim of the SEA is to analyze the plan or programme and recommend its improvement – both processes often employ similar analytical thinking. In essence, both the development of the plan or programme and the carrying out of the SEA should:

- Determine the key issues that should be considered during plan- or programme-making
- Analyze the context of the plan or programme and likely future trends if the plan or programme is not implemented

- Propose optimal alternatives
- Propose optimal monitoring and management systems
- Inform the relevant authorities, the public and decision-makers about the plan or programme and its likely impacts

Figure A2.3: Logical links between plan- and programme-making tasks and SEA elements



12. Table A2.2 below outlines the main logical links that may exist between plan or programme making and undertaking SEA.

13. Plan- and programme-making and assessment systems have evolved differently in **Eastern Europe, Caucasus and Central Asia**. An examination of the relationship between SEA according to the Protocol, on the one hand, and plan- and programme-

making and assessment systems in that subregion, on the other, is presented in a publication by UNDP, the REC and UNECE.[11] (The plan- and programme-making systems in Western Europe are also highly diverse.)

Table A2.2: Logical links between plan or programme making, SEA, consultations with authorities and public participation.

Step	Usual tasks in plan or programme making	Logically corresponding tasks in SEA	Consultations with authorities, public access to information and public participation within SEA
		Requirement to carry out SEA can be determined either by reference to legal obligation (e.g. list of plans and programmes that always require SEA) or through case-by-case review of whether the plan or programme requires SEA under the Protocol (see Chapter A3).	Consult the relevant environmental and health authorities and inform the public.
Determination of the scope	Scope of the plan or programme (which is often clarified in its formal initiation) may be determined by law, etc., by specific guidance or through consultations to define: o Broad objectives of the plan or programme o Links between the plan or programme and other plans and programmes o General issues to be addressed in the plan or programme	Scope of SEA may be defined by identifying: o Likely contents and the main objectives of the plan or programme and its link with other plans or programmes (and possibly also policies)[12] o Environmental problems that are relevant to the plan or programme[13] o Environmental objectives established at international, national and other levels that are relevant to the plan or programme[14] o Alternatives to deal with and, in outline, the reasons for their selection[15] o Initial list of environmental impacts that should be assessed[16]	Identify authorities to be consulted & public to participate Consult relevant environmental and health authorities. *Optionally:* Consult public.

[11] Dusik J., Cherp A., Jurkeviciute A., Martonakova H., and N. Bonvoisin (2006), *Capacity Development for Implementing the UNECE SEA Protocol in the Former Soviet Union Countries in Eastern Europe, Caucasus and Central Asia*, UNDP, the REC and UNECE, available at http://www.unece.org/env/eia/documents/SEA CBNA/UNDP-REC-UNECE_SEA Bulletin no.2.pdf.
[12] Annex IV, item 1
[13] Annex IV, item 4
[14] Annex IV, item 5
[15] Annex IV, item 8
[16] Annex IV, item 6

Step	Usual tasks in plan or programme making	Logically corresponding tasks in SEA	Consultations with authorities, public access to information and public participation within SEA
Analysis of context and baseline	Review relevant plans and programmes and baseline information (characteristics of relevant development trends) Determine constraints and opportunities for future development	Focus the baseline analyses on issues identified during the scoping process and analyze: o The characteristics of the environment in areas likely to be significantly affected[17] o The current state of the environment and its likely evolution should the plan or programme not be implemented[18] *Optionally:* Further develop the scope of the assessment to follow	*Optionally:* Consult authorities & public on context & relevant issues, and record comments
Development and comparison of alternatives	Development and comparison of options usually considers: o Specific objectives of the plan or programme to be achieved o Actions to implement these objectives o Measures to optimize implementation of selected actions	Describe how the environmental objectives and other environmental considerations have been taken into account in the alternative options. Assess (by various methods – see Chapter A5) the expected environmental effects, including likely significant transboundary effects.[19] SEA can contribute to development and comparison of options by evaluating relevant alternative options of the plan or programme on the basis of their likely significant environmental effects. Such assessment can identify optimal options and describe measures to prevent, reduce or mitigate any significant adverse effects.[20] It may also suggest preferred alternatives among those that are being considered.	*Optionally:* Consult authorities & public on alternatives, and record comments

[17] Annex IV, item 3
[18] Annex IV, item 2
[19] Annex IV, items 6 and 10.
[20] Annex IV, item 7.

Step	Usual tasks in plan or programme making	Logically corresponding tasks in SEA	Consultations with authorities, public access to information and public participation within SEA
Document-ation	Preparation of the draft plan or programme, including: o Proposed implementation and monitoring arrangements o Summary description of the draft plan or programme o Documentation of the draft plan or programme	Preparation and issue of the environmental report accompanying the draft plan or programme: o Recording how alternatives were developed o Recording how assessment was carried out, including difficulties encountered o Defining measures for monitoring of environmental effects of the implementation of the plan[21] o Summarizing the information in a non-technical summary[22]	
Consultation with relevant authorities and the public	Consultation	Public participation, consultation with relevant authorities and transboundary consultations	Make draft plan or programme and environmental report available to the public and the authorities Consult authorities & public concerned on the draft plan or programme and environmental report Notify and consult affected Parties as appropriate Receive comments to be taken into due account in decision-making

[21] Annex IV, item 9.
[22] Annex IV, item 11.

Step	Usual tasks in plan or programme making	Logically corresponding tasks in SEA	Consultations with authorities, public access to information and public participation within SEA
Decision-making	Taking environmental report and comments from authorities and the public into account during formal decision-making on the plan or programme.		Inform the relevant authorities (including environmental and health authorities) and the public
Monitoring	Monitoring of implementation of the plan or programme	Environmental monitoring	Make monitoring results available to the public and the authorities

A2.3 PRACTICAL APPROACHES TO INTEGRATING SEA INTO PLAN AND PROGRAMME MAKING

14. Section A2.2 looks at theoretical situations. This section turns to practical plan- and programme-making processes, and to some practical reasons for seeking to integrate SEA into plan or programme making.

A2.3.1 Determining effective links between SEA and plan or programme making

Review of the plan- or programme-making process

15. As pointed out in the section A2.2, each plan- or programme-making process is different – some of these processes operate on the basis of clearly defined procedures (e.g. spatial planning, river-basin management, coastal zone management), but other plan- and programme-making processes (e.g. waste management, energy planning) may operate on the basis of less structured approaches.

16. Optimal points for entry of SEA into plan- and programme-making processes cannot be effectively established, therefore, without detailed knowledge of the very specific plan- and programme-making systems within which SEA needs to operate. This knowledge can be gained through review of the plan- or programme-making process, which may be done on two levels:

- The review of procedures (e.g. procedural and methodological requirements for a specific plan- or programme-making discipline) can provide useful insights on the level of specific plan- and programme-making regimes. This may be useful for design of, for example, specific SEA guidelines for a particular plan- or programme-making procedure.

- The review of a process used to draw up a specific plan or programme (e.g. a forestry plan) can provide useful insights for the design of a specific SEA approach in drawing up a range of other plans and programmes.

Suggested focus of the review

17. In order to determine the entry points for SEA into a specific plan- or programme-making process, it may be useful to review:

- The formal or informal plan- or programme-making logic and the sequence of the key plan- or programme-making tasks

- Any environmental analyses that are normally performed within the specific plan- or programme-making process

- Consultation with environmental and health authorities within the plan or programme making

- Access to information and any provisions for public participation during the plan or programme making

18. Such a review may offer useful insights for the design of customized SEA processes that build effectively on the existing plan- or programme-making tasks rather than replacing or duplicating them.

A2.3.2 Practical reasons for integrating SEA into plan and programme making

19. Integration of SEA into the development of plans and programmes is based on practical reasons, which extend beyond the legal obligations for early and effective use of SEA in the plan or programme making described in Chapter A4.

20. The complexity of decision-making calls for the use of effective instruments that assist rather than complicate the development of plans and programmes. Generally speaking, SEA processes will be regarded as effective and efficient if they:

- **Enable effective consideration of environmental issues in the development of plans and programmes.** The capacity of SEA to facilitate the integration of environmental issues into plan or programme making largely depends of the timelines and form of SEA inputs into the plan or programme making. SEAs that provide early and operative inputs in the relevant stages of the plan or programme making are naturally going to be more efficient than ex-post[23] or separate assessments.

- **Assist in the identification of conflicting views and interests and thus increase the credibility of decision-making.** This tends to facilitate rational debate and problem solving, as well as building trust between stakeholders.

- **Do not unnecessarily prolong plan or programme making.** Application of the Protocol requirements poses certain time demands, which can be minimized by careful organization of the SEA during the plan- or programme-making process.

- **Are not unreasonably costly.** The preparation of environmental reports and consultations with authorities and with the public defined by the Protocol will incur additional costs. Additional costs may be limited if SEA is carried out in conjunction with the plan or programme making and builds on data gathering, analyses and consultation that may already occur within the plan- or programme-making process.

21. The above overview indicates how important it is to coordinate SEA properly with the development of the plan or programme. The goal is to ensure that SEA provides early and effective inputs into plan or programme making and to ensure that environmental considerations **are thoroughly taken into account in the development of plans and programmes** (see art. 1(a) of the Protocol).

22. In reality, SEA practitioners may be confronted with numerous challenges in achieving effective coordination, and ultimately integration, of SEA and plan or programme making.

[23] 'Ex-post' means 'Based on or determined by actual results, rather than expectations; calculated retrospectively'. It is the opposite of 'ex-ante', which means 'Based on predicted or expected results; forecast, anticipated'. Source: Oxford English Dictionary, Oxford University Press.

A2.3.3 Issues for consideration

23. The proper use of logical links between plan- or programme-making tasks, on the one hand, and SEA tasks, on the other, can help to achieve one of the objectives of the Protocol: 'to ensure that environmental, including health, considerations are thoroughly taken into account in the development of plans and programmes' (art. 1(a)).

24. Apparent logical links between the development of the plan or programme and SEA will only be realized if practical links occur on the following levels:

- Development of the plan or programme and the preparation of the environmental report
- Consultation with the authorities
- Public participation

25. Links between the development of the plan or programme and the preparation of the environmental report may result practically in:

- Joint use of data
- Joint inputs into the development of relevant alternatives
- Addressing plan- and programme-making and environmental issues during comparisons of alternatives, in modelling (if any), etc.

26. Links in consultation with the authorities may result practically in:

- Joint consultative processes for public authorities
- Joint evaluation of comments obtained, etc.

27. Links in public participation may result practically in:

- A single system to facilitate public access to documentation
- A single system for consultations with the public
- A single system for the evaluation of comments obtained, etc.

A2.4 OPTIONS FOR APPLYING THE PROTOCOL DURING PLAN AND PROGRAMME MAKING

28. This section outlines some possible situations that may occur in the practical undertaking of SEA during the development of plans and programmes. It is understood that, in reality, there may be options that combine different elements of these extreme situations. The overview below is thus illustrative – its purpose is to outline the strengths and weaknesses of each option and its contribution to meeting obligations under the Protocol.

A2.4.1 Problematic application: SEA that is ex-post and separated from the plan or programme making

29. It sometimes occurs that SEA is ex-post and separated from the plan or programme making; this will occur if SEA begins only after formulation of the draft plan or programme (see Figure A2.4). This situation might be caused by several factors:

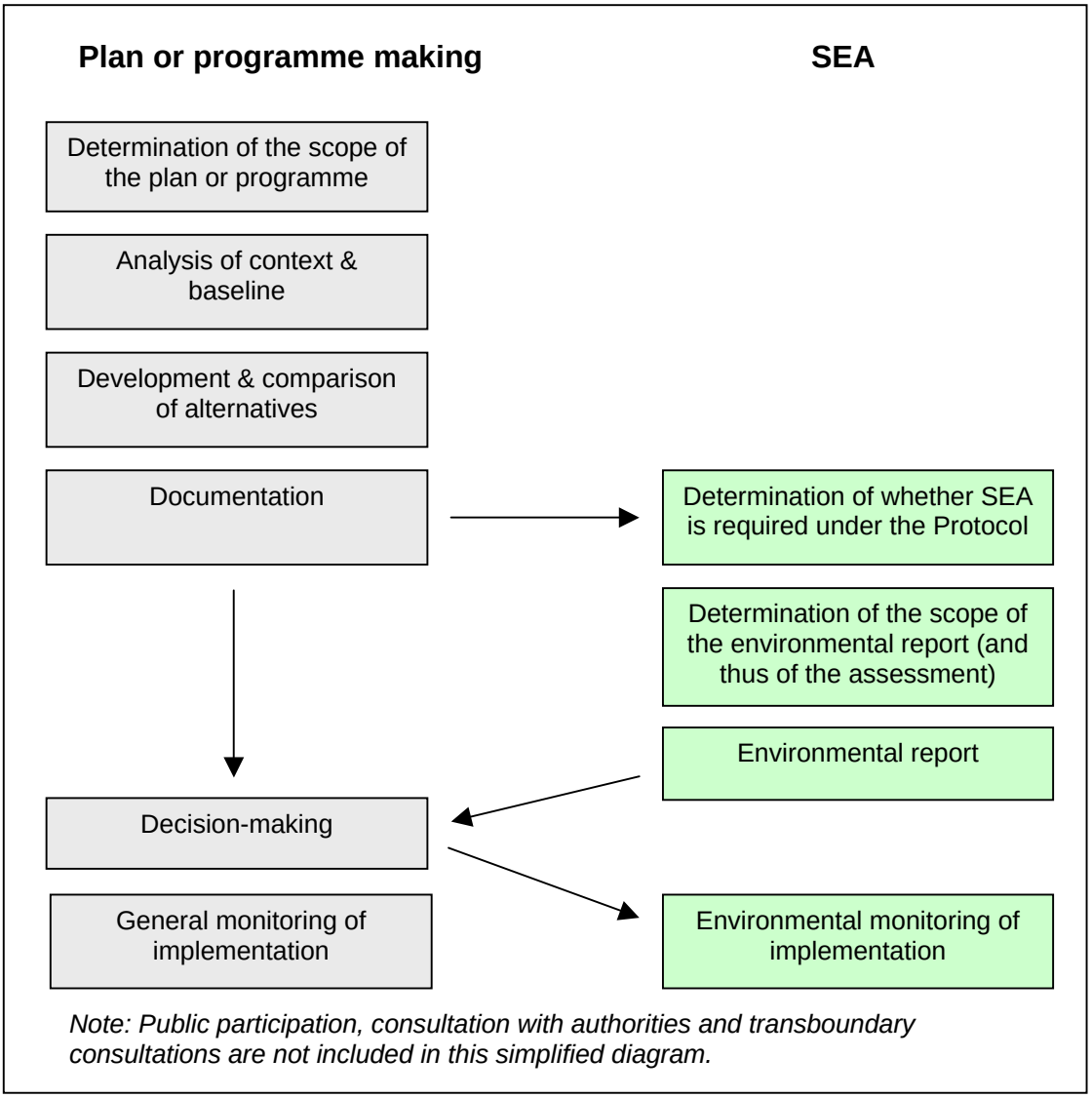
- Case-by-case determination of whether SEA is required for a given plan or programme requires a too-detailed description of the proposed plan or programme. Very detailed demands for the description of the nature of the proposed plan or programme for determining the significance of its likely environmental effects may lead the responsible authority to submit only an advanced (or completed) draft of the plan or programme for case-by-case determination of whether SEA is required. In practice, the determination of likely significant effects of the plan or programme should be possible during its initiation, which normally defines the nature of the plan or programme and its broad objectives.

- Responsible authorities or developers of the plan or programme do not wish to undertake SEA early, because they may be unaware of the numerous benefits of early application of SEA. In practice, there may be political reasons for this or a simple lack of appreciation of the value of SEA. However, such instances tend to be very limited and may be prevented by awareness raising about the benefits of SEA in preventing conflicts and in cost and time savings.

- Persons in charge of SEA do not wish or are not ready to assess incomplete plans and programmes. This situation may occur in countries or institutions with limited practice in SEA. Cases have been observed of persons in charge of SEA intentionally postponing beginning SEA with the argument that it is impossible to assess impacts of non-existent or vaguely defined proposals. This may be caused by attempts to apply rigidly approaches used in project-level EIA, without their necessary adjustment to the scale of issues that are normally addressed in a plan or programme and to the nature of the plan- or programme-making process.

30. Such SEA may be perceived as a final quality check that aims to provide information to the decision-making on the draft plan or programme.

Figure A2.4: SEA that is ex-post and separated from the plan or programme making: overall approach



31. However, SEA separated from the plan- or programme-making process has several widely perceived weaknesses:

- Separated and ex-post SEA **does not influence the development of the plan or programme**. Such SEA examines only the end product of plan or programme making and does not influence important choices that are made in plan or programme making. The responsible authority is less likely to adopt any of the SEA recommendations as the plan or programme making may be more advanced. Such SEA will likely produce the least environmental benefit.

- SEA that starts after completion of the draft plan or programme **may duplicate effort** in the development of alternatives, their analyses and comparison.

- The separation of consultations within SEA from consultations within the plan- or programme-making process may lead to **duplication in the commenting process** and may also **confuse participating authorities and the public**.

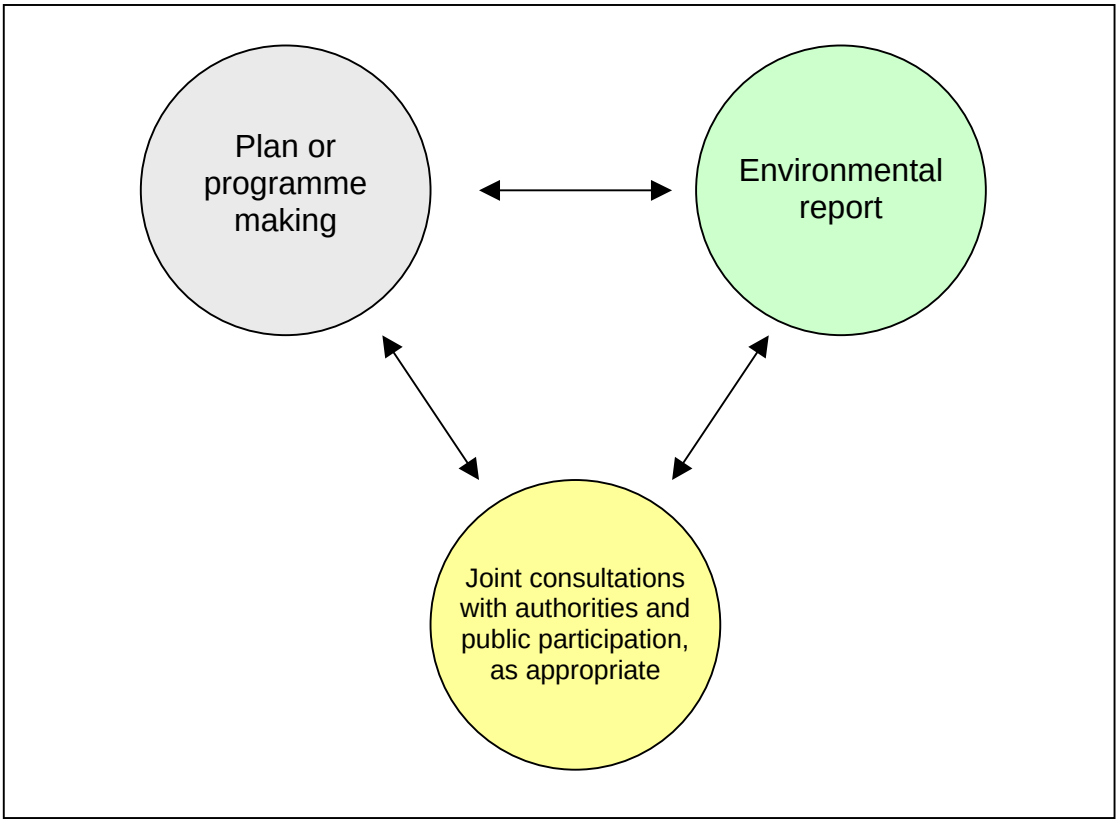
- Such SEA usually **significantly delays the plan- or programme-making process**. Determination of whether SEA is needed, scoping the assessment, preparing the environmental report, carrying out consultations with authorities and public participation may also require considerable time, which may prolong the plan- or programme-making process.

- Lastly – and **most importantly** – this approach may conflict with several provisions of the Protocol (see preamble, objective and definition of SEA) and there is a risk that it **will not provide SEA in accordance with the Protocol and the SEA Directive**.

A2.4.2 SEA partially integrated into plan or programme making

32. SEA partially integrated into plan or programme making (see Figure A2.5) is based on the assumption that initiation of the specific plan or programme normally provides sufficient basis for the determination of whether SEA is needed and for scoping.

Figure A2.5: SEA partially integrated into plan or programme making: overall approach



33. Initiation of the plan or programme usually clarifies legal, administrative or regulatory requirements for the development of the plan or programme and outlines its nature and the intended focus of its objectives. This information should normally provide a sufficient

basis for the determination of whether SEA is required for the given plan or programme and for scoping of the key issues that should be analyzed within the SEA. Determination of whether SEA is required and early scoping during initiation of the plan or programme making create favourable conditions for undertaking SEA during the plan or programme making.

34. SEA partially integrated into plan or programme making runs in parallel to the development of the plan or programme. The SEA team and the plan- or programme-making team work separately while maintaining close links in order to ensure due account of the SEA in the plan or programme making.

35. This approach utilizes logical links between the development of plans and programmes and SEA and enables the SEA team to:

- Address the same issues at the same time as the plan- or programme-making team
- Generate, analyze and compare alternative viewpoints and options
- Create favourable conditions for taking due account of SEA at each step of the plan or programme making

36. Draft versions of the plan or programme and of the environmental report can also be made available for comments by the authorities and by the public (concerned) through a single commenting or review system that combines requirements for consultation within the plan- or programme-making process and within SEA.

37. The SEA team may also explain within the final environmental report how the conclusions of the SEA were reflected in the draft plan or programme and may indicate any outstanding issues, thus helping authorities to meet their obligations under article 11.2: Parties are required to provide the public, the relevant environmental authorities and any consulted Parties 'with a statement summarizing how the environmental, including health, considerations have been integrated into it, how the comments received in accordance with articles 8 to 10 have been taken into account and the reasons for adopting it in the light of the reasonable alternatives considered'. Such an overview may also be helpful in the review of the environmental report and of the draft plan or programme by the authorities and the public.

38. Partial integration of SEA into plan or programme making results in several benefits:

- Significantly **reduces delays**, since SEA is undertaken in parallel with the development of the plan or programme.
- **Saves resources** required to undertake SEA since the SEA team is able to participate in data gathering and to contribute to analyses that are normally performed within the plan- or programme-making process. (See section A1.3 for a more detailed discussion of the costs and benefits of SEA.)
- Frequent consultations between the SEA team and the plan- or programme-making team facilitate **early consideration of different viewpoints** and minimize the risk of late surprises and conflicts. This debate helps not only the plan- or programme-

making team (which may consider inputs from the SEA) but also the SEA team (which can get immediate feedback on its proposals).

- **Consultations** between teams that prepare the plan or programme and the SEA may, as deemed appropriate, also **extend to relevant environmental and health authorities and to the public (concerned).** Such consultations, once organized, enable periodic scoping and review of key issues that are relevant for each respective stage of the plan- or programme-making process. Such consultations may also become more effective in gathering and addressing inputs from relevant authorities and the public than initial scoping consultations, or than concluding reviews of the draft plan or programme and of the environmental report at the end of the plan- or programme-making process.

- Lastly – and **most importantly** – this application supports several provisions of the Protocol (see preamble, objective and definition of SEA) and **may provide SEA in accordance with the Protocol and the SEA Directive**.

39. At the same time, it is useful to note possible weaknesses of such an application of SEA. This approach generally increases demands on the SEA team since experts preparing the environmental report have to follow the entire plan- or programme-making process, which, in reality, may not proceed as a linear process and may not always proceed according to the original schedule but instead become quite lengthy. If the SEA team intends to provide inputs into all major stages in the drawing up the plan or programme, it needs to be ready to adapt its workplan to any changes in the plan- or programme-making process. (This may pose difficulties if SEA tasks are subcontracted to external bodies.)

A2.4.3 SEA fully integrated into plan and programme making

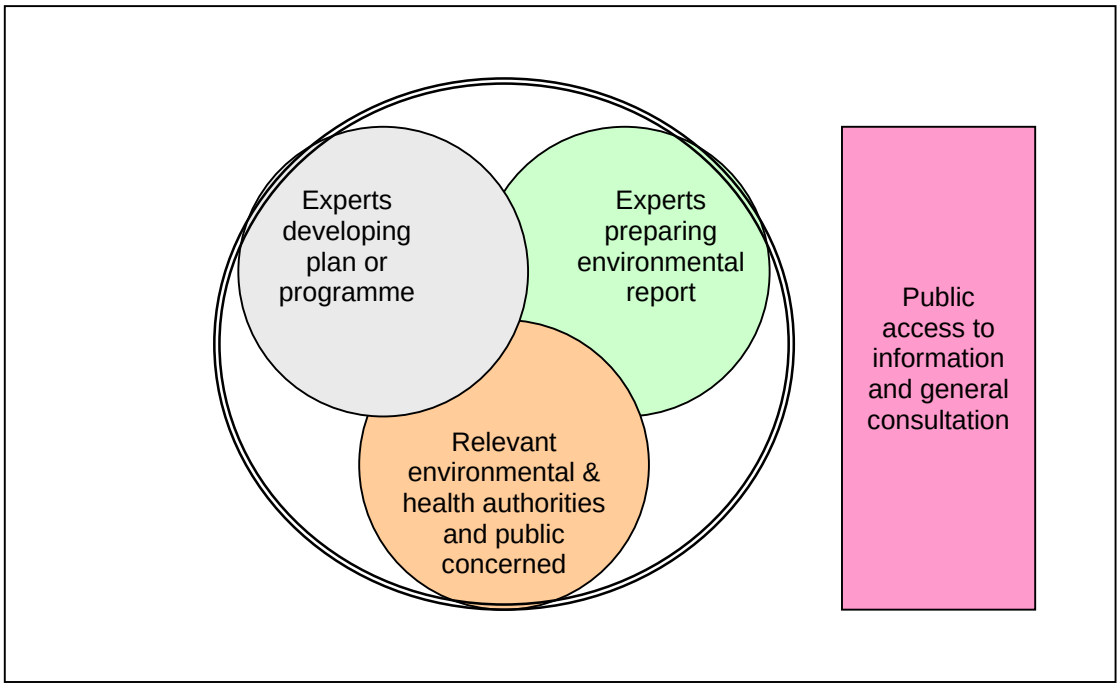
40. SEA that is fully integrated into plan or programme making (Figure A2.6) is based on the notion that SEA experts and plan- or programme-making experts can work together as part of one team that develops the plan or programme. This approach to plan or programme making and SEA is typically carried out through joint working groups or plan- or programme-making roundtables, which may include representatives of relevant authorities and the public concerned. Such joint work enables the free flow of information between all concerned parties (plan- or programme-making experts, SEA experts and representatives of relevant authorities and the public concerned) who receive the same information at the same time, share their knowledge and concerns, develop and analyze key options and thus jointly draw-up the draft plan or programme. The preparation of the environmental report and consultations with the relevant authorities and public concerned thus become inseparable parts of the plan- or programme-making process.

41. Interim documents that reflect outcomes of these consultations can be provided for wider public review as they become available. However, the wider public is not allowed to participate directly in the core plan- or programme-making and assessment process, because of management and logistical reasons.

42. This mode of work enables ongoing consultations and review of interim documents produced within the plan- or programme-making process. The information produced within the environmental report can be integrated fully into the respective plan or programme. The final environmental report explains how various analyses were carried

out within the integrated plan or programme making and SEA and can provide supplementary information that would not otherwise have been directly included in the plan or programme.

Figure A2.6: SEA fully integrated into plan or programme making: overall approach



43. Full integration of SEA into the plan or programme making typically brings about the same benefits as partial integration of SEA into plan or programme making. This mode of work reduces delays since analyses performed within SEA become an integral part of the plan- or programme-making process. It may also reduce costs for the SEA, since the plan- or programme-making experts and SEA experts jointly gather data for and contribute their inputs to the development of the plan or programme. Their joint work allows them to share immediately their concerns and thus by definition prevents any late surprises. Lastly, it creates favourable conditions for meeting the obligations of the Protocol and the SEA Directive.

44. An additional benefit of such an approach lies in the fact that joint work by all parties in the plan- or programme-making process creates an optimal environment for cooperation, and it helps build trust between stakeholders that may normally have different attitudes and values. This may be an important factor for fostering a participatory nature of plan- or programme-making process.

45. Possible concerns with full integration of SEA into plan or programme making derive from a fear that SEA experts in the overall plan- or programme-making team may become fully co-opted in the plan- or programme-making process, or may be marginalized (have only limited influence) or may make trade-offs that will not be publicly disclosed. The rationale behind these concerns is:

- Outcomes of any collective work are normally heavily influenced by the composition of the team. This approach will work only if SEA experts and plan- or programme-making experts are willing to cooperate.

- If SEA experts, together with representatives of relevant environmental and health authorities and the public concerned, form a minor part of the entire team or working group that draws up the plan or programme, there might be a risk that their views will not be duly respected in the internal debates. This approach will function only if the teamwork is properly facilitated to ensure that the plan- or programme-making process is not dominated by any particular interest group within this integrated plan- or programme-making team.

- The last concern relates to the fact that such teamwork may result in internal agreements and trade-offs that are not transparent to outside stakeholders. SEA experts may also be expected to defend the conclusions of the entire team. In this regard, it is important to emphasize that the SEA experts are required to produce an environmental report that must outline all significant issues (impacts, proposals for consideration of alternatives, etc.) that were addressed in the SEA process. This report can be produced as a separate document or a clearly distinguishable part of the plan or programme. It should, irrespective of final internal agreements reached within integrated teams, record all significant issues and trade-offs that were discussed within the SEA.

46. While these concerns may not be relevant for well-governed and transparent plan- or programme-making processes, they may be valid for other some less developed plan- or programme-making regimes.

A2.4.4 Conclusion on integration of SEA into plan or programme making

47. There is no single best approach to conducting SEA in relation to plan or programme making. However, it appears that SEA that is ex-post and separated from plan or programme making tends to be least effective and is unlikely to provide a sufficient basis for meeting the obligations of the Protocol.

48. Partial or full integration of SEA into plan or programme making seem to offer suitable frameworks for application of the Protocol. The choice of approach depends on the specific conditions in each plan- or programme-making process. Sometimes partial integration would be more effective then full integration, on other occasions the reverse may be true.

CHAPTER A3: DETERMINING WHETHER PLANS AND PROGRAMMES REQUIRE SEA UNDER THE PROTOCOL

A3.1 INTRODUCTION TO THE CHAPTER

The Protocol refers throughout to 'the environment, including health'. To avoid repetition, the Manual refers only to 'the environment', but this should always be understood to include health. For more information on health issues, please see [Annex] [Chapter] [XX].

1. This Chapter provides a description of how to determine whether SEA is required under the Protocol for a given plan or programme. Chapter A4 takes this discussion forward by examining how the SEA may be undertaken.

2. This Chapter begins with an overview of the legal requirements (section A3.2). This is followed by a detailed description of a series of tests to determine whether SEA is required (section A3.3). The Chapter concludes with a discussion of possible practical arrangements (section A3.4).

A3.2 LEGAL OBLIGATIONS

Key provisions

3. To determine whether SEA is required under the Protocol, it is necessary to determine whether the plan or programme being considered falls within the Protocol's **definition** of a plan or programme (art. 2.5), and within the '**field of application**' of the Protocol (art. 4). For certain plans and programmes (see below) it will be necessary to determine the **significance** of its likely environmental effects (art. 5, 'Screening'). Articles 4 and 5 combined are broadly equivalent to Article 3 ('Scope') in the SEA Directive.

4. The key provisions of the Protocol with regard to the determination of whether SEA is required under the Protocol for a given plan or programme are thus:

- Article 2.5 – Definition of 'plans and programmes'
- Article 4 – Field of Application concerning Plans and Programmes
- Annex I – List of projects as referred to in article 4, paragraph 2
- Annex II – Any other projects referred to in article 4, paragraph 2
- Article 5 – Screening
- Annex III – Criteria for determining of the likely significant environmental effects referred to in article 5, paragraph 1

A3.2.1 Articles 2.5 and 4, and annexes I and II

5. The first requirement in order for plans and programmes to be subject to SEA under the Protocol is that they must meet the conditions of both indents in the definition of 'plans and programmes' (art. 2.5). In other words they must be both 'subject to preparation and/or adoption by an authority or prepared by an authority for adoption, through a formal procedure, by a parliament or a government' and 'required by legislative, regulatory or administrative provisions'. Further requirements are laid down in article 4, which specifies for which plans and programmes satisfying article 2.5 an SEA is required. Article 4 contains a set of criteria that have to be considered; when these criteria are met an SEA has to be carried out.

Article 2 – Definitions

5. "Plans and programmes" means plans and programmes and any modifications to them that are:
   (a) Required by legislative, regulatory or administrative provisions; and
   (b) Subject to preparation and/or adoption by an authority or prepared by an authority for adoption, through a formal procedure, by a parliament or a government.

Article 4 – Field of Application concerning Plans and Programmes

1. Each Party shall ensure that a strategic environmental assessment is carried out for plans and programmes referred to in paragraphs 2, 3 and 4 which are likely to have significant environmental, including health, effects.
2. A strategic environmental assessment shall be carried out for plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry including mining, transport, regional development, waste management, water management, telecommunications, tourism, town and country planning or land use, and which set the framework for future development consent for projects listed in annex I and any other project listed in annex II that requires an environmental impact assessment under national legislation.

3. For plans and programmes other than those subject to paragraph 2 which set the framework for future development consent of projects, a strategic environmental assessment shall be carried out where a Party so determines according to article 5, paragraph 1.
4. For plans and programmes referred to in paragraph 2 which determine the use of small areas at local level and for minor modifications to plans and programmes referred to in paragraph 2, a strategic environmental assessment shall be carried out only where a Party so determines according to article 5, paragraph 1.
5. The following plans and programmes are not subject to this Protocol:
   (a) Plans and programmes whose sole purpose is to serve national defence or civil emergencies;
   (b) Financial or budget plans and programmes.

The corresponding provisions in the SEA Directive are in Article 3, paragraphs 1-4 and 8-9.

Annex I – List of projects as referred to in article 4, paragraph 2

1. Crude oil refineries (excluding undertakings manufacturing only lubricants from crude oil) and installations for the gasification and liquefaction of 500 metric tons or more of coal or bituminous shale per day.
2. Thermal power stations and other combustion installations with a heat output of 300 megawatts or more and nuclear power stations and other nuclear reactors (except research installations for the production and conversion of fissionable and fertile materials, whose maximum power does not exceed 1 kilowatt continuous thermal load).
3. Installations solely designed for the production or enrichment of nuclear fuels, for the reprocessing of irradiated nuclear fuels or for the storage, disposal and processing of radioactive waste.
4. Major installations for the initial smelting of cast-iron and steel and for the production of non-ferrous metals.
5. Installations for the extraction of asbestos and for the processing and transformation of asbestos and products containing asbestos: for asbestos-cement products, with an annual production of more than 20,000 metric tons of finished product; for friction material, with an annual production of more than 50 metric tons of finished product; and for other asbestos utilization of more than 200 metric tons per year.
6. Integrated chemical installations.
7. Construction of motorways, express roads*/ and lines for long-distance railway traffic and of airports**/ with a basic runway length of 2,100 metres or more.
8. Large-diameter oil and gas pipelines.
9. Trading ports and also inland waterways and ports for inland-waterway traffic which permit the passage of vessels of over 1,350 metric tons.
10. Waste-disposal installations for the incineration, chemical treatment or landfill of toxic and dangerous wastes.
11. Large dams and reservoirs.
12. Groundwater abstraction activities in cases where the annual volume of water to be abstracted amounts to 10 million cubic metres or more.
13. Pulp and paper manufacturing of 200 air-dried metric tons or more per day.
14. Major mining, on-site extraction and processing of metal ores or coal.
15. Offshore hydrocarbon production.
16. Major storage facilities for petroleum, petrochemical and chemical products.
17. Deforestation of large areas.

*/ For the purposes of this Protocol:
- “Motorway” means a road specially designed and built for motor traffic, which does not serve properties bordering on it, and which:
(a) Is provided, except at special points or temporarily, with separate carriageways for the two directions of traffic, separated from each other by a dividing strip not intended for traffic or, exceptionally, by other means;
(b) Does not cross at level with any road, railway or tramway track, or footpath; and
(c) Is specially sign posted as a motorway.
- “Express road” means a road reserved for motor traffic accessible only from interchanges or controlled junctions and on which, in particular, stopping and parking are prohibited on the running carriageway(s).
**/ For the purposes of this Protocol, “airport” means an airport which complies with the definition in the

1944 Chicago Convention setting up the International Civil Aviation Organization (annex 14).

Annex II – Any other projects referred to in article 4, paragraph 2

1. Projects for the restructuring of rural land holdings.
2. Projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes.
3. Water management projects for agriculture, including irrigation and land drainage projects.
4. Intensive livestock installations (including poultry).
5. Initial afforestation and deforestation for the purposes of conversion to another type of land use.
6. Intensive fish farming.
7. Nuclear power stations and other nuclear reactors*/ including the dismantling or decommissioning of such power stations or reactors (except research installations for the production and conversion of fissionable and fertile materials whose maximum power does not exceed 1 kilowatt continuous thermal load), as far as not included in annex I.
8. Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of 15 kilometres or more and other projects for the transmission of electrical energy by overhead cables.
9. Industrial installations for the production of electricity, steam and hot water.
10. Industrial installations for carrying gas, steam and hot water.
11. Surface storage of fossil fuels and natural gas.
12. Underground storage of combustible gases.
13. Industrial briquetting of coal and lignite.
14. Installations for hydroelectric energy production.
15. Installations for the harnessing of wind power for energy production (wind farms).
16. Installations, as far as not included in annex I, designed:
    - For the production or enrichment of nuclear fuel;
    - For the processing of irradiated nuclear fuel;
    - For the final disposal of irradiated nuclear fuel;
    - Solely for the final disposal of radioactive waste;
    - Solely for the storage (planned for more than 10 years) of irradiated nuclear fuels in a different site than the production site; or
    - For the processing and storage of radioactive waste.
17. Quarries, open cast mining and peat extraction, as far as not included in annex I.
18. Underground mining, as far as not included in annex I.
19. Extraction of minerals by marine or fluvial dredging.
20. Deep drillings (in particular geothermal drilling, drilling for the storage of nuclear waste material, drilling for water supplies), with the exception of drillings for investigating the stability of the soil.
21. Surface industrial installations for the extraction of coal, petroleum, natural gas and ores, as well as bituminous shale.
22. Integrated works for the initial smelting of cast iron and steel, as far as not included in annex I.
23. Installations for the production of pig iron or steel (primary or secondary fusion) including continuous casting.
24. Installations for the processing of ferrous metals (hot-rolling mills, smitheries with hammers, application of protective fused metal coats).
25. Ferrous metal foundries.
26. Installations for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes, as far as not included in annex I.
27. Installations for the smelting, including the alloyage, of non-ferrous metals excluding precious metals, including recovered products (refining, foundry casting, etc.), as far as not included in annex I.
28. Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process.
29. Manufacture and assembly of motor vehicles and manufacture of motor-vehicle engines.
30. Shipyards.
31. Installations for the construction and repair of aircraft.
32. Manufacture of railway equipment.
33. Swaging by explosives.
34. Installations for the roasting and sintering of metallic ores.
35. Coke ovens (dry coal distillation).
36. Installations for the manufacture of cement.
37. Installations for the manufacture of glass including glass fibre.
38. Installations for smelting mineral substances including the production of mineral fibres.

39. Manufacture of ceramic products by burning, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain.
40. Installations for the production of chemicals or treatment of intermediate products, as far as not included in annex I.
41. Production of pesticides and pharmaceutical products, paint and varnishes, elastomers and peroxides.
42. Installations for the storage of petroleum, petrochemical, or chemical products, as far as not included in annex I.
43. Manufacture of vegetable and animal oils and fats.
44. Packing and canning of animal and vegetable products.
45. Manufacture of dairy products.
46. Brewing and malting.
47. Confectionery and syrup manufacture.
48. Installations for the slaughter of animals.
49. Industrial starch manufacturing installations.
50. Fish-meal and fish-oil factories.
51. Sugar factories.
52. Industrial plants for the production of pulp, paper and board, as far as not included in annex I.
53. Plants for the pre treatment or dyeing of fibres or textiles.
54. Plants for the tanning of hides and skins.
55. Cellulose-processing and production installations.
56. Manufacture and treatment of elastomer-based products.
57. Installations for the manufacture of artificial mineral fibres.
58. Installations for the recovery or destruction of explosive substances.
59. Installations for the production of asbestos and the manufacture of asbestos products, as far as not included in annex I.
60. Knackers' yards.
61. Test benches for engines, turbines or reactors.
62. Permanent racing and test tracks for motorized vehicles.
63. Pipelines for transport of gas or oil, as far as not included in annex I.
64. Pipelines for transport of chemicals with a diameter of more than 800 mm and a length of more than 40 km.
65. Construction of railways and intermodal transhipment facilities, and of intermodal terminals, as far as not included in annex I.
66. Construction of tramways, elevated and underground railways, suspended lines or similar lines of a particular type used exclusively or mainly for passenger transport.
67. Construction of roads, including realignment and/or widening of any existing road, as far as not included in annex I.
68. Construction of harbours and port installations, including fishing harbours, as far as not included in annex I.
69. Construction of inland waterways and ports for inland-waterway traffic, as far as not included in annex I.
70. Trading ports, piers for loading and unloading connected to land and outside ports, as far as not included in annex I.
71. Canalization and flood-relief works.
72. Construction of airports**/ and airfields, as far as not included in annex I.
73. Waste-disposal installations (including landfill), as far as not included in annex I.
74. Installations for the incineration or chemical treatment of non-hazardous waste.
75. Storage of scrap iron, including scrap vehicles.
76. Sludge deposition sites.
77. Groundwater abstraction or artificial groundwater recharge, as far as not included in annex I.
78. Works for the transfer of water resources between river basins.
79. Waste-water treatment plants.
80. Dams and other installations designed for the holding-back or for the long-term or permanent storage of water, as far as not included in annex I.
81. Coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works, excluding the maintenance and reconstruction of such works.
82. Installations of long-distance aqueducts.
83. Ski runs, ski lifts and cable cars and associated developments.
84. Marinas.

85. Holiday villages and hotel complexes outside urban areas and associated developments.
86. Permanent campsites and caravan sites.
87. Theme parks.
88. Industrial estate development projects.
89. Urban development projects, including the construction of shopping centres and car parks.
90. Reclamation of land from the sea.

*/ For the purposes of this Protocol, nuclear power stations and other nuclear reactors cease to be such an installation when all nuclear fuel and other radioactively contaminated elements have been removed permanently from the installation site.
**/ For the purposes of this Protocol, "airport" means an airport which complies with the definition in the 1944 Chicago Convention setting up the International Civil Aviation Organization (annex 14).

6. Many so-called 'plans and programmes' will not require SEA, while some so-called 'policies', 'strategies', 'projects', 'concepts', 'laws', 'regulations' and so on, will. This section will help you determine whether what is being considered is a 'plan or programme' within the meaning of the Protocol, and whether an SEA is required.

7. It is useful to bear in mind the following when considering whether SEA is required under the Protocol:

- The term 'plan or programme' is not sufficient qualification.
- Not all 'plans and programmes' will require SEA, but only those plans and programmes meeting a number of conditions.
- Some so-called policies, strategies and concepts that have the features of plans or programmes defined by the Protocol will require SEA. It is even possible that some laws and regulations might fall within the field of application of the Protocol, again provided that they meet its conditions.
- Detailed tests may be needed to define what is a plan or programme that requires SEA.

8. A number of questions are asked about any candidate plan or programme, or a modification to a plan or programme (see paragraph 23), to determine whether an SEA is required under the Protocol, beginning with the following:

- Is the sole purpose of the plan or programme to serve **national defence or civil emergencies**, or is it a **financial or budget** plan or programme? If so, no SEA is required.
- Is the plan or programme being prepared for agriculture, forestry, fisheries, energy, industry including mining, transport, regional development, waste management, water management, telecommunications, tourism, town and country planning or land use? If not, SEA is not automatically required but see paragraph 11 below.

9. If the answer to the first question is no and to the second it is yes then two more questions are asked:

- Does the plan or programme set the framework for future development consent for projects listed in annex I to the Protocol?

- Does the plan or programme set the framework for future development consent for any other project listed in annex II to the Protocol, and does the relevant project require EIA under national legislation?

10. If the answer to either of these questions is yes, then normally an SEA is required under the Protocol. However, if the plan or programme determines the use of a **small area at a local level** or is a **minor modification** to a plan or programme (art. 4.4), an SEA will be required only if the plan or programme is likely to have significant environmental effects according to article 5 ('Screening').

11. In addition (art. 4.3), a plan or programme will require SEA if it is likely to have significant environmental effects according to article 5 and if:

- The plan or programme sets the framework for the future development consent of projects **other than those** in annex I or those listed in annex II and requiring an EIA under national legislation; or

- The plan or programme sets the framework for future development consent of projects in annex I or any other project listed in annex II and requiring an EIA under national legislation **but where the plan or programme has not been prepared for one or more of the sectors listed** in article 4.2.

A3.2.2 Article 5 and annex III

12. The determination of significant effects is provided for in article 5 and may be done:

- By a case-by-case examination
- By specifying types of plans and programmes
- By a combination of the above two

13. The criteria set out in annex III (similar to Annex II of the SEA Directive) have to be taken into account in this determination.

Article 5 – Screening

1. Each Party shall determine whether plans and programmes referred to in article 4, paragraphs 3 and 4, are likely to have significant environmental, including health, effects either through a case-by-case examination or by specifying types of plans and programmes or by combining both approaches. For this purpose each Party shall in all cases take into account the criteria set out in annex III.
2. Each Party shall ensure that the environmental and health authorities referred to in article 9, paragraph 1, are consulted when applying the procedures referred to in paragraph 1 above.
3. To the extent appropriate, each Party shall endeavour to provide opportunities for the participation of the public concerned in the screening of plans and programmes under this article.
4. Each Party shall ensure timely public availability of the conclusions pursuant to paragraph 1, including the reasons for not requiring a strategic environmental assessment, whether by public notices or by other appropriate means, such as electronic media.

The broadly corresponding provisions in the SEA Directive are in its Article 3, paragraphs 5-7.

Annex III – Criteria for determining of the likely significant environmental, including health, effects referred to in article 5, paragraph 1

1. The relevance of the plan or programme to the integration of environmental, including health, considerations in particular with a view to promoting sustainable development.
2. The degree to which the plan or programme sets a framework for projects and other activities, either with regard to location, nature, size and operating conditions or by allocating resources.
3. The degree to which the plan or programme influences other plans and programmes including those in a hierarchy.
4. Environmental, including health, problems relevant to the plan or programme.
5. The nature of the environmental, including health, effects such as probability, duration, frequency, reversibility, magnitude and extent (such as geographical area or size of population likely to be affected).
6. The risks to the environment, including health.
7. The transboundary nature of effects.
8. The degree to which the plan or programme will affect valuable or vulnerable areas including landscapes with a recognized national or international protection status.

The broadly corresponding provisions in the SEA Directive are in its Annex II.

14. Relevant environmental and health authorities must be consulted during any **determination of significant effects** (art. 5.2), and the public may be provided with opportunities to participate (art. 5.3). However, a large number of plans and programmes will not be subject to the determination of significant effects as it will already be clear that they are, or are not, subject to SEA.

15. Under article 5.4, authorities have to make publicly available the outcome of any determination of significant effects (i.e. application of art. 5), whether during preparation of lists of types of plans and programmes (see below) or during a case-by-case examination. The information to be made available comprises:

    - The outcome of the testing, i.e. whether the plan or programme, or plan or programme type, is to be subject to SEA
    - The reasons why an SEA is not required, if this is the conclusion

16. This process of determining whether SEA is required may be made more efficient by reference to a **list of types** of plans and programmes always (or generally) subject to SEA. The creation of lists is discussed in section A3.4 below.

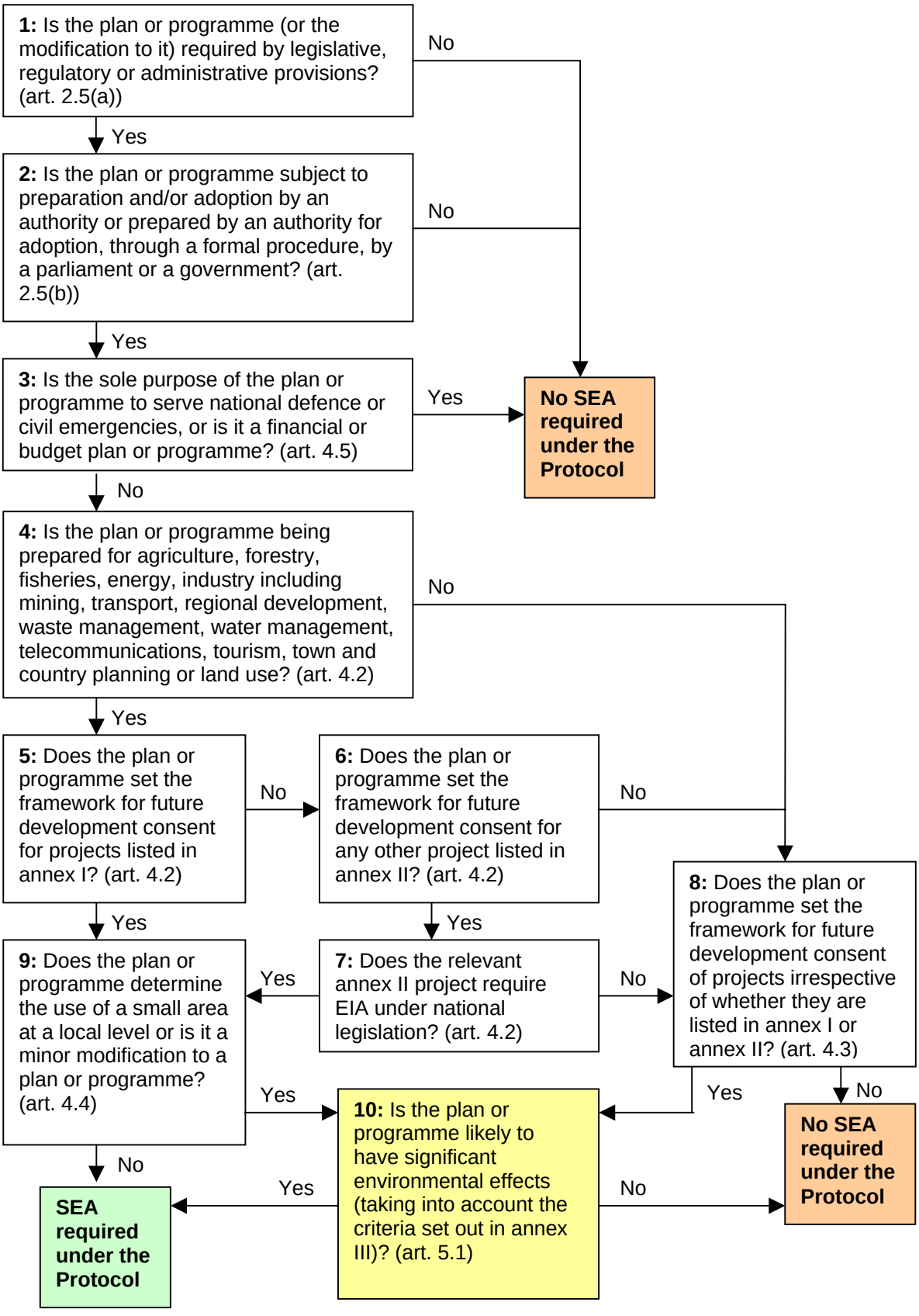
A3.3 DETAILED DESCRIPTION OF TESTS

17. This subsection includes a breakdown of the method of determination of whether a candidate plan or programme should be subject to SEA, listing nine tests that are set out in the Protocol's field of application (art. 2.5 and art. 4). A tenth test (determination of significant effects – art. 5) may be necessary to determine whether a plan or programme is likely to have significant environmental effects.

18. Figure A3.1 overleaf illustrates how the relevant provisions may be used to build a complete method for the determination of whether a particular plan or programme is subject to SEA. Each of the tests shown in the figure is presented in detail in this section.

Definition of a plan or programme (art. 2.5)	
Test 1	Is the plan or programme (or the modification to it) required by legislative, regulatory or administrative provisions? (art. 2.5(a))
Test 2	Is the plan or programme subject to preparation and/or adoption by an authority or prepared by an authority for adoption, through a formal procedure, by a parliament or a government? (art. 2.5(b))
Exemption from application (art. 4.5)	
Test 3	Is the sole purpose of the plan or programme to serve national defence or civil emergencies, or is it a financial or budget plan or programme? (art. 4.5)
Mandatory application (art. 4.2)	
Test 4	Is the plan or programme being prepared for agriculture, forestry, fisheries, energy, industry including mining, transport, regional development, waste management, water management, telecommunications, tourism, town and country planning or land use? (art. 4.2)
Test 5	Does the plan or programme set the framework for future development consent for projects listed in annex I? (art. 4.2)
Test 6	Does the plan or programme set the framework for future development consent for any other project listed in annex II? (art. 4.2)
Test 7	Does the relevant annex II project require EIA under national legislation? (art. 4.2)
Non-mandatory application (art. 4.3 and 4.4)	
Test 8	Does the plan or programme set the framework for future development consent of projects irrespective of whether they are listed in annex I or annex II? (art. 4.3)
Test 9	Does the plan or programme determine the use of a small area at a local level or is it a minor modification to a plan or programme? (art. 4.4)
Determination of significant effects (art. 5.1)	
Test 10	Is the plan or programme likely to have significant environmental effects (taking into account the criteria set out in annex III)? (art. 5.1)

Figure A3.1: Guide to determining whether a particular plan or programme should be subject to SEA under the Protocol



Test 1	Is the plan or programme (or the modification to it) required by legislative, regulatory or administrative provisions? (art. 2.5(a))

19. If a candidate plan or programme fails this first test, no SEA is required under the Protocol. If the test is passed, continue with Test 2.

20. We first need to consider how **plans and programmes** may be identified. It is clear that the name is not a sufficient indication: what is called a 'plan' or 'programme' may not be within the definition used by the Protocol and so the Protocol would not apply to it.

21. Similarly, plans and programmes are not always named as such: policies, projects, guidelines and strategies are some of the many labels attached to plans and programmes. An open mind is necessary at first when deciding what is a plan or programme. Here are some pointers derived from the EC Guide:

    - Recognize the wide scope and broad purpose of the Protocol
    - Consider the extent to which an act is likely to have significant environmental effects[24]
    - Consider any formal statement that goes beyond aspiration and sets out an intended course of future action
    - Examples of plans include:
        - A document that sets out how it is proposed to carry out or implement a scheme or a policy
        - Land use plans and development criteria
        - Waste management plans
        - Water resource plans
        - Transport plans
    - A programme may comprise a set of projects in a given area, for example a scheme for regeneration of an urban area, comprising a number of separate construction projects

22. It is not necessary to differentiate between plans on the one hand and programmes on the other: the Protocol treats them identically.

23. The Protocol also applies to **modifications** to plans and programmes. A good example of such a modification is where an existing land-use plan is revised regularly (perhaps every five years); the preparation of the revised plan would usually be subject to SEA. It is possible that a modification to a plan or programme for minor reasons (for example, changes to individual projects that do not significantly change the environmental effects of the plan or programme) may be exempt from SEA on these grounds but, as always, such an exemption should be examined carefully. In any case, the fundamental test is whether the modification is likely to have significant environmental effects.

[24] Para. 3.4 of the EC Guide

24. A modification to a plan or programme may lead to significant environmental effects not yet assessed. Such effects may arise because of the nature of the modification or because of a change in the state of the environment.

25. Parties might also wish to consider a situation where their knowledge (of activities, the environment or effects) has developed since the original plan or programme was developed or where the original plan or programme was not subject to SEA because it pre-dated the entry into force of SEA legislation.

26. Throughout this Manual references to plans or programmes include modifications to them.

27. The plan or programme (or modification) must be required by **legislative, regulatory or administrative provisions**. Parties might therefore choose not to subject to SEA any plan or programme that is not mandatory under such provisions. 'Administrative provisions are formal requirements for ensuring that action is taken which are not normally made using the same procedures as would be needed for new laws and which do not necessarily have the full force of law' (EC Guide, para. 3.16). Thus, though administrative provisions are not themselves legally binding, plans or programmes required by an administrative provision do fall within the definition in the Protocol. The UK's practical guide to the SEA Directive[25] states 'Characteristics of "administrative provisions" are likely to be that they are publicly available, prepared in a formal way, probably involving consultation with interested parties. The administrative provision must have sufficient formality such that it counts as a "provision" and it must also use language that plainly requires rather than just encourages a plan or programme to be prepared'.

Test 2	Is the plan or programme subject to preparation and/or adoption by an authority or prepared by an authority for adoption, through a formal procedure, by a parliament or a government? (art. 2.5(b))

28. If a candidate plan or programme fails this second test, no SEA is required under the Protocol. If the test is passed, continue with Test 3.

29. A plan or programme must be **subject to preparation and/or adoption by an authority**. Pointers that may be drawn from the EC Guide (para. 3.11-3.13) on this expression include:

- Either preparation or adoption by an authority is adequate to satisfy this test.
- A plan or programme may be prepared by one authority but adopted by another, but still satisfy this test.
- An 'authority' may be defined as:

  'a body, whatever its legal form and regardless of the extent (national, regional or local) of its powers, which has been made responsible, pursuant to a measure

[25] Para. 2.6 in *A Practical Guide to the Strategic Environmental Assessment Directive*, September 2005, available at http://www.communities.gov.uk/pub/290/APracticalGuidetotheStrategicEnvironmentalAssessmentDirectivePDF776Kb_id1143290.pdf.

adopted by the State, for providing a public service under the control of the State, and it has for that purpose special powers beyond those which result from the normal rules applicable in relations between individuals' (EC Guide, para. 3.12).[26]

- An authority may include, for example, a privatized utility company when it is preparing plans that in 'non-privatised regimes would be carried out by public authorities', but not when it is drawing up plans for its own commercial purposes not related to that 'public authority role'.

30. As an alternative to a plan or programme being 'subject to preparation and/or adoption by an authority', it may be '**prepared by an authority for adoption through a formal procedure, by a parliament or a government**', as is normally the case in some States. The Protocol qualifies both parliament and government by the indefinite article 'a', making it clear that there may be several parliaments or governments within a State, at different levels (e.g. national, regional, provincial, local). (See also EC Guide, para. 3.14.)

Test 3	Is the sole purpose of the plan or programme to serve national defence or civil emergencies, or is it a financial or budget plan or programme? (art. 4.5)

31. If a candidate plan or programme satisfies this third test, no SEA is required under the Protocol. If the test is failed, continue with Test 4.

32. Key pointers to this test derived from the EC Guide (see para. 3.62-3.63) include:

- The exemption is for those plans and programmes of which the **sole** purpose is to serve national defence or civil emergencies. The exemption is not for plans and programmes having elements that serve such a purpose.

- Civil emergencies would include man-made and natural disasters. The plan or programme would be prepared in response to a particular emergency that had already occurred, but not as a preventative measure (e.g. forest-fire prevention planning).

- Budgetary plans might include budgets at different government or authority levels. Financial plans might include project financing or finance distribution.

Test 4	Is the plan or programme being prepared for agriculture, forestry, fisheries, energy, industry including mining, transport, regional development, waste management, water management, telecommunications, tourism, town and country planning or land use? (art. 4.2)

33. A candidate plan or programme that has reached this test falls within the definition of a plan or programme provided in article 2.5 of the Protocol. Tests 4, 5 and 6 together implement article 4.2 of the Protocol. If this Test 4 is failed, continue with Test 8 as it does not mean that the plan or programme is not subject to SEA: article 4.3 may determine that it may nonetheless be subject to SEA. If this Test 4 is passed, continue with Test 5.

[26] See also the opinion of the European Court of Justice in the case C-188/89 *Foster and others v British Gas*: http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!CELEXnumdoc&lg=en&numdoc=61989J0188

34. This test asks whether the plan or programme is within one of the listed sectors. The terms 'town and country planning' and 'land use planning' are used in different States and might be used interchangeably. (See EC Guide, para. 3.31.)

Test 5	Does the plan or programme set the framework for future development consent for projects listed in annex I? (art. 4.2)

35. It is now asked whether the candidate plan or programme sets the framework for projects listed in annex I. If this test is failed, continue with Test 6 to see if the project is in annex II; if this test is passed, continue with Test 9.

36. The plan or programme must set the framework for future development consent for projects. Pointers that may be drawn from the EC Guide (para. 3.23-3.28) on this expression include:

- 'The meaning of "**set the framework for** future development consent" is crucial to the interpretation of the Directive, although there is no definition in the text. The words would normally mean that the plan or programme contains criteria or conditions that guide the way the consenting authority decides an application for development consent. Such criteria could place limits on the type of activity or development which is to be permitted in a given area; or they could contain conditions which must be met by the applicant if permission is to be granted; or they could be designed to preserve certain characteristics of the area concerned (such as the mixture of land uses which promotes the economic vitality of the area)' (para. 3.23).

- The same expression is used in annex III (item 2), together with a list of ways in which a framework might be set: location, nature, size and operating conditions or by allocating resources. The EC Guide suggests that the corresponding list in the Directive is list 'indicative and not exhaustive'. The 'resources' might be natural, human or financial, though the exclusion of financial and budget plans and programmes (art. 4.5) should not be forgotten. The EC Guide also suggests 'a generalised allocation of financial resources would not appear to be sufficient to set the framework'. Rather the resource allocation would condition how consent was to be granted, for example by defining a course of action or limiting solutions, if it were to be considered as setting the framework.

- As the EC Guide notes, 'land use plans generally contain criteria determining what kind of development can take place in particular areas and are a typical example of plans which set the framework for future development consent' (para. 3.26). Such a plan would need to define one or more precise or non-trivial conditions relating to future development consents.

- Plans or programmes might either define conditions in this way or directly, once adopted, give consent for projects. For example, an urban regeneration programme might comprise a number of construction projects complying with the conditions of the programme.

- Sectoral plans and programmes might define locational or technological conditions of future development projects, for example defining where in broad terms transport infrastructure is to be developed or what form of transport is to be employed.

37. The list in annex I to the Protocol is broadly similar, but not identical, to the corresponding list for the SEA Directive (Annex I to EU Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment, as amended by European Council Directive 97/11/EC of 3 March 1997 – the EIA Directive). (EU Member States also have to apply the 'Habitats Directive' test, as discussed in para. 3.32 of the EC Guide.)

Test 6	Does the plan or programme set the framework for future development consent for any other project listed in annex II? (art. 4.2)
Test 7	Does the relevant annex II project require EIA under national legislation? (art. 4.2)

38. These two tests may be considered together. If either test is failed, continue with Test 8. If both tests are passed, continue with Test 9.

39. Test 6 is similar to Test 5 and the list in annex II to the Protocol similar, but again not identical, to the corresponding list for the SEA Directive (Annex II of the EIA Directive). However, Test 7 introduces an important difference between the Protocol and Directive: those projects listed in annex II to the Protocol that do not require EIA under national legislation do not need to be included. In contrast, all projects in the corresponding list for the SEA Directive are included, irrespective of whether national legislation requires EIA.

Test 8	Does the plan or programme set the framework for future development consent of projects irrespective of whether they are listed in annex I or annex II? (art. 4.3)

40. If a candidate plan or programme has failed Tests 4, 6 or 7 it will nonetheless be subject to SEA if it passes this Test 8 and the test for significant environmental effects (Test 10). If it now fails Test 8, no SEA is required under the Protocol.

41. Article 4.3 broadens the scope of the Protocol to include plans and programmes that set the framework for future development consent of projects **and** have significant environmental effects. This provision includes projects in sectors not included in article 4.2 (Test 4) as well as projects that are in those sectors but are not listed in the annexes (Tests 5, 6 and 7).

Test 9	Does the plan or programme determine the use of a small area at a local level or is it a minor modification to a plan or programme? (art. 4.4)

42. If this test is failed, an SEA is required under the Protocol. Even if this test is passed, a plan or programme is not automatically exempt, as it would still require determination of significant effects (Test 10).

43. Key pointers to this test derived from the EC Guide (see para. 3.33-3.36) include:

- The meaning of small 'will call for the careful exercise of judgement' and may have different meanings in different countries and within different locations in a country. For example, 'small' may be interpreted differently in an historic town from in reclaimed agricultural land. The EC Guide gives an example of a 'building plan' that sets specific conditions on construction within a limited area.

- 'Local level', rather than just 'local', might imply a local authority level. 'A small area at a local level' might be interpreted to prevent exemption (i.e. Test 9 being passed) for the whole of a local authority area.

- 'Minor modifications' should be considered in terms of the likelihood of such changes having significant environmental effects, not in terms of the degree of change to a plan or programme.

- Significance of effects is the **overriding** criterion under Tests 8 and 9.

Test 10	Is the plan or programme likely to have significant environmental effects (taking into account the criteria set out in annex III)? (art. 5.1)

44. It is only necessary to test for significant environmental effects of a plan or programme that falls within the definition in the Protocol (art. 2.5 – Tests 1 and 2), **and** that has not already been identified as clearly subject to SEA by reference to a list of types of plans and programmes, **and** that either:

    - Is within one of the specified sectors and is listed in annex I or annex II (and required by national legislation) (art. 4.2 – Tests 4 through to 7), but determines the use of a small area at a local level or is a minor modification (art. 4.4 – Test 9); or

    - Sets the framework for future development consent of projects irrespective of whether they are listed in annex I or annex II (art. 4.3 – Test 8).

45. Key features of this test (art. 5) are:

    - An analysis against significance criteria (in annex III, similar to Annex II of the SEA Directive)

    - Mandatory consultation with authorities

    - Optional public participation

    - Making the outcome publicly available

46. Whereas the earlier tests (1-9 – field of application) may be carried out internally, within an authority, Test 10 (determination of significant effects) requires at least the consultation with the environmental and health authorities. Test 10 also explicitly provides for public participation, but this provision is not mandatory (and is not a requirement of the SEA Directive). Detailed descriptions of public participation and of consultation with authorities are provided in Chapter A4, in section A4.3 and section A4.4, respectively.

47. The Protocol requires that the result of any determination of significant effects be made publicly available, again in contrast with the earlier tests. This is discussed in paragraph 15 above and paragraph 55 below.

48. This test has to take into account the criteria for characteristics of the plan or programme and for its effects (or 'significance criteria') provided in annex III:

- Contribution to sustainable development
- Degree to which it sets a framework for projects
- Influence on other plans and programmes
- Relevant environmental, including health, problems
- Nature of effects, including whether transboundary
- Risks
- Effect on valuable or vulnerable areas

49. All the criteria might be considered as a group and expert judgement might then be applied to determine which criteria are relevant and to apply them. If it is not possible to determine whether a plan or programme is likely to have significant effects, it is recommended that an SEA be undertaken as a precautionary measure.

50. The EC Guide advises that, for the equivalent provision in the SEA Directive, when applying qualitative criteria or thresholds to types of plans or programmes based on the relevant significance criteria, 'it is advisable to avoid [significance testing systems] … based only on the size or financial thresholds of projects, or on the physical area covered by the plan or programme' (para. 3.47).

51. The EC Guide also provides an example of why such an approach is not recommended:[27] 'Even a small-scale project can have significant effects on the environment if it is in a location where the environmental factors … are sensitive to the slightest alteration. Similarly, a project is likely to have significant effects where by reason of its nature, there is a risk that it will cause a substantial or irreversible change in those environmental factors, irrespective of its size' (para. 3.60).

52. The significance criteria in annex III are discussed in Table A3.1 below. Other criteria might also be employed to determine significance. The 'environmental receptors' identified in article 2.7 and the information referred to in annex IV might be useful in this regard, for example whether effects are likely to be cumulative or permanent. In addition, the SEA Directive includes two extra criteria not specified in the Protocol, but which might be of help in determining significance:

- The cumulative nature of the effects

- 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

[27] Reporting the opinion of the European Court of Justice in a relevant case on EIA (C-392/96 Commission v Ireland) – see http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!CELEXnumdoc&lg=en&numdoc=61996J0392

- Intensive land-use

53. The significance criteria in annex III are not in order of importance, but they may be grouped: broadly speaking, items 1 to 4 relate to the characteristics of a plan or programme, whereas items 5 to 8 relate to its effects.

54. If the application of a criterion indicates that a plan or programme is likely to have important effects, there is no need to continue with the significance determination – this criterion would be enough to trigger an SEA. However, for many plans and programmes it may be difficult to determine, with certainty, whether they are likely to have significant effects on the environment. The word 'likely' provides for this situation, as it is only required to show that an effect can be expected with a reasonable degree of probability.

Table A3.1: Guidance on annex III (significance criteria)

Item in annex III	Guidance (from EC Guide)
1. The relevance of the plan or programme to the integration of environmental, including health, considerations in particular with a view to promoting sustainable development.	How far can the plan or programme envisaged contribute to reducing harm to the environment? A plan or programme having great scope to affect the environment will be a strong candidate for SEA. SEA may also improve the contribution of a plan or programme to sustainable development. (paras. 3.53-3.54)
2. The degree to which the plan or programme sets a framework for projects and other activities, either with regard to location, nature, size and operating conditions or by allocating resources.	The more precisely the framework is set by a plan or programme, the more likely it is that an SEA will be required. Plans or programmes that are legally binding might set the framework more strictly than nonbinding plans or programmes. Plans or programmes whose only or main purpose is to set a framework for projects might also set a strong framework. (para. 3.51)
3. The degree to which the plan or programme influences other plans and programmes including those in a hierarchy.	If a plan or programme strongly influences another, any environmental effects it might have may be spread widely (or deeply). In a hierarchy, plans and programmes at the higher, general level might influence those at a lower, detailed level. Binding plans or programmes, which will be explicitly implemented by means of other plans or programmes, will probably have a strong influence. However, the relationships between different plans and programmes will have to be carefully considered in each case. (para. 3.52)
4. Environmental, including health, problems relevant to the plan or programme.	This would include cases where plans or programmes cause or exacerbate environmental problems, are constrained or otherwise affected by them, or contribute to solving, reducing or avoiding them. In any case, it will be necessary to identify the nature and seriousness of environmental problems relevant to the plan or programme. (para. 3.55)

Item in annex III	Guidance (from EC Guide)
5. The nature of the environmental, including health, effects such as probability, duration, frequency, reversibility, magnitude and extent (such as geographical area or size of population likely to be affected). 6. The risks to the environment, including health. 7. The transboundary nature of effects. 8. The degree to which the plan or programme will affect valuable or vulnerable areas including landscapes with a recognized national or international protection status.	Many uncertainties exist, and insufficient or missing data and inadequate knowledge may make it difficult to decide whether significant effects are likely. Even so, it is assumed that a rough estimation of the effects should always be possible. (para. 3.57) The nature and characteristics of the likely effects will influence their significance in the context within which they are being considered – e.g. is the probability or frequency of effects very low (accidental cause) or will the effects occur continuously? Moreover, the more complex (e.g. due to synergies and accumulation), the more widespread or the more serious the effects, the more likely it is that they should be considered 'significant'. (para. 3.58) Equally important is the area likely to be affected by the plan or programme and consequently by its effects. Not only areas that have a designated protection status are required to be given attention. The particular value or vulnerability of the area likely to be affected may make it more likely that effects must be considered significant there. (para. 3.59)

A3.4 POSSIBLE PRACTICAL ARRANGEMENTS

Making the outcome publicly available

55. When making publicly available the outcome of any determination of significant effects, it may be useful to state how the plan or programme (or type) 'performed' against the individual significance criteria.

56. The Protocol suggests making the information publicly available 'by public notices or by other appropriate means, such as electronic media'. Care should be taken to ensure that the information is available to a broad spectrum of the public.

Lists of types of plans and programmes

57. Though not a requirement of the Protocol, States might wish to prepare lists of types of plans and programmes that are subject to SEA, identifying types for which SEA is mandatory or providing an indicative list, for example. If a plan or programme is clearly identified on a positive (or other) list of types of plan or programme, there may be no need to continue with the detailed determination of whether the plan or programme is subject to SEA.

58. For example, a positive list may be prepared identifying types of plans and programmes that should always be subject to SEA. Examples of such types of plans and programmes could include regularly revised land-use or development plans (which in some countries are produced at various levels of government), waste management plans, and transport infrastructure plans and programmes.

59. Besides a positive list, a discretionary list might similarly be prepared, identifying those types of plans and programmes that should always be subject to case-by-case examination (art. 4), including as appropriate the determination of significant effects (art. 5).

60. If defining or using a negative list of types, care should be taken to ensure that a plan or programme affecting a sensitive area, or otherwise likely to have significant effects, is not wrongly exempted from SEA.

61. Typically, government or others may prepare one or more lists of types by applying article 4 (field of application) of the Protocol to common types of plans and programmes to determine whether they would be subject to SEA. The lists of types can then either be distributed as guidance or be included in national laws or regulations. Parties must provide for consultation with environmental and health authorities when first developing lists of types of plans and programmes. They may also consult with the public, but the Protocol does not explicitly require this. Many Parties may anyway require consultation on proposed national guidance, laws or regulations.

CHAPTER A4: SEA OF PLANS AND PROGRAMMES

A4.1 INTRODUCTION TO THE CHAPTER

The Protocol refers throughout to 'the environment, including health'. To avoid repetition, the Manual refers only to 'the environment', but this should always be understood to include health. For more information on health issues, please see [Annex] [Chapter] [XX].

1. This Chapter comprises a description of the SEA elements to be integrated, as appropriate, within a plan- or programme-making process, as introduced in section A2.2:

   - Scoping and the environmental report (section A4.2)
   - Public participation (section A4.3)
   - Consultation with authorities (section A4.4)
   - Transboundary consultations (section A4.5)
   - Decision (section A4.6)
   - Monitoring (section A4.7)

2. For each element, legal obligations and possible practical considerations are presented.

A4.2 SCOPING AND ENVIRONMENTAL REPORT

3. This section provides an examination of scoping (art. 6) and the environmental report (art. 7) in SEA under the Protocol. The two provisions are dealt with here together but countries might chose to apply them as more distinct elements in SEA.

4. Besides providing a summary of the relevant legal obligations, this section describes alternatives and other possible practical considerations.

A4.2.1 Legal obligations

5. **Scoping** (art. 6) is the first element in the SEA process for plans and programmes.

Article 6 – Scoping
1. Each Party shall establish arrangements for the determination of the relevant information to be included in the environmental report in accordance with article 7, paragraph 2.
2. Each Party shall ensure that the environmental and health authorities referred to in article 9, paragraph 1, are consulted when determining the relevant information to be included in the environmental report.
3. To the extent appropriate, each Party shall endeavour to provide opportunities for the participation of the public concerned when determining the relevant information to be included in the environmental report.

The corresponding provisions in the SEA Directive are in Article 5(4).

6. Scoping defines the information content in terms of both the topics to be considered and the depth or detail of the information to be presented on each topic. The aim of scoping is thus to assure that the environmental report is correctly focused, providing enough information on what really matters and not cluttering the report with what does not matter. 'An excessive account of information on insignificant effects or irrelevant issues makes the report difficult to digest and might lead to important information being overlooked' (EC Guide, para. 5.19).

7. Environmental and health authorities must be consulted during scoping (art. 6.2), and the public may be provided with opportunities to participate (art. 6.3).

8. The information to be included in the environmental report has to be **relevant** (art. 6.1) and in accordance with the **criteria** listed in article 7.2 (the SEA Directive does not include the last two criteria) – see below.

9. The second element of the SEA process is the preparation of the **environmental report** on a plan or programme subject to SEA (art. 7).

Article 7 – Environmental Report
1. For plans and programmes subject to strategic environmental assessment, each Party shall ensure that an environmental report is prepared.
2. The environmental report shall, in accordance with the determination under article 6, identify, describe and evaluate the likely significant environmental, including health, effects of implementing the plan or programme and its reasonable alternatives. The report shall contain such information specified in annex IV as may reasonably be required, taking into account:
(a) Current knowledge and methods of assessment;

(b) The contents and the level of detail of the plan or programme and its stage in the decision-making process;
(c) The interests of the public; and
(d) The information needs of the decision-making body.

3. Each Party shall ensure that environmental reports are of sufficient quality to meet the requirements of this Protocol.

The corresponding provisions in the SEA Directive are in its Articles 2(c), 5(1), 5(2), 5(3) and 12(2).

Annex IV – Information referred to in article 7, paragraph 2

1. The contents and the main objectives of the plan or programme and its link with other plans or programmes.
2. The relevant aspects of the current state of the environment, including health, and the likely evolution thereof should the plan or programme not be implemented.
3. The characteristics of the environment, including health, in areas likely to be significantly affected.
4. The environmental, including health, problems which are relevant to the plan or programme.
5. The environmental, including health, objectives established at international, national and other levels which are relevant to the plan or programme, and the ways in which these objectives and other environmental, including health, considerations have been taken into account during its preparation.
6. The likely significant environmental, including health, effects*/ as defined in article 2, paragraph 7.
7. Measures to prevent, reduce or mitigate any significant adverse effects on the environment, including health, which may result from the implementation of the plan or programme.
8. An outline of the reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken including difficulties encountered in providing the information to be included such as technical deficiencies or lack of knowledge.
9. Measures envisaged for monitoring environmental, including health, effects of the implementation of the plan or programme.
10. The likely significant transboundary environmental, including health, effects.
11. A non-technical summary of the information provided.

*/ These effects should include secondary, cumulative, synergistic, short-, medium- and long-term, permanent and temporary, positive and negative effects.

The corresponding provisions in the SEA Directive are in its Annex I.

10. This element includes consultation with the authorities, public participation and possibly transboundary notification and consultations, as discussed later in this Chapter.

11. The environmental report has to identify, describe and evaluate the likely significant environmental effects of implementing the plan or programme and its reasonable alternatives (art. 7.2). The resulting report will be used by the decision-makers (see section A4.6) and will describe the monitoring arrangements (section A4.7).

12. The content of the report has to reflect the outcome of the scoping (art. 6), but will be based on the list in annex IV of the Protocol (the corresponding provisions in the SEA Directive are in its Annex I) and take into account the four criteria specified (art. 7.2).

13. Finally, the environmental report must be of sufficient quality to meet the requirements of the Protocol (art. 7.3).

A4.2.2 Alternatives

14. An important feature of the environmental report is that it should deal in the same way with the draft plan or programme and its reasonable alternatives. This subsection examines the possible practical consideration of such alternatives. Other possible practical considerations are discussed in subsection 4.2.3 below.

15. The preparation of plans and programmes usually involves the consideration of the following options (see Figure A4.1):

- Specific **objectives** (what the Protocol refers to as the 'main objectives') and **priorities** to be pursued by the plan or programme. These options usually formulate optimal responses to development demands and suggest overall directions of desired development, e.g. development scenarios.

- **Activities** to be undertaken to implement the agreed objectives and priorities of the plan or programme. These options may propose different means for attainment of the objectives through different technological options (i.e. technologies, processes or modes of delivery), different locations of proposed activities, or their different timing or sequencing.

- Alternative **conditions** for implementation of proposed actions. These options define measures to be taken to ensure that the intended positive effects of the proposed plan or programme are maximized and that its adverse side effects are minimized (prevented, mitigated or offset). They may be defined, for example, in criteria for decision-making on proposed activities or in general terms of reference for subsequent environmental assessments of future plans, programmes or projects that are initiated by the plan or programme.

16. Not all alternatives considered within the specific plan- or programme-making process might necessarily be generated within that process. A plan or programme may for instance adopt objectives and priorities defined in higher-level plans, programmes or policies. It may also further develop options elaborated in related studies before the plan- or programme-making process (e.g. scenarios that are developed in periods between successive plans and are formally considered only in the 'next' planning cycle). Whether or not such situations occur, SEA has to assess effects of the whole plan or programme (i.e. its objectives, activities to attain these objectives and conditions for their implementation) thus providing insights into the environmental effects of the plan or programme in its entirety.

17. Irrespective of their origin, all these alternatives can be analyzed and mutually compared in terms of their:

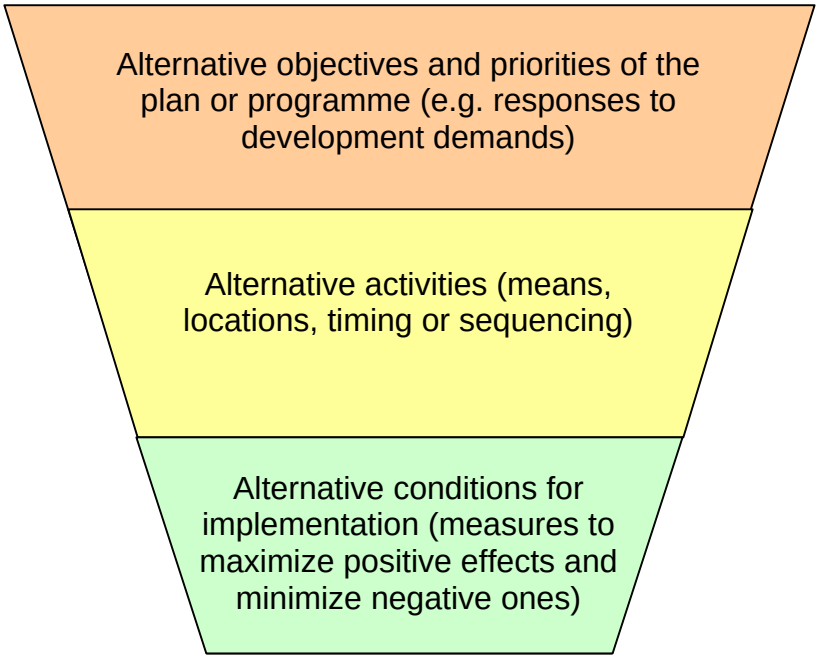
- Contribution to the attainment of relevant objectives of the plan or programme
- Their specific impacts

18. SEA may provide operational inputs to the development of alternatives in key elements of the plan- or programme-making process where alternatives are discussed, that is:

- Clarifying the context and objectives of the plan or programme

- Elaborating alternative scenarios for future developments
- Defining alternative ways of reaching the objectives of the plan or programme
- Comparing alternative measures to prevent, mitigate or offset negative effects

Figure A4.1: Alternative options that may be considered in plan- or programme-making



19. The Protocol treats the draft plan or programme and the alternatives the same, with the report having to cover reasonable alternatives in full. It is therefore suggested that all alternatives are treated equally – there is not one plan or programme plus a number of alternatives, but just a number of alternatives. The plan or programme might evolve thus:

    1. Initial set of alternatives (which might be determined during scoping)
    2. Select and revise – yielding preferred alternatives
    3. Adopt – select final plan or programme

20. It is therefore recommended to begin the consideration of alternatives in scoping.

21. The EC Guide comments that the SEA Directive 'calls for a more comprehensive assessment of [alternatives] than does the EIA Directive' (para. 5.6). Additional guidance based on the EC Guide is presented in Box A4.1 below.

Box A4.1: Alternatives in SEA

The Protocol deals with alternatives in the same way as it deals with the draft plan or programme. As suggested by the EC Guide, 'the essential thing is that the likely significant effects of the plan or programme and the alternatives are identified, described and evaluated in a comparable way' (para. 5.12). The EC Guide goes on to suggest that 'it is essential that the authority or parliament responsible for the adoption of the plan or programme as well as the authorities and the public consulted, are presented with an accurate picture of what reasonable alternatives there are and why they not are considered to be the best option. The information referred to in [the annex] should thus be provided for the alternatives chosen'.

The term 'alternative' is not defined in the Protocol (or in the Directive). Various categories of alternative might be considered:

- An alternative plan or programme to that originally proposed, perhaps meeting the same set of objectives
- Alternative elements within a plan or programme, again perhaps meeting the same set of objectives

Types of alternatives might also include alternative locations, land uses, technologies, timing, development paths or even sets of objectives.

In deciding what is reasonable, various constraints might be considered: geographical, financial or in terms of the objectives (e.g. an alternative that would clearly be incompatible with the objectives might not be considered reasonable). Alternatives must be realistic: 'a deliberate selection of alternatives for assessment, which had much more adverse effects, in order to promote the draft plan or programme would not be appropriate for the fulfilment of the purpose of this paragraph. To be genuine, alternatives must also fall within the legal and geographical competence of the authority concerned' (para. 5.14).

(Source: adapted from EC Guide, para. 5.11-5.14)

A4.2.3 Other possible practical considerations

Responsibility for scoping and preparing the environmental report

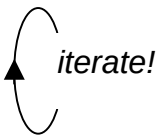
22. The Protocol does not specify on whom falls the responsibility for preparing a draft plan or programme and this would vary according to the specific plan or programme proposal and the administrative level it addresses. Responsibility for preparing the environmental report, and the screening and scoping that precede it, 'would in many cases be the authority or natural or legal person responsible for preparing the plan or programme' (EC Guide, para. 5.8), but this may be determined in national legislation.

Suggested steps in scoping and preparing the environmental report

23. As noted in the EC Guide, the environmental report is an important tool for integrating environmental considerations into the preparation and adoption of plans and programmes since it ensures that their likely significant effects on the environment are identified, described, assessed and taken into account in that process. The preparation of the environmental report and the integration of the environmental considerations into the preparation of plans and programmes form an iterative process that should contribute to more sustainable solutions in decision-making (para. 5.2). The EC Guide (reflecting Article 4(1) of the Directive) thus identifies an iterative process.

24. The Protocol does not explicitly determine an iterative process nor the need for draft reports, but it is suggested that the report preparation be an iterative process, between and within steps, with opportunities to return to earlier tasks as necessary:

Step 1 Determine the scope
Step 2 Analyze the context and baseline
Step 3 Contribute to the development and comparison of alternatives
Step 4 Prepare the environmental report
Step 5 Consult



25. These suggested steps are elaborated in more detail below, identifying mandatory methodological and process tasks to be undertaken at some point in the SEA, so as to fulfil the obligations of the Protocol, together with extra optional tasks promoting good practice. The methodological tasks should result in the preparation and provision of information to be included in the environmental report in accordance with annex IV. **The methodological and process tasks are mandatory within the SEA as a whole, and not necessarily in the step indicated. The sequencing of the tasks is a recommendation** and, as noted above, the process is likely to be iterative with, for example, the scope continuing to be developed as the environmental report is prepared.

26. The steps described below indicate when public participation and consultation with the authorities might take place. The Protocol requires that both the public concerned and the authorities have the opportunity to express their opinion on the environmental report (art. 8.1 and art. 9.3), so this opportunity must be provided once the report has been finalized. However, the Protocol also requires that there be 'early, timely and effective opportunities for public participation, when all options are open' (art. 8.1, with a similar provision for consultation with the authorities in art. 9.3) so, in some circumstances, it may be beneficial to provide additional opportunities at earlier stages of the report preparation on a voluntary basis.

Step 1: Determination of the scope

Methodological tasks	Process tasks	Extra, optional tasks
❑ Describe the contents of the plan or programme (annex IV, item 1) ❑ Identify main objectives of the plan or programme (annex IV, item 1) ❑ Identify other relevant plans and programmes and explain how they interact with the plan or programme (annex IV, item 1) ❑ Gather information on environmental, including health, problems relevant to the plan or programme (annex IV, item 4) ❑ Identify environmental, including health, objectives relevant to the plan or programme (annex IV, item 5) ❑ Outline reasons for selecting the alternatives dealt with (annex IV, item 8)	❑ Analyze how the environmental objectives relate to proposed objectives of the plan or programme ❑ Identify environmental and health authorities to be consulted (art. 9.1 – see also section A4.4) ❑ Consult authorities on information to be included in environmental report (art. 6.2 – see also section A4.4) ❑ Determine relevant information to be included in the environmental report (art. 7.1)	❑ Identify relevant policies and explain how they interact with the plan or programme ❑ Identify likely effects to be assessed ❑ Identify concerned public to participate, including relevant NGOs (must be done by step 5) (art. 8.3 – see section A4.3) ❑ Provide for public participation in determining the relevant information to be included in environmental report (art. 6.3) ❑ Informally notify and consult affected Parties as appropriate (see section A4.5)

27. This first step provides for scoping: the determination of the relevant information to be included in the environmental report. As noted above, scoping might be considered either as a separate element in the SEA process or as a first step in preparing the environmental report. This section presents the latter approach. In practice, scoping and report preparation are likely to be part of an iterative process.

28. Scoping might answer the following, among other, questions:

- ❑ Which geographical areas have to be covered?
- ❑ Which environmental aspects (human health, flora, fauna, biodiversity, soil, etc.) have to be examined?
- ❑ Which periods of time have to be covered?
- ❑ Which methods (of data collection, effects assessment, public participation, consultation with authorities, etc.) have to be used and to what depth or detail?
- ❑ What are the data requirements?
- ❑ Which alternatives have to be considered?

29. To be able to answer the questions above, the scoping might also need to answer the following (as reflected in the ‘step 1’ table above):

- What are the main objectives of the plan or programme?
- What environmental objectives are relevant to the plan or programme, and how do they relate to the objectives of the plan or programme?
- What other plans and programmes are relevant and how might they interact with the plan or programme?
- What environmental problems are relevant to the plan or programme?

30. Neither the Protocol nor the SEA Directive explicitly requires the elaboration of objectives, but both require relevant information on objectives established at international, national and other levels to be included in the environmental report and on how they have been taken into account in the preparation of the plan or programme (annex IV, item 5). Moreover, an assessment of how far the objectives are met by the measures under consideration is a recognized means of comparing alternatives within SEA. Two types of objective are proposed in the SEA process described in this Chapter, both of which are important:

- The main objectives of the proposed plan or programme
- Environmental objectives relevant to the plan or programme

31. The Box A4.2 and Table A4.1 below provide discussion on environmental objectives and related concepts. It may be useful to examine how these objectives interact with, and whether they are compatible with, the objectives of the plan or programme.

32. As discussed in tools Chapter A5, various techniques may be used to define objectives and to develop plan or programme ideas, involving the authorities and the public at the earliest stage of plan or programme development. The authorities might guide the information gathering on other relevant plans and programmes, the state of the environment and its likely evolution, area characteristics, problems and the stakeholders (authorities and the public).

33. In considering what **other plans and programmes** are relevant and how they might interact with the plan or programme, it may be useful to examine any hierarchy of plans and programmes (see Box A4.3 below on 'tiering').

34. Scoping includes consultation with the authorities (see section A4.4) and, optionally, public participation (section A4.3). Practical guidance on tools for interacting with the authorities and for public participation is provided in Chapter A5 of this Manual.

35. If significant transboundary effects appear likely, it is suggested that **informal** transboundary consultations might be begun during scoping so as to streamline the process (see subsection A4.5.2). There is the risk that if no such consultations take place during scoping, later consultations may identify additional issues, so requiring that this element be revisited.

36. Finally in step 1, we need to determine the relevant information to be included in the environmental report. As noted at the start of this section, the Protocol guides this

determination with a list of information (annex IV) and a series of criteria (art. 7.2), as discussed in two tables below, Table A4.2 and Table A4.3, respectively.

Box A4.2: Problems, concerns or issues; objectives; targets; and indicators or guiding questions

Environmental **objectives** may be derived from many different sources, such as sustainable development strategies, policies and legislation and from other plans and programmes. They may also be apparent from the context of the proposed plan or programme, in terms of local environmental **problems, concerns or issues**.

Development and environmental objectives may be supplemented by **targets** and these in turn by either quantitative **indicators** or more qualitative **guiding questions** (i.e. open ended, non-judgmental questions that focus inquiry on a specific topic and direct a search for understanding, but without being leading questions). For example, an objective might be to reduce greenhouse gas emissions, the target would be less carbon dioxide from electricity generation and one indicator household electricity use in kilowatt-hours per annum. The United Kingdom guidance on the application of the SEA Directive provides examples of environmental objectives and indicators. The Irish guidance on the Directive includes examples of indicators together with a list of further sources of environmental objectives: Irish – though typical of many countries –, European Union and international. Sources might include those indicated in Table A4.1. Further examples will be indicated on the Protocol website.[28]

It is important that objectives are identified for all relevant environmental concerns. The indicators can then be used in the report preparation (art. 7) to guide the collection of baseline information and to assess the effects of alternatives on the objectives. Further, the indicators can be monitored to assess the effectiveness of the plan and to identify unforeseen effects (art. 12).

Indicators should therefore be carefully selected to maximize their value in measuring the effects of alternatives on the objectives, while minimizing cost over the whole SEA process.

Box A4.3: Tiering

The SEA Directive, but not the Protocol, recognizes that plans and programmes may form part of a hierarchy of decisions and that there may be opportunities for savings by sharing information between processes related to these decisions – this is 'tiering'. (See para. 4.5-4.7 of the EC Guide for further information.) However, the validity of sharing information between decision-making processes within a hierarchy should be examined critically, given that decisions in a hierarchy are usually taken at different times, under differing conditions.

The Protocol, besides a reference to hierarchies in annex III (item 3), does not consider the opportunities of tiering. It may nonetheless be useful to assure that the development of alternative plans and programmes respects the position of the plan or programme in tiered decision-making. Some plans and programmes may include all elements of strategic planning, whereas other plans and programmes may be more limited by related plans and programmes.

[28] The European Environment Agency provides extensive information on numerous indicators – see http://themes.eea.europa.eu/indicators/

Table A4.1: Some possible sources and examples of environmental objectives

	International	National	Other (sub-national) levels
Legislation	UN Global Environmental Agreements including: ▪ Kyoto Protocol ▪ Montreal Protocol ▪ Convention on Biological Diversity ▪ Convention to Combat Desertification UNECE Regional Environmental Agreements European Community Environmental Directives	Objectives in: ▪ Waste management legislation ▪ Water quality legislation ▪ Air quality legislation	Objectives in local decrees on waste, water and air
Policy	Johannesburg Plan of Implementation Agenda 21 Health for All Health 21 London Declaration on Environment & Health	National Sustainable Development Strategy National Development Plan National Spatial Strategy National Climate Change Strategy National Biodiversity Plan National Waste Strategy National Mineral Strategy National Energy Strategy	Regional Waste Plan Regional Minerals Plan

Table A4.2: Report contents according to annex IV to the Protocol

Item in annex IV	Guidance (from EC Guide, adapted)
1. The contents and the main objectives of the plan or programme and its link with other plans or programmes.	Information on the relationship with other relevant plans and programmes sets the plan or programme in a broader context. Such plans and programmes might be within the same hierarchy of decision-making (e.g. land-use plans at different administrative levels) or from different sectors but affecting the same or adjacent areas. (para. 5.20)
2. The relevant aspects of the current state of the environment, including health, and the likely evolution thereof should the plan or programme not be implemented. 3. The characteristics of the environment, including health, in areas likely to be significantly affected.	These three requirements may overlap but are coherent and aim at different aspects of the environmental conditions in areas covered by the plan or programme and on which it is likely to have significant environmental effects. Paragraphs 3 and 4 supplement the information collated under paragraph 2. Paragraphs 2 and 3 examine problems, values and assets, whereas paragraph 4 focuses on problems alone. It may be convenient to combine information collated under paragraphs 3 and 4. The word 'relevant' (para. 2 and 4) means relevant to the likely significant environmental effects of the plan or programme. (para. 5.21) In paragraph 2, the relevant aspects could be of a positive as well as of a negative nature. The information should be as up to date as

Item in annex IV	Guidance (from EC Guide, adapted)
4. The environmental, including health, problems which are relevant to the plan or programme.	possible. The description of the likely evolution of relevant aspects (without the plan or programme) is important as a frame of reference for assessment; it corresponds to the 'zero-alternative' often applied in EIA. The description of the evolution should cover roughly the same time horizon as that envisaged for the implementation of the plan or programme. Effects of other adopted plans and programmes, or decisions made that would affect the area in question, should also be considered, as far as possible. (para. 5.22) In paragraph 3, the focus is on the areas that are of special interest for the assessment, namely the areas likely to be significantly affected by the plan or programme. A description of the characteristics of these areas is required. It would be appropriate to describe characteristics by reference to the environmental issues listed above. Examples of characteristics of areas include: especially sensitive, vulnerable to acidification, high botanical value or densely populated. Such areas could be found outside the area directly covered by the plan or programme. If an area is near to another Party, or if the effects are of a long-range nature, areas in other Parties and beyond could be significantly affected, in which case transboundary consultation will be needed. (para. 5.23) In paragraph 4, information is required on any existing problems relevant to the plan or programme, to provide for assessment of how these problems will affect the plan or programme or whether the plan or programme is likely to aggravate, reduce or otherwise affect existing problems. The relevance of problems may also lie in non-significant effects that, in combination with existing problems, could create significant effects. Even issues treated in the plan or programme that do not have any environmental effects may be relevant. The problems do not need to be of a significant nature and they do not need to be specially related to specific areas. Areas of particular environmental importance could be those with especially high environmental values, including areas designated under national legislation. (para. 5.24)
5. The environmental, including health, objectives established at international, national and other levels which are relevant to the plan or programme, and the ways in which these objectives and other environmental, including health, considerations have been taken into account during its preparation.	The environmental protection objectives to be dealt with should cover at least the relevant issues listed in the definition of environmental effects: 'any effect on the environment, including human health, flora, fauna, biodiversity, soil, climate, air, water, landscape, natural sites, material assets, cultural heritage and the interaction among these factors' (art. 2.7). International and regional (UNECE) objectives are often incorporated in objectives on national, regional and local levels and these could often be enough. **Objectives are those relevant to the plan or programme's likely significant effects or to issues that it raises**. Consultation with authorities can help to provide this information. (para. 5.25)

Item in annex IV	Guidance (from EC Guide, adapted)
6. The likely significant environmental, including health, effects*/ as defined in article 2, paragraph 7. */ These effects should include secondary, cumulative, synergistic, short-, medium- and long-term, permanent and temporary, positive and negative effects.	(para. 5.26) The list of issues in the definition of effects (see above) is not exhaustive and other issues may be relevant. As a minimum, and in accordance with the scope, the notion of human health should be considered in the context of the other issues mentioned in the list and thus environmentally-related health issues such as exposure to traffic noise or air pollutants are obvious aspects to study. A description of the relationship between the factors mentioned in the list is essential since it could show other and more severe significant effects than those resulting from a more isolated study of each single factor. Thus, significant effects on air and climatic factors may cause significant adverse effects on flora, fauna and biodiversity. Broad and comprehensive information on the factors and their interrelationship is needed. A description of positive effects is essential to show the contribution of the plan or programme to environmental protection and sustainable development.
7. Measures to prevent, reduce or mitigate any significant adverse effects on the environment, including health, which may result from the implementation of the plan or programme.	This is to ensure that the report discusses how the significant adverse effects it describes are to be mitigated. The measures envisaged are not specified further and they could be measures envisaged or prescribed in the plan or programme or measures discussed in the report. It should be remembered that mitigation measures may themselves have adverse environmental effects and these should be recognized. There exist methods of mitigation in connection with EIAs that could also be helpful for assessments of plans and programmes. (para. 5.27)
8. An outline of the reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken including difficulties encountered in providing the information to be included such as technical deficiencies or lack of knowledge.	Information on the selection of alternatives is essential to understand why certain alternatives were assessed and their relation to the draft plan or programme. A description of the methods used in the assessment is helpful when judging the quality of information, the findings and the degree to which they can be relied upon. An account of the difficulties met will also clarify this aspect. When appropriate, it would be helpful to include how those difficulties were overcome. (para. 5.28)
9. Measures envisaged for monitoring environmental, including health, effects of the implementation of the plan or programme.	According to article 12, the significant environmental effects of the implementation of the plan or programme shall be monitored and, since these effects are specified in paragraph 6, the report should contain a description of how that monitoring is to be undertaken. The description should refer to existing monitoring arrangements if these are to be used. It would also be helpful to describe here how the results of monitoring are to be made available in accordance with article 12. Monitoring arrangements will inevitably be tentative at this stage, but the report should provide a good indication of the eventual arrangements. (para. 5.29)

Item in annex IV	Guidance (from EC Guide, adapted)
10. The likely significant transboundary environmental, including health, effects.	Not in SEA Directive as a separate item (nor in the EC Guide), but implicit. It is useful to provide this information as a separate section, even if duplicated from paragraph 6 above. This will ease translation for and discussion with other Parties.
11. A non-technical summary of the information provided.	The purpose of a non-technical summary is to make the key issues and findings of the report accessible and easily understood by the general public as well as by the decision-makers. The summary may be part of the report (usually at the front) but it might also be helpful to make it available as a separate document to ensure a wider dissemination. An overall summary table may be helpful in simplifying the findings. (para. 5.30)

Table A4.3: Criteria to be taken into account in determining the content of the environmental report (art. 7.2)

Criterion	Notes
Current knowledge and methods of assessment	The assessment may be limited by our current level of understanding of the environment and of the effects of our activities on the environment.
Nature of plan or programme (contents and the level of detail of the plan or programme, and its stage in the decision-making process)	For more strategic decisions with few details, a detailed analysis may be neither possible nor desirable. For example, 'the environmental report for a national plan might not need to assess the effects of the plan on, say, every river in the country; but the environmental report underpinning a town plan would certainly be expected to address its implications for rivers or other waterbodies in or near the town' (EC Guide, para. 5.16).
The interests of the public	The public may expect the adequate and understandable assessment of certain topics that are important to the public, addressing the public's perspectives and interests.
The information needs of the decision-making body	A decision-making body is to examine the assessment, and that body may similarly require certain issues be dealt with and in a particular manner.

37. There is no requirement in the Protocol to prepare a **scoping report**. However, it may be useful to record the outcome of the scoping, perhaps as a scoping report, as this would provide the outline of what is to be done when preparing the environmental report. Authorities may choose to make a scoping report publicly available as a matter of good practice, and there may anyway be a requirement to make any such report publicly available under the Aarhus Convention (or the corresponding EU Directive 2003/4/EC).

38. Scoping need not be administratively distinct from the preparation of the environmental report, there being no requirement for a scoping report or for an administrative decision on the outcome of scoping. However, the consultation with the authorities on the scope of the environmental report will always be required. **It is not sufficient to integrate scoping into report preparation and to consult the authorities only once the report has been prepared.**

39. The responsible authority may choose to employ an **outside body** (public or private) **to undertake certain elements of the SEA**, though not the decision-making. The scoping report might provide the basis for the terms of reference for the contract with that body. Alternatively, the scoping might also be contracted out. Examples of terms of reference include:

- The European Union's 'development cooperation arm' provides *Terms of Reference for SEA for Plans and Programmes*[29]
- The European Union's development cooperation arm also provides *Terms of Reference for Scoping Study for SEA for Plans and Programmes*[30]

40. Contracting out need not lead to a separation of SEA from the planning process, provided the SEA contractor works closely with the plan or programme makers (see Chapter A2).

41. For further advice on project management, please see the UNEP EIA Training Resource Manual (2nd edition), Topic 12 (EIA project management).[31]

Step 2: Analysis of the context & baseline

Methodological tasks	Process tasks	Extra, optional tasks
❑ Gather information on current state of the environment, including health, and its likely evolution if the plan or programme not be implemented (annex IV, item 2) ❑ Gather information on characteristics of the environment, including health, in areas likely to be significantly affected (annex IV, item 3)	(none)	❑ As appropriate, consult authorities & provide for public participation on context, objectives & baseline ❑ Informally notify and consult affected Parties as appropriate (see section A4.5) ❑ Describe methodology for identification of authorities & public concerned ❑ Specify quality of the information gathered and how up to date it is

42. The second step in the report preparation is an information gathering exercise. Guidance on the information is provided in Table A4.2 above regarding the report contents (annex IV). It will be useful to record difficulties encountered in gathering the information and the data limitations, as these will need later to be described in the environmental report.

43. There is no requirement in the Protocol that consultation and public participation occur at this early stage. The public and the authorities might help the responsible authority in assessing the information gathered so far, revising the scope as necessary and discussing objectives, but whether consultation and public participation are needed in all steps of report preparation will depend on the circumstances. Consultation and public participation are only required by the Protocol once the environmental report has been prepared (i.e. in

[29] Available within the Environmental Integration theme at http://ec.europa.eu/development/Policies/Crosscutting_en.cfm.
[30] Ibid.
[31] Available at http://www.unep.ch/etu/publications/EIAMan_2edition_toc.htm

step 5), and it may be considered unnecessary and inefficient to provide for consultation and public participation in all steps.

Step 3: Contribution to the development & comparison of alternatives

Methodological tasks	Process tasks	Extra, optional tasks
❑ Describe how the environmental, including health, objectives and other environmental, including health, considerations have been taken into account in preparing the plan or programme, including alternatives (annex IV, item 5) ❑ Assess alternatives by identifying, describing & evaluating (for methods, see Chapter A5) likely significant environmental, including health, effects* (art. 7.2 and annex IV, items 6 and 10) ❑ Describe assessment methodologies (annex IV, item 8) ❑ Propose measures to prevent, reduce or mitigate adverse environmental, including health, effects (annex IV, item 7)	(none)	❑ Propose measures to enhance environmental, including health, benefits ❑ Provide inputs to the development of alternatives, to maximize their contribution to environmental, including health, objectives and to take into account other environmental, including health, considerations including adverse environmental, including health, effects ❑ Record how alternatives developed ❑ As appropriate, consult authorities & provide for public participation on alternatives ❑ Consult affected Parties as appropriate (see section A4.5) ❑ Describe why methodologies selected & their limitations

44. This third step in the report preparation is where the alternative plans or programmes will begin to take shape, with the context and baseline already having been determined and discussed with the stakeholders, as appropriate. How the alternatives are developed will need to be outlined in the report so it is important to keep records of the process. It is possible that the process will iterate through tasks in this step until the alternatives are sufficiently developed and assessed for them to be described in full in the environmental report.

45. One approach to the assessment of alternative plans or programmes (or elements within them) in this step might be to look at the objectives and to record in a matrix the compatibility of the alternatives with the objectives. More information on such an approach is presented in tools Chapter A5. If alternatives are developed, refined and reduced in number, the assessment might become more detailed and eventually comprise the identification, description and evaluation of the likely significant effects of all the reasonable alternatives that remain. There are other means of developing alternatives.

46. Difficulties encountered predicting and evaluating effects need to be recorded.

47. Strictly, measures to prevent, reduce or mitigate effects might only be proposed for the selected plan or programme, but the identification of such measures for all the reasonable alternatives will provide information on the residual effects (i.e. the effects with the measures in place) thus providing for a more informed selection of the plan or programme.

48. It is suggested that public participation and consultation might occur in this step, if appropriate, to improve the alternatives under consideration.

Step 4: Prepare the environmental report

Methodological tasks	Process tasks	Extra, optional tasks
❑ Propose monitoring arrangements (annex IV, item 9) ❑ Identify and describe any difficulties, limitations, uncertainties and risks in the assessment of alternatives, including those arising from gaps in data (annex IV, item 8) ❑ Summarize the information in a non-technical summary (annex IV, item 11)	❑ Prepare environmental report (art. 7.1)	❑ In proposing monitoring arrangements, address data gaps and data quality or quantity issues ❑ Revise selected alternatives and environmental report as necessary ❑ Record how SEA influenced development of the plan or programme & alternatives ❑ Record interactions between planning and SEA teams ❑ Propose follow-up actions, including recommendations for other plans, programmes or projects

49. Everything should now be ready to be pulled together as the environmental report. The non-technical summary must be available now, though early versions of it might have been distributed earlier to facilitate the public participation and consultation process, as appropriate.

50. The EC guide suggests that the environmental report be a 'coherent text or texts' and that it might be structured on the headings used in the annex. If integrated into the plan or programme it should, however, 'be clearly distinguishable as a separate part of the plan or programme, and be easy to find and assimilate for the public and authorities' (EC Guide, para. 5.4). The EC Guide also identifies the possibility of integrating the report within a sustainability assessment or appraisal, which might in turn be integrated within a plan or programme (para. 5.5).

Report quality

51. The remainder of this section looks at the quality of the environmental report, which has to be sufficient for the purpose of the Protocol (art. 7.3 – and Art 12(2) of the Directive). See Box A4.4 below for possible practical considerations.

52. Responsibility for assuring quality will depend on the institutional arrangements in a country. The same authority that prepared the environmental report might also be responsible for assuring its quality. The body responsible for preparing guidelines might also take on a role of quality control, or an independent commission might be set up or an existing audit commission have its mandate extended.

53. In considering the quality of the environmental report, the following issues might be borne in mind:

- Sufficient quality means that there is proper application of the provisions, in content and procedure, with complete and reliable information adequate for application of the Protocol.

- The individual authority has to decide whether the report is of sufficient quality, particularly against article 7 and annex IV.

- If the report is not of sufficient quality, the report might be amended or augmented or part of the SEA repeated, depending on national SEA systems.

- If the report is not of sufficient quality, this may call into question the validity of any decision taken as a result of the SEA.

- The Protocol provides a 'minimum standard', but there are many options for going further, e.g. independent assessments, guidelines on procedural or substantive requirements, review by an independent institution, reliance on complaints or legal appeals.

- There are many methods to maintain quality, e.g. checklists of steps in the process. Table A4.4 below provides a checklist from the United Kingdom (designed as a quality assurance instrument for the whole SEA process, rather than just the environmental report).

Box A4.4: Quality – Possible practical considerations

The environmental report should contain complete and reliable information that will be adequate for the purposes of the Protocol. The Protocol does not elaborate what is sufficient quality but, since the SEA process and environmental report are both defined by the Protocol, a proper application of its provisions, both in content and procedure would appear to meet the requirement for sufficient quality.

In most cases, it will be the individual authority that has to decide before it adopts a plan or programme whether a specific environmental report is of sufficient quality or, if not, what action needs to be taken to rectify the deficiencies. This might include amending or augmenting the environmental report or even repeating part or all of the SEA. In identifying what makes for satisfactory quality, the authorities responsible for the plan or programme will need to pay close attention to the requirements of the Protocol as set out in article 7 and annex IV. They will also need to pay close attention to the results of consultation with the authorities and of public participation. They will need to bear in mind that a defective report may call into question the validity of any acts or decisions taken in pursuance of it.

The procedural and substantive requirements of the Protocol, if properly implemented and applied, may be considered as a 'minimum standard' for ensuring the quality of environmental reports. Parties may decide for themselves whether to take more measures and, if so, what these should be. Many measures that are used in EIA practice may be appropriate for the Protocol, for example: independent assessments (such as a review panel, or a government commission which advises about the quality of the information in the environmental report); guidelines which prescribe procedural or substantive requirements for the planning authority to follow; an independent institution (to be used when determining the level of detail and scope of the environmental report); or simply reliance on legal appeals.

As well as ensuring that every procedural step of the SEA leading up to the environmental report is of sufficient quality, other methods may be considered to try to maintain the quality of the entire process, for example, by using checklists that demonstrate transparently whether every step in the process has been dealt with and dealt with properly.

(Source: adapted from EC Guide, para. 6.2-6.6)

Table A4.4: Quality assurance checklist[32]

Objectives and context

- The plan's or programme's purpose and objectives are made clear.
- Environmental issues and constraints, including international and EC environmental protection objectives, are considered in developing objectives and targets.
- SEA objectives, where used, are clearly set out and linked to indicators and targets where appropriate.
- Links with other related plans, programmes and policies are identified and explained.
- Conflicts that exist between SEA objectives, between SEA and plan objectives and between SEA objectives and other plan objectives are identified and described.

Scoping

- Relevant authorities with environmental, including health, responsibilities are consulted in appropriate ways and at appropriate times on the content and scope of the Environmental Report.
- The assessment focuses on significant issues.
- Technical, procedural and other difficulties encountered are discussed; assumptions and uncertainties are made explicit.
- Reasons are given for eliminating issues from further consideration.

Alternatives

- Realistic alternatives are considered for key issues, and the reasons for choosing them are documented.
- Alternatives include 'do minimum' and/or 'business as usual' scenarios wherever relevant.
- The environmental effects (both adverse and beneficial) of each alternative are identified and compared.
- Inconsistencies between the alternatives and other relevant plans, programmes or policies are identified and explained.
- Reasons are given for selection or elimination of alternatives.

Baseline information

- Relevant aspects of the current state of the environment and their likely evolution without the plan or programme are described.
- Environmental characteristics of areas likely to be significantly affected are described, including areas wider than the physical boundary of the plan area where it is likely to be affected by the plan.
- Difficulties such as deficiencies in information or methods are explained.

Prediction and evaluation of likely significant environmental effects

- Effects identified include the types listed in the Directive (biodiversity, population, human health, fauna, flora, soil, water, air, climate factors, material assets, cultural heritage and landscape), as relevant; other likely environmental effects are also covered, as appropriate.
- Both positive and negative effects are considered, and the duration of effects (short, medium or long-term) is addressed.
- Likely secondary, cumulative and synergistic effects are identified where practicable.
- Inter-relationships between effects are considered where practicable.
- The prediction and evaluation of effects makes use of relevant accepted standards, regulations, and thresholds.
- Methods used to evaluate the effects are described.

[32] From *A Practical Guide to the SEA Directive*, Appendix 9, United Kingdom Office of the Deputy Prime Minister, 2005, adapted

Mitigation measures

- Measures envisaged to prevent, reduce and offset any significant adverse effects of implementing the plan or programme are indicated.
- Issues to be taken into account in project consents are identified.

The Environmental Report

- Is clear and concise in its layout and presentation.
- Uses simple, clear language and avoids or explains technical terms.
- Uses maps and other illustrations where appropriate.
- Explains the methodology used.
- Explains who was consulted and what methods of consultation were used.
- Identifies sources of information, including expert judgement and matters of opinion.
- Contains a non-technical summary covering the overall approach to the SEA, the objectives of the plan, the main options considered, and any changes to the plan resulting from the SEA.

Consultation

- The SEA is consulted on as an integral part of the plan-making process.
- Relevant authorities with environmental, including health, responsibilities and the public likely to be affected by, or having an interest in, the plan or programme are consulted in ways and at times which give them an early and effective opportunity within appropriate time frames to express their opinions on the draft plan and Environmental Report.

Decision-making and information on the decision

- The environmental report and the opinions of those consulted are taken into account in finalising and adopting the plan or programme.
- An explanation is given of how they have been taken into account.
- Reasons are given for choosing the plan or programme as adopted, in the light of other reasonable alternatives considered.

Monitoring measures

- Measures proposed for monitoring are clear, practicable and linked to the indicators and objectives used in the SEA.
- Monitoring is used, where appropriate, during implementation of the plan or programme to make good deficiencies in baseline information in the SEA.
- Monitoring enables unforeseen adverse effects to be identified at an early stage. (These effects may include predictions that prove to be incorrect.)
- Proposals are made for action in response to significant adverse effects.

Step 5: Consult

Methodological tasks	Process tasks	Extra, optional tasks
(none)	❑ Identify concerned public to participate, including relevant NGOs (if not already done in step 1) (art. 8.3 – see section A4.3) ❑ Make environmental report available to authorities and the public (art. 8.2 – see section A4.3; and art. 9.2 – see section A4.4) ❑ Formally notify affected Parties as appropriate (art. 10 – see section A4.5) ❑ Consult authorities & provide for public participation on environmental report & selected alternatives ❑ Consult affected Parties as appropriate ❑ Receive comments to be taken into due account in the decision ❑ Formally submit to decision-maker (art. 11 – see section A4.6)	❑ Describe consultation & public participation processes ❑ Record who comprised 'the public' and 'the public concerned'

54. Consultation (section A4.4) and public participation (section A4.3) must occur at this stage, with the authorities and the public concerned commenting on the report and the draft plan or programme alternatives. Their comments need to be taken into account in the decision on the plan or programme, so should be recorded.

55. If likely transboundary effects have been determined, transboundary consultations must now be begun. An affected Party might also request that consultations take place. See section A4.5 below.

56. Finally, the report and the plan or programme alternatives might be amended if appropriate to take account of the comments received before being submitted to the decision-makers. How these documents influence the decision-making process is discussed in Chapter A2.

A4.3 PUBLIC PARTICIPATION

57. This section provides an examination of public participation in SEA under the Protocol (principally art. 8).

A4.3.1 Legal obligations

Article 8 – Public Participation

1. Each Party shall ensure early, timely and effective opportunities for public participation, when all options are open, in the strategic environmental assessment of plans and programmes.
2. Each Party, using electronic media or other appropriate means, shall ensure the timely public availability of the draft plan or programme and the environmental report.
3. Each Party shall ensure that the public concerned, including relevant non-governmental organizations, is identified for the purposes of paragraphs 1 and 4.
4. Each Party shall ensure that the public referred to in paragraph 3 has the opportunity to express its opinion on the draft plan or programme and the environmental report within a reasonable time frame.
5. Each Party shall ensure that the detailed arrangements for informing the public and consulting the public concerned are determined and made publicly available. For this purpose, each Party shall take into account to the extent appropriate the elements listed in annex V.

There are further provisions relating to public participation in the preamble and in articles 1(c), 2.6 and 2.8 (in 'definitions'), 3.2, 3.3, 3.6 and 3.7 (in 'general provisions'), 5.3 and 5.4 (in 'screening'), 6.3 (in 'scoping'), 7.2(a) (in 'environmental report'), 10.4 (in 'transboundary consultations'), 11 ('decision') and 12.2 (in 'monitoring').

The main corresponding provisions in the SEA Directive are in Articles 6(1), 6(2), 6(4) and 6(5). There are further provisions relating to public participation in the preamble and in Articles 2(b) and (d), 3(7), 7(2), 8 and 9(1).

Annex V – Information referred to in article 8, paragraph 5

1. The proposed plan or programme and its nature.
2. The authority responsible for its adoption.
3. The envisaged procedure, including:
   (a) The commencement of the procedure;
   (b) The opportunities for the public to participate;
   (c) The time and venue of any envisaged public hearing;
   (d) The authority from which relevant information can be obtained and where the relevant information has been deposited for examination by the public;
   (e) The authority to which comments or questions can be submitted and the time schedule for the transmittal of comments or questions; and
   (f) What environmental, including health, information relevant to the proposed plan or programme is available.
4. Whether the plan or programme is likely to be subject to a transboundary assessment procedure.

There is no corresponding provision in the SEA Directive for annex V of the Protocol.

58. Article 8 requires that there are early, timely and effective opportunities for public participation, when all options are open, in the SEA of plans and programmes (art. 8.1). The timely public availability of the draft plan or programme and the environmental report is required (art. 8.2).

59. The **public concerned**, including relevant non-governmental organizations (NGOs), has to be identified (art. 8.3). It is the public concerned, not the public in general, that must have the opportunity to express its opinion on the draft plan or programme and the environmental report (see section A4.2, step 4) within a reasonable time frame (art. 8.4).

60. In addition, the Protocol optionally provides for public participation in earlier stages:

- Determination of significant effects, when determining whether SEA required (art. 5) – see section A3.2
- Scoping (art. 6) – see section A4.2, step 1

61. Detailed arrangements for informing the public and consulting the public concerned have to be determined and made publicly available (art. 8.5). These arrangements have to take into account the items listed in annex V (see above). There is no equivalent to annex V in the SEA Directive.

62. The public's rights under the Protocol may be examined in more detail under three headings:

- General rights
- Rights to information
- Rights to participate

General public rights

63. The Protocol provides a number of general rights for the public, besides rights to certain information and to consultation on the draft plan or programme and the environmental report. These are set out in article 3 and are similar to those expressed in Article 3 of the Aarhus Convention:

- Relevant assistance and guidance from officials and authorities
- Recognition of and support to relevant associations, organizations or groups (for example, NGOs)
- Exercising rights under the Protocol:
  - Without being penalized, persecuted or harassed, and
  - Without discrimination as to citizenship, nationality or domicile.

64. For the most part, European Community law, other than the SEA Directive, provides similar rights.

65. Article 3 also includes provisions on how Parties are to transpose the Protocol into their national legislation.

Article 3 – General Provisions

1. Each Party shall take the necessary legislative, regulatory and other appropriate measures to implement the provisions of this Protocol within a clear, transparent framework.
2. Each Party shall endeavour to ensure that officials and authorities assist and provide guidance to the public in matters covered by this Protocol.
3. Each Party shall provide for appropriate recognition of and support to associations, organizations or groups promoting environmental, including health, protection in the context of this Protocol.
4. The provisions of this Protocol shall not affect the right of a Party to maintain or introduce additional measures in relation to issues covered by this Protocol.
5. Each Party shall promote the objectives of this Protocol in relevant international decision-making processes and within the framework of relevant international organizations.
6. Each Party shall ensure that persons exercising their rights in conformity with the provisions of this Protocol shall not be penalized, persecuted or harassed in any way for their involvement. This provision shall not affect the powers of national courts to award reasonable costs in judicial proceedings.
7. Within the scope of the relevant provisions of this Protocol, the public shall be able to exercise its rights without discrimination as to citizenship, nationality or domicile and, in the case of a legal person, without discrimination as to where it has its registered seat or an effective centre of its activities.

Public rights to information

66. Rights to the following information are expressed in various provisions of the Protocol and are discussed where appropriate in this Manual:

- The conclusions of the determination of significant effects (art. 5.4) – see Chapter A3
- The draft plan or programme and the environmental report (timely availability) (art. 8.2 and art. 10.4) – section A4.2
- Detailed arrangements for informing the public and consulting the public concerned (art. 8.5) – this section
- Adoption of the plan or programme, etc. (art. 11.2) – section A4.6
- Monitoring results (art. 12.2) – section A4.7

67. The detailed arrangements for informing the public and consulting the public concerned have to be determined and made publicly available. Annex V to the Protocol sets out in detail what those arrangements might cover.

Public rights to participate

68. Besides having a right to be informed, the public concerned has a right to contribute to the decision-making process by expressing its opinion on the draft plan or programme and the environmental report and to have its comments taken into account in decision-making on the plan or programme:

- Early, timely and effective opportunities must be provided for public participation, when all options are open (art. 8.1)

- There may possibly be public participation in the determination of significant effects and in scoping, but this is not mandatory (art. 5.3 and art. 6.3) – Chapter A3 and section A4.2, respectively

- The public concerned can express its opinion on the draft plan or programme and the environmental report within a reasonable time frame (art. 8.4 and art. 10.4) – section A4.2 and section A4.5 (for the public concerned in any affected Party), respectively

- The opinions of the public concerned must be taken into account in decision-making (art. 11.1) – section A4.6

A4.3.2 Possible practical considerations

69. The general rights for the public under the Protocol (art. 3) are, as noted above, similar to those expressed in the Aarhus Convention.

70. In addition, this section examines possible practical considerations in public participation under the Protocol by asking four questions about the public:

- Who are they?
- What are their general rights under the Protocol?
- How can information be made available to them?
- How can they participate?

Who is the public?

71. Who is the public? And who is the 'public concerned' that must have 'the opportunity to express its opinion on the draft plan or programme and the environmental report within a reasonable time frame' (art. 8.4)? The term 'the public concerned' is not defined in the Protocol, though it is in the Aarhus Convention. Certainly, the public concerned may vary from one plan or programme to another.

72. The following possible practical considerations might be taken into account when identifying the public concerned:

- The Protocol requires that 'the public concerned', including relevant NGOs, is identified (not chosen).

- The Protocol's definition of 'the public' is identical to that in the Aarhus Convention and the SEA Directive, but differing from the Espoo Convention by its explicit inclusion of 'associations, organizations or groups'.

- The definition 'refers to any natural or legal person' (EC Guide, para. 7.5). 'In many cases, an **association, organization or group** of natural or legal persons will itself have legal personality, and will be directly covered by the definition. The language should be interpreted, therefore, to provide that associations, organizations or groups without legal personality (including NGOs) may, if national legal frameworks so provide, also constitute "the public"' (EC Guide, para. 7.6).

- The Protocol specifies that 'the public concerned', a term that is not defined (except that it must include relevant NGOs), has the opportunity to express its opinion on the draft plan or programme and the environmental report. The Aarhus Convention's definition of 'the public concerned' is 'the public affected or likely to be affected by, or having an interest in, the environmental decision-making; for the purposes of this definition, non-governmental organizations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest' (art. 2.5). The Directive follows the Aarhus Convention definition, though without using the term 'public concerned'. Parties might choose to employ this definition.

- The EC Guide may also be relevant: 'The public affected or likely to be affected by, or having an interest in, the decision-making subject to this [legal instrument] can be described as a subset of the public in general. ... This provision requires [States] to identify that subset, which is given the opportunity to express its opinion on the draft plan or programme and the environmental report ... The public identified may differ from one plan or programme to another. In some situations, for instance in the case of a country-wide plan or programme, the public with an interest or likely to be affected may be very similar to the public in general and the identification would have to take account of that' (EC Guide, para. 7.16).

- Relevant NGOs are by definition considered part of the concerned public. The EC Guide notes 'NGOs may differ in their field of interest. Some are, for example, more active on the national level, and some are more active on the regional or local level or on specific issues, such as nature or waste. In identifying relevant NGOs [,] States may tailor the identification to the nature and contents of the plan or programme concerned and the interests of the NGOs. NGOs with purely local concerns would need to be identified even in the case of plans or programmes relating to distant localities, provided it was clear that their interests were affected by those plans or programmes' (EC Guide, para. 7.17).

73. It is important to consider all population groups that might be affected, either adversely or beneficially, by the plan or programme and to make efforts to involve the population groups likely to be adversely affected in public participation processes. These groups may include disadvantaged groups such as people having low incomes, the disabled, the homeless, refugees, etc.

What are the public's general rights?

Each Party shall endeavour to ensure that officials and authorities assist and provide guidance to the public in matters covered by this Protocol (art. 3.2).

74. Because officials are in the public service, it is reasonable to expect that they might help to activate the public's use of these instruments, by providing information, guidance and encouragement. The phrase 'endeavour to ensure' may not be intended to soften the obligation but it is an acknowledgement that it is conceptually impossible for Parties to ensure that officials and authorities assist and provide guidance, because whether individual officers actually give assistance and guidance in a particular case is subjective. The phrase might be interpreted to require Parties to take firm steps towards ensuring that officials and authorities provide the assistance mentioned, i.e. Parties must provide means for assistance, opportunities for officials and authorities to provide such assistance, and

must encourage officials and authorities to do so through official policies and capacity-building measures.[33]

75. The participation of the public in SEA is vital to give SEA legitimacy and value. Many States have experienced difficulty motivating public participation in SEA, so the effort required to provide 'information, guidance and encouragement' should not be underestimated.

Each Party shall provide for appropriate recognition of and support to associations, organizations or groups promoting environmental, including health, protection in the context of this Protocol (art. 3.3).

76. Parties need to assure that legitimate associations, organizations or groups (e.g. NGOs) may be formed. Some States require registration of such groups etc, whereas others explicitly recognize non-registered, or ad hoc, groups. The form of the 'support' might vary, including direct support (e.g. grants) or indirect support (e.g. tax relief, or advantages in participation).

Each Party shall ensure that persons exercising their rights in conformity with the provisions of this Protocol shall not be penalized, persecuted or harassed in any way for their involvement. This provision shall not affect the powers of national courts to award reasonable costs in judicial proceedings (art. 3.6).

77. The provision is intended to prevent penalization, apart from through the courts, or persecution or harassment against persons participating as members of the public in SEA.

Within the scope of the relevant provisions of this Protocol, the public shall be able to exercise its rights without discrimination as to citizenship, nationality or domicile and, in the case of a legal person, without discrimination as to where it has its registered seat or an effective centre of its activities (art. 3.7).

78. The provision is intended to prevent discrimination on the basis of citizenship, nationality or domicile.

How can information be made available to the public?

79. Making information available to the public may involve appropriate publicity arrangements and easy access to information, though only public availability is strictly required by the Protocol. Effective dissemination might be by public notice (e.g. in a newspaper) or individually (e.g. mail shots).

80. The Protocol explicitly suggests use of 'electronic media' as a means of ensuring timely public availability of documents. However, given the need to provide 'effective' opportunities for public participation, it might be inadequate to provide documents only via electronic media, as this may exclude important segments of the public such as the poor, isolated (e.g. rural) and elderly who might not use the Internet.

[33] After *The Implementation Guide to the Aarhus Convention*, ECE/CEP/72, page 43, available at http://www.unece.org/env/pp/acig.htm.

81. Dissemination methods and means of making information publicly available are described in the tools Chapter A5 of this Manual.

How can the public participate?

82. Practical methods of public participation are dealt with in detail in the tools Chapter A5 of this Manual. Below is presented some possible practical guidance on the relevant provisions of the Protocol.

83. States have to give an opportunity to certain members of the public to express their opinion on the environmental report and the draft plan or programme. One of the reasons for public participation is to contribute to the quality of the information available to those responsible for the decisions that are made concerning the plan or programme. Public participation might sometimes reveal important new information that leads to substantial changes to the plan or programme and consequently its likely significant environmental effects. If so, it might be necessary to consider a revision of the environmental report and, if the changes justified it, fresh public participation (EC Guide, para. 7.1, adapted).

84. The Protocol specifies that the opportunities for public participation be 'when all options are open', i.e. at a stage when reasonable alternatives may be chosen to be put forward for adoption or submission to the legislative procedure.

85. The draft plan or programme and the report are made available to the public in general, but only the opinions of the concerned public must be taken into account.

86. Time frames for public participation need to take into account the requirement to give an 'early and effective' opportunity for such participation (art. 8.1) and for the public concerned to have the opportunity to express its opinion 'within a reasonable time frame' (art. 8.4). Experiences with consultation procedures for domestic and transboundary EIA may provide guidance (EC Guide, para. 7.9), e.g. EIA time frames might be used as a guide. It is recommended that time frames are laid down in legislation and that, for any given type of plan or programme, the same time frame be allowed for comments on the environmental report and on the draft plan or programme. The SEA Directive specifies that the draft plan or programme must be **accompanied** by the environmental report during consultation (Art. 6(2)), whereas the Protocol does not explicitly require that the two documents be made available together.

87. Different time frames may be appropriate for different types or complexity of plan or programme but care should be taken to allow enough time for opinions to be properly developed and formulated on lengthy, complex, contentious or far-reaching plans and programmes. Adequate time will also be needed for the planning authority to take these views into account before deciding on the plan or programme. Sometimes requests for more information may be made and the time frame for public participation may also need to take into account the time for the responsible authority to respond (EC Guide, para. 7.10, adapted).

88. It may be useful to combine public participation in SEA with public participation within the development of the plan or programme (as discussed in Chapter A2). Combining public participation in the SEA and plan- or programme-making process may enable consideration of possible suggestions for reformulation of the plan or programme within a single commenting and review process.

A4.4 CONSULTATION WITH AUTHORITIES

89. This section provides an examination of the consultation with environmental and health authorities in SEA under the Protocol (principally art. 9).

A4.4.1 Legal obligations

Article 9 – Consultation with Environmental and Health Authorities

1. Each Party shall designate the authorities to be consulted which, by reason of their specific environmental or health responsibilities, are likely to be concerned by the environmental, including health, effects of the implementation of the plan or programme.
2. The draft plan or programme and the environmental report shall be made available to the authorities referred to in paragraph 1.
3. Each Party shall ensure that the authorities referred to in paragraph 1 are given, in an early, timely and effective manner, the opportunity to express their opinion on the draft plan or programme and the environmental report.
4. Each Party shall determine the detailed arrangements for informing and consulting the environmental and health authorities referred to in paragraph 1.

There are further provisions relating to consultation in articles 2.6 (in 'definitions'), 5.2 (in 'screening'), 6.2 (in 'scoping'), 10.4 (in 'transboundary consultation'), 11 ('decision') and 12.2 (in 'monitoring').

The main corresponding provisions in the SEA Directive are in Articles 6(1), 6(2), 6(3) and 6(5). There are further provisions relating to consultation in the preamble and in Articles 2(b), 3(6), 5(4), 7(2), 8 and 9(1).

90. Article 9 requires that the environmental and health authorities have an early, timely and effective opportunity to express their opinion on the draft plan or programme and the environmental report (art. 9.3).

91. Which environmental and health authorities are to be consulted has to be determined (art. 9.1), as do detailed arrangements for informing and consulting them (art. 9.4).

92. The consultation with environmental and health authorities occurs at a number of stages in the SEA process:

- Determination of significant effects, if required while determining whether SEA is required (art. 5.2) – see section A3.2
- Scoping (art. 6.2) – see section A4.2
- Environmental report (art. 9.3) – see section A4.2

A4.4.2 Possible practical considerations

93. In applying the legal obligations for consultations, the following suggestions may provide for effective consultations (see Box A4.5 below for details):

- Parties determine detailed arrangements for informing and consulting the authorities, with legislation providing a framework (art. 9.4)

- 'Authorities' includes formal governmental or public authorities, defined by administrative or legal requirements

- Designation may be by including them in legislation or by designating case by case, or for each plan or programme type (art. 9.1)

- Both the Protocol and the Directive require designation of the authorities to be consulted. In the interests of clarity, it may be useful to make a general determination in advance covering different types of plans and programmes; this advance determination is mandatory under the SEA Directive. It may also be useful to draft service agreements or terms of reference to clarify the responsibilities of the different institutions, including the environmental and health authorities to be consulted during the SEA.

- The most appropriate form of consultation needs to be selected for each plan or programme, or for each plan or programme type

94. There are many methods and techniques for consultation, e.g.

- Seeking written comments
- Steering groups
- Focus groups
- Advisory committees
- Interviews
- Internet-based discussions

95. Chapter A5 provides information on such tools. See also subsection A4.3.2 above, which provides possible practical guidance on how the public can participate, much of which is equally valid for the consultation with authorities.

Box A4.5: Consultation with the authorities – Possible practical arrangements

The 'authorities' covers formal governmental or public authorities, defined by administrative or legal requirements. They might include environmental or environmental health inspectorates (national, regional or local level), environmental or health research institutions performing a public task or units in government (national, regional or local) likely to be concerned by, or have expertise in, the effects of implementing the plan or programme in question. The phrase 'specific environmental or health responsibilities' refers to their responsibilities as authorities (for example, to monitor the quality of the environment, provide health services, inspect sites or activities, carry out research, etc).

The 'designation' of the authorities can be done in a general way by including them in the legislation implementing the Protocol. For example, a national environmental inspectorate could be designated as an authority to be consulted in all cases, or in specified types of case. Authorities can also be designated case by case, provided the implementing legislation is drafted so as to permit this type of designation.

For example, the legislation might designate several authorities, including environmental or health inspectorates or regional governmental units. In a case-by-case approach, the planning authority may then designate which of these authorities are to be consulted on individual cases, depending on the contents of each plan or programme.

Parties may also decide to designate authorities that have environmental or health responsibilities in a more general way, for instance, 'neighbouring local authorities' with such responsibilities. This example seems a more intermediate approach between general and case-specific designation.

The organization of 'the detailed arrangements' for informing the authorities and receiving reactions is left to the discretion of the Parties. The implementing legislation should provide for the framework for these arrangements. The arrangements may, for example, specify the ways in which the authorities may be informed and comments can be given. Parties also have the opportunity of exploring more modern arrangements for consultation such as internet-based discussions, provided that these do not by their nature exclude certain authorities. There are many different methods and techniques for consultation, including seeking written comments on draft proposals, steering groups, focus groups, advisory committees or interviews. The most appropriate form of consultation needs to be selected for any given plan or programme.

(Source: adapted from EC Guide, para. 7.11-7.20)

A4.5 TRANSBOUNDARY CONSULTATIONS

96. This section provides an examination of the transboundary consultations in SEA under the Protocol (principally art. 10).

A4.5.1 Legal obligations

Article 10 – Transboundary Consultations

1. Where a Party of origin considers that the implementation of a plan or programme is likely to have significant transboundary environmental, including health, effects or where a Party likely to be significantly affected so requests, the Party of origin shall as early as possible before the adoption of the plan or programme notify the affected Party.
2. This notification shall contain, *inter alia*:
   (a) The draft plan or programme and the environmental report including information on its possible transboundary environmental, including health, effects; and
   (b) Information regarding the decision-making procedure, including an indication of a reasonable time schedule for the transmission of comments.
3. The affected Party shall, within the time specified in the notification, indicate to the Party of origin whether it wishes to enter into consultations before the adoption of the plan or programme and, if it so indicates, the Parties concerned shall enter into consultations concerning the likely transboundary environmental, including health, effects of implementing the plan or programme and the measures envisaged to prevent, reduce or mitigate adverse effects.
4. Where such consultations take place, the Parties concerned shall agree on detailed arrangements to ensure that the public concerned and the authorities referred to in article 9, paragraph 1, in the affected Party are informed and given an opportunity to forward their opinion on the draft plan or programme and the environmental report within a reasonable time frame.

There are further provisions relating to transboundary consultations in the preamble, in articles 2.3 and 2.4 (in 'definitions') and 11 ('decision'), in annexes III, IV (item 10) and V.

inter alia means 'among other things'

The main corresponding provisions in the SEA Directive are in Article 7. There are further provisions relating to transboundary consultation in the preamble, in Articles 2(b), 8 and 9(1) and in Annex II (item 2).

97. Article 10 provides for transboundary consultations when a proposed plan or programme in one country (the Party of origin) is likely to have significant environmental effects on the territory of another country (the affected Party).

98. The Party of origin has to notify the affected Party if it considers that implementation of the proposed plan or programme is likely to have significant transboundary environmental effects, or if so requested by another Party likely to be significantly affected (art. 10.1). The first task is therefore to determine whether the plan or programme is likely to have significant transboundary environmental effects.

99. The SEA process presented in this Chapter does not indicate precisely when transboundary notification and consultations are to take place; the Protocol simply requires notification 'as early as possible before the adoption of the plan or programme' (art. 10.1).

100. The notification has to include (art. 10.2):

- The draft plan or programme
- The environmental report, including information on possible transboundary environmental effects
- Information on the decision-making procedure, including information on a time schedule for comments

101. Consultations then follow if desired and indicated by the affected Party. The consultations have to address:

- The likely transboundary environmental effects of implementing the plan or programme (art. 10.3)
- The measures envisaged to prevent, reduce or mitigate adverse effects (art. 10.3)
- Detailed arrangements (art. 10.4) for informing the **public concerned** and authorities in the affected Party, and for giving them the opportunity to forward their opinion on:
  - the draft plan or programme
  - the environmental report

102. The opinions of the **public concerned** and the environmental and health authorities in the affected Party have to be taken into due account, and they have to be informed of how their comments were taken into account (art. 11).

A4.5.2 Possible practical arrangements

103. At the latest, transboundary effects might be identified during preparation of the environmental report, but if identified earlier then notification would best be begun earlier as well, during **scoping**; doing so may reduce delays in reaching the decision-making. However, such early notification would necessarily be **informal**, as the formal notification has to include, amongst other things, the environmental report. The following paragraphs provide additional suggestions on transboundary consultations, adapted from the EC Guide (para. 7.25-7.29).

104. The Protocol requires that reasonable **time frames** be provided for consultation in transboundary situations. Compared with non-transboundary situations, these will need to be enough for contact to be made between the Parties concerned, the identification of and consultation with the public and environmental and health authorities in the affected Party, and consideration of the resulting comments by the appropriate authorities in the Party of origin. Practical matters such as the need to prepare translations may also lengthen the process.

105. Once the transboundary mechanism is triggered, the concerned Parties have to agree on more detailed arrangements to ensure the necessary consultation with the public concerned and the environmental and health authorities in the affected Party.

106. Transboundary (notification and) consultations may be arranged purely on an ad hoc basis. However, with EIA in a transboundary context (under the Espoo Convention) it has been found that the process can be accelerated and simplified through developing bilateral or multilateral agreements that provide a framework for transboundary consultations, specifying parameters including: contact points, a joint body, language considerations including translation arrangements, assigning costs, criteria of effect significance, public participation arrangements and dispute settlement procedures. The Espoo Convention's Guidelines on good practice and bilateral and multilateral agreements provide advice on these matters. Bilateral and multilateral agreements that have been set up in the framework of the Espoo Convention may, suitably modified to cover plans and programmes, provide a pattern for these arrangements.

107. Finally, the Espoo Convention's Guidance on public participation in EIA in a transboundary context may also be useful in this regard.[34]

[34] These documents are available at http://www.unece.org/env/eia/publications.html.

A4.6 DECISION

108. This section provides an examination of the decision in SEA under the Protocol (art. 11).

A4.6.1 Legal obligations

Article 11 – Decision

1. Each Party shall ensure that when a plan or programme is adopted due account is taken of:
   (a) The conclusions of the environmental report;
   (b) The measures to prevent, reduce or mitigate the adverse effects identified in the environmental report; and
   (c) The comments received in accordance with articles 8 to 10.
2. Each Party shall ensure that, when a plan or programme is adopted, the public, the authorities referred to in article 9, paragraph 1, and the Parties consulted according to article 10 are informed, and that the plan or programme is made available to them together with a statement summarizing how the environmental, including health, considerations have been integrated into it, how the comments received in accordance with articles 8 to 10 have been taken into account and the reasons for adopting it in the light of the reasonable alternatives considered.

The corresponding provisions in the SEA Directive are in Articles 8 and 9.

109. The decision-maker decides which, if any, of the alternative plans or programmes, or alternative elements within a plan or programme, to adopt (art. 11). And in adopting a plan or programme, the decision-maker must take into account the conclusions of the environmental report including the necessary measures to prevent, reduce or mitigate the adverse effects of the various plan or programme alternatives. The decision-maker must also take into account (art. 11.1) opinions expressed by:

- The relevant environmental and health authorities
- The public concerned
- Any affected Parties

110. Following adoption of a plan or programme, the relevant environmental and health authorities, the public (not just the public concerned) and any affected Parties must be informed of that decision (art. 11.2). The adopted plan or programme must be made available to them together with a statement:

- Summarizing how the environmental considerations (as presented in the environmental report) have been integrated into the adopted plan or programme
- Summarizing how their opinions (as expressed by 'the public concerned' in the case of the public) have been taken into account
- Summarizing the reasons why the plan or programme has been adopted in the light of the reasonable alternatives considered
- For EU Member States, describing the monitoring measures decided upon (Art. 9(1)(c) of the SEA Directive)

A4.6.2 Possible practical considerations

111. In adopting a plan or programme, the decision-maker might wish to take into account, in particular:

- The compatibility with the plan or programme objectives and environmental objectives
- The residual environmental effects

112. The informing of the public and the information in the statement are compatible with the Aarhus Convention. No provision is made for confidentiality. As suggested by the EC Guide, 'authorities must provide sufficient information about the conditions under which the environmental information is available and how it can be obtained. The facilities for doing this include, for example, information publications, announcements in government publications or on government websites, television or radio public service announcements, or as part of environmental information catalogues that describe how relevant information can be obtained' (para 7.31).

113. As noted earlier, some elements of the SEA process may be integrated within a plan- or programme-making process. So, ideally, various analyses performed within SEA should inform the entire plan- or programme-making process. The draft plan or programme might therefore explain how the SEA has influenced the plan- or programme-making process.

A4.7 MONITORING

114. This final section provides an examination of monitoring in SEA under the Protocol (art. 12).

A4.7.1 Legal obligations

Article 12 – Monitoring

1. Each Party shall monitor the significant environmental, including health, effects of the implementation of the plans and programmes, adopted under article 11 in order, *inter alia*, to identify, at an early stage, unforeseen adverse effects and to be able to undertake appropriate remedial action.
2. The results of the monitoring undertaken shall be made available, in accordance with national legislation, to the authorities referred to in article 9, paragraph 1, and to the public.

inter alia means 'among other things'

The corresponding provision in the SEA Directive is in Article 10.

115. Article 12 provides for the monitoring of the significant environmental effects of the implementation of the adopted plan or programme. The Protocol requires that monitoring results be made available to the relevant environmental and health authorities and to the public (art. 12.2). The only explicit reason given for monitoring is to identify, among other things, unforeseen adverse effects and to enable remedial action to be taken (art. 12.1).

A4.7.2 Possible practical considerations

116. Monitoring has benefits other than those mentioned above and therefore monitoring might be used to:

- Compare predicted and actual effects, thus providing information on the implementation of the plan or programme
- Provide experience to help improve future SEAs (i.e. as a quality control tool)
- Check that environmental conditions imposed by the authorities are being complied with
- Check that the plan or programme is implemented as described, including the prescribed measures to prevent, reduce or mitigate adverse effects

117. The Protocol does not suggest the who, what, where, when or how of monitoring – who is to undertake it, who is to make results available, what to monitor (except, in general terms, the significant environmental effects of the plan or programme), what to make available (raw results or analyses thereof), where to monitor, what frequency and for how long, when to make results available, and how to monitor (methods) and to make results available. Parties might wish to exploit existing monitoring and information access arrangements or to strengthen them specifically for SEA.

118. The nature of monitoring will vary between different types of plans and programmes. A regularly revised land-use plan might require monitoring of whether the predicted

environmental effects were realized, as a means of improving the next version of the plan. However, it is often difficult to establish a cause-effect relationship at the plan and programme level. The results of monitoring might be made available at the start of the next plan-revision cycle. A transport infrastructure programme might be more focused on dealing with unexpected adverse effects of its implementation, taking immediate action through modifying the programme or its individual projects. The duration of monitoring for the latter example might be significantly longer than the former, and the making publicly available of monitoring results might be through a programme-specific website, for example.

119. Based on the EC Guide (para. 8.4) it is suggested that methods chosen should be those that are both available and suited to testing whether the assumptions and predictions made in the environmental assessment correspond with the environmental effects that occur when the plan or programme is implemented; a key consideration is also the ability of the methods to provide early warning of unforeseen adverse effects of the plan or programme so that timely remedial action can be taken. It is also suggested that the nature of the environmental information (i.e. the detail and whether it is quantitative or qualitative) necessary for monitoring depends on the corresponding character and detail of the plan or programme and its predicted environmental effects.

120. Though the requirement is to identify **unforeseen** adverse effects, the monitoring can be based on the relevant significant environmental effects as identified in the environmental report. The meaning of 'unforeseen' might therefore refer to the unforeseen magnitude or intensity of a foreseen effect, such as greater than expected changes in sulphur dioxide emissions arising from an energy sector plan. It would also be possible to include elements in the monitoring programme that might identify truly unforeseen effects. For example, occasional sampling of a broad range of environmental parameters might identify a change in a parameter that was not expected to be affected by the plan or programme.

121. The EC Guide suggests that '**implementation** means not only the realization of the projects envisaged in the plan or programme (including both their construction and operation) but also covers other activities (such as behavioural measures or management schemes) which form part of the plan or programme (or its implementation)' (para. 8.9).

122. The Protocol does not discuss what **remedial action** might be taken if an unforeseen adverse effect is observed. If it is decided to modify the plan or programme as a result, this may require a further SEA, if the requirements of articles 2 and 4 are met.

123. Finally, the significant effects to be monitored might include transboundary effects. The post-project analysis provision of the Espoo Convention (Art. 7) might provide inspiration for how to monitor such effects. There is no requirement to share with the affected Party the results of any monitoring, but they should be in the public domain and the affected Party's assistance might well be required in setting up monitoring in its territory.

124. The tools Chapter A5 provides practical guidance on monitoring. The EC Guide provides more guidance on monitoring in its section 8 and appendix I. Also see the European Union Network for the Implementation and Enforcement of Environment Law (IMPEL). *IMPEL PROJECT: Implementation of Article 10 of the EA Directive 2001/42/EC*, available at http://ec.europa.eu/environment/eia/pdf/impel_final_report.pdf.

CHAPTER A5: OVERVIEW OF BASIC TOOLS FOR SEA

A5.1 INTRODUCTION TO THE CHAPTER

The Protocol refers throughout to 'the environment, including health'. To avoid repetition, the Manual refers only to 'the environment', but this should always be understood to include health. For more information on health issues, please see [Annex] [Chapter] [XX].

1. This Chapter describes how to an assessment can be carried out that gives effect to the provisions and procedures of the Protocol on SEA (as described in Chapters A2 to A4) and that meets emerging internationally-accepted standards of good practice.

2. It is organized into three sections focusing on:

   - The relationship between SEA and plan and programme making, with particular reference to their basic approaches and methodological frameworks (section A5.2)

   - Analytical approaches and tools that can be employed to undertake an SEA in support of effective plan and programme making (section A5.3)

   - Participatory approaches and tools that can be employed to undertake an SEA in support of effective plan and programme making (section A5.4)

A5.2 ANALYTICAL AND PARTICIPATORY TOOLS IN SEA

A5.2.1 Introduction

3. The Protocol is a procedural framework that does not specify how analyses or consultations should be conducted. However, a number of requirements set out in the Protocol have methodological overtones or content.

4. In this respect, it should be noted that there is no single best methodology for conducting SEA and that there is a large range of analytical and consultative tools available for this purpose. These tools derive from three main sources:

   - Tools used in EIA with adaptations to undertake SEA at the required scale and appropriate level of detail
   - Tools used in policy analysis, plan evaluation or the development of plans and programmes with adaptations to provide an analysis that meets the requirements of the Protocol
   - Tools used in health impact assessment (HIA) to take account of significant effects on human health, as required by the Protocol

5. In all cases, SEA methodology and tools should be appropriate to the issues to be addressed in the given plan or programme and the choice of an approach should be determined as part of scoping.

6. As described in Chapter A3, the Protocol applies to certain plans and programmes that set the framework for development consent. It seems likely, in that context, that EIA-derived methods can be used or modified to undertake SEA for plans or programmes that initiate specific land uses or projects, i.e. where a cause-effect chain can be readily identified. The following may be suitable in these circumstances:

   - Formal and informal checklists
   - Matrices of impacts
   - Impact networks
   - Case comparisons and collective expert judgements
   - Overlay mapping and geographical information systems (GIS)
   - Predictive modelling
   - Life-cycle assessment (LCA)
   - Multi-criteria analysis (MCA)

7. When the environmental effects of plans and programmes or particular components of them are indirect and generalized, tools used in policy appraisal or plan evaluation may be more suitable. Examples of policy-appraisal or plan-evaluation methods include:

- Policy and legal reviews
- SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis, or other approaches to mapping of constraints and opportunities
- Scenario building
- Matrices of conflicts and synergies
- Decision trees
- Trend analysis and extrapolation
- Simulation modelling
- Options appraisal
- Comparative risk assessment

8. It is important to recall that in many instances a single simple method of assessment may be appropriate for all environmental effects.

9. However, when the health effects of plans or programmes or particular components of them are important, tools used in HIA may be appropriate. Examples of HIA methods include:

- Health hazard checklists
- Qualitative and quantitative risk assessment
- Surveys of health risk perception
- Methods and tools for risk characterisation and risk communication.
- Methodologies for rapid assessment of health risk and impacts and of the environmental determinants of health impacts

10. In exceptional circumstances it may be useful to consider the application of the DPSEEA (Driving Forces - Pressures - State - Exposure - Effects - Actions) model in designing a system of health indicators within the decision-making context. However, it is important to recognize the limitations of the DPSEEA model, notably its complexity and lack of precision. For more information see http://www.euro.who.int/EHindicators/Indicators/20030527_2.

A5.2.2 SEA and plan and programme making from a methodological perspective

11. As noted in the Chapter A2, SEA and plan or programme making are mutually supportive processes with reciprocal functions. Given their close relationship, there are opportunities to design and adapt SEA analytical and consultative tools as an extension of those applied in the development of the plan or programme.

12. Examples of tools that can be adapted with minor modifications to analyze appropriate environmental issues include:

- Tools for the determination of context and key issues (checklists, SWOT, matrices)

- Tools for developing alternative options (scenario building or objectives-led planning)

- Tools for assessment of impacts (modelling, GIS, etc.) or tools comparing options and presenting conclusions (MCA, cost-benefit analysis, etc.)

13. In this context, it is important first to examine critically which of the methods used in the development of the plan or programme can be extended to address relevant environmental issues and thus deliver information required by the Protocol.

14. The decision on the approach and methodology will have to be made case-by-case, respecting the nature of the plan or programme, taking into account data and scale considerations and looking to add value to decision-making and to strengthen the plan- or programme-making process. For example, in the SEA of land-use plans, the emphasis typically will be on resource and environmental potentials and constraints of a particular area. This requires giving specific attention to local baseline conditions and to the ecological effects of proposed changes using tools such as GIS, habitat analysis or vulnerability mapping. By contrast, the SEA of sector plans or programmes may be concerned more with aggregate effects, for example on air quality or on carbon emissions in relation to Kyoto Protocol targets,[35] using simulation models for this purpose.

15. These examples underline the call made above for an adaptation of SEA to the context and characteristics of the planning process. The following rules can help to guide the selection of an optimal approach to integrating the use of SEA tools with those used to develop the plan or programme:

- Analyze the logic behind the development of the specific plan or programme and the analytical tools and stakeholder-involvement techniques applied
- Determine the tools and techniques used in the plan- or programme-making process that may provide information required by the Protocol and consider how these may need to be adapted
- Determine needs for additional analyses and consultations within the SEA process and choose appropriate tools

A5.2.3 Selecting appropriate tools

16. Methods and tools used to conduct SEA have a major bearing on the quality of the information that is incorporated into plan and programme making and decision-making and on the effectiveness of this process.

17. As noted in the introduction to this section, there is no single ‘best’ methodology for conducting a systematic and thorough analysis. Generally speaking, however, the simplest tool consistent with the task should be used in SEA. In many cases, of course, more advanced methods will need to be employed to generate information or predict the impact on the environment (e.g. traffic simulation models for a road-building programme). However, the ‘as simple as possible rule’ still applies and it is important to avoid overcomplicating analyses.

18. It is also important to remember that selected tools must also be data and scale adapted to cope with the temporal and spatial dimensions of likely effects. They also have to be able to address uncertainties that may arise due to limited knowledge of cause-effect relations,

[35] See http://unfccc.int/kyoto_protocol/background/items/3145.php.

insufficient data or unknown development trends that may significantly influence development of the given sector or territory.

19. The information provided through various tools should be decision-relevant, should help to clarify the trade-offs at stake and should recommend practicable options that can give the best environmental pay off with regard to mitigating adverse effects and enhancing positive effects.

A5.3 OVERVIEW OF BASIC ANALYTICAL TOOLS

20. This section provides a more detailed overview of analytical methods and tools that can be used in SEA. This framework draws on EIA-based, policy-appraisal and health impact assessment methods. For ease of use, this overview is organized by key steps and tasks in the preparation of the environmental report, as suggested in section A4.2. This menu of tools is not exhaustive and can be adapted to the particular context of a proposal, depending on the logic of the plan- or programme-making process and the nature of the issues that should be addressed.

Determination of the scope

21. Scoping identifies and determines the important issues that need to be assessed. It normally moves from a long list of concerns to a short list of potentially significant issues.

22. The following methods can be used to scope the environmental dimensions of specific plans and programmes and to identify issues that require attention or that might be affected significantly when implementing the proposal:

- Policy and legal reviews, which help determine those environmental objectives and targets that are relevant to the plan or programme
- Collective expert judgements, which can determine – based on personal experience and case comparisons – possible impacts that should be considered within an SEA
- Checklists, which offer a simple way of identifying whether certain issues are relevant to a proposal and help to avoid overlooking potential issues
- Matrices of impacts and conflicts or synergies, which facilitate – more systematically than checklists – the identification of the main issues that should be addressed within an SEA
- SWOT analysis, which can present relevant opportunities and threats related to the environment that could be addressed in an SEA
- Overlay maps and GIS, which can determine key spatial issues and to set the territorial boundaries for the assessment
- Decision trees and impact networks, which can identify key direct and indirect impacts and set the system boundaries for the assessment
- Life-cycle assessment, which can map all inputs and outputs based on a cradle-to-grave approach, as well as to validate system boundaries for the evaluation of the environmental effects

23. Often it will not be appropriate, possible or necessary to address all environmental effects of a plan or programme within SEA, though the reasons why should always be provided. Instead, assessment against relevant indicators or guiding questions may be sufficient for the purposes of an SEA (see Box A4.2).

Analysis of the context and baseline

24. The purpose of baseline analysis is to establish the reference point for assessing the effects of the plan or programme. Typically, it involves describing the current state of the environment and outlining its likely evolution without the plan or programme. A key task in that regard is to analyze and extrapolate trends in the evolution of the state of the environment in the territory or sector that is subject to the plan- or programme-making process and SEA. Given the need to reflect both key current issues and longer-term trends, and the usual time and resource constraints in plan- or programme-making and SEA processes, the baseline analyses will usually rely on existing data.

25. There are numerous tools that can be used to obtain data, such as:

- Surveys of local environmental quality that have often proved instrumental for project-level EIA may be realistically applied in SEA only for very specific local plans and programmes. Their use in SEA is also limited by the fact that they provide only a snapshot of the current situation without yielding insights into longer-term trends.

- Progress reports on implementation of environmental policy objectives and standards can provide useful insights into obstacles or achievements in realizing already existing environmental objectives and targets. These reports (often part of a state-of-the-environment report or environmental monitoring systems) are usually structured around specific domestic indicators that are relevant for specific commitments in the country.

- Trends in headline environmental indicators usually focus on aggregated indicators to measure key drivers, pressures, states, impacts and responses. Useful indicators may be obtained from international comparative reviews using these headline indicators, for example those of the European Environment Agency or OECD.

- Health surveys help to identify the current health issues that are of concern in areas or sectors addressed by the plan or programme. For example, SEA for a transport plan may analyze trends in the exposure of population to excessive levels of air pollution or noise, accidents on roads, etc; these issues would be usually deemed directly relevant for transport. However, SEA for a transport plan may also map wider or indirect health issues such as cardiovascular diseases, psychosocial well-being or obesity and examine whether they are influenced by transport-related issues (e.g. lack of physical activity – walking, cycling, etc.). Due to complex cause-effect relationships, evaluations of such indirect issues inherently involve assumptions and the assessment in such cases should properly acknowledge any limitations and uncertainties in the conclusions reached.

Contribution to the development and comparison of alternatives

26. The environmental report must identify, describe and evaluate the likely significant environmental effects of implementing the plan or programme and its reasonable alternatives (art. 7). The SEA process has a potentially important role in identifying and generating reasonable alternatives, which begins in the scoping phase. The comparison of the effects of the major alternatives represents a crucial step in SEA for contributing to the quality of plan and programme making in support of the environment and sustainable development. Key tools for the purpose of **developing alternatives** include:

- Collective expert judgement, which can determine or develop key alternatives, e.g. through workshops or conferences

- Overlay maps and GIS, which can help develop and optimize alternatives with clear spatial dimensions

- Scenario building, which can outline future options that reflect the most uncertain and important driving forces affecting future development

- Modelling, which can illustrate key features of the proposed options (possibly starting with extreme scenarios), rule out unfeasible proposals and help in combining and optimizing selected options

- Life-cycle assessment, which can define alternatives based on different material and energy flows (e.g. in waste or energy management)

27. Formulation of alternatives is central to integrating environmental considerations into plan and programme making within the SEA process. A first step is to identify the range of reasonable alternatives that meet the objectives of the proposal, and summarize their environmental aspects. The alternatives should include a 'do nothing alternative'. Although it is not mandatory, it might also be helpful to include the best practicable environmental option (BPEO). The best practicable environmental option helps clarify the environmental trade-offs that are at stake, and the basis for choice.

28. As mentioned in section A4.2, all alternatives can be analyzed and mutually compared in terms of their specific effects or their contribution to the attainment of the relevant objectives of the plan or programme. The development of alternatives is thus normally closely interlinked to the **assessment of their effects** (hence the inclusion of these two tasks within a single step in section A4.2) and some analytical tools used to develop alternatives can be used also to predict their effects (and some of the tools listed below are the same as those identified in the list above). The most common tools include:

- Collective expert judgment, which can analyze the scale and nature of expected impacts

- Matrices of impacts and conflicts or synergies, which can describe the main environmental impacts of proposed options or their main synergies or conflicts with the relevant environmental objectives

- Trend analyses and extrapolation, which can outline the likely evolution of the state of the environment, i.e. environmental trends based on the evolving environmental pressures

- Overlay maps and GIS, which can determine impacts of the proposal in the given territory and identify cumulative and synergistic effects

- Life-cycle assessment, which can help to estimate different resource inputs and outputs of proposed options

- Predictive modelling, which can quantify impacts by simulating environmental conditions

29. The easiest means of **comparing key options** for decision-making is to describe and present clearly their key positive impacts (benefits) and negative impacts (problems or risks) – such a description will anyway be required as part of the non-technical summary. Other techniques that facilitate comparison of options are:

- Matrices, which can present impacts of proposed options or their consistency with relevant environmental objectives
- Overlay maps and GIS, which can visually present the proposed alternatives and their impacts
- Multi-criteria analysis, which can evaluate alternative options against several criteria and combine these separate evaluations into one overall evaluation
- Cost-benefit analysis, which can examine the balance between the benefits of the proposal and its costs over a specified period of time
- Life-cycle assessment, which can present impacts of proposed alternatives on material and energy flows

30. Given the great degree of uncertainty that inevitably occurs in any analysis on a strategic level, it is recommended that a **sensitivity analysis** be carried out for any analysis that is performed. Sensitivity analysis helps to test the effect of changed assumptions and thus yields insights into the robustness of an assessment.

31. Annex A5.1 offers more detailed information on selected techniques. The specific features of these techniques are outlined in Table A5.1 below.

Table A5.1: Overview of basic analytical tools

Analytical tool	Application within the SEA process					Key features				
	Identification of issues and impacts	Analysis context and baseline	Contributing to development of alternatives	Assessment of impacts	Comparing options for decision-making	Demand for data	Cost and time requirements	Transparency for public	Ability to cope with uncertainties	Ability to address health issues
Environmental scan, and legal and policy reviews	✓	✓				o	$	😐		xx
SWOT analysis	✓	✓			✓	o	$	😐	•	xx
Checklists	✓					o	$	😐	•	x
Matrices	✓		✓	✓	✓	o	$	☺	•	x
Decision trees, impact networks	✓	✓			✓	o	$	☺		xx
Overlay maps and GIS	✓	✓	✓	✓	✓	oo	$$	☺		x
Trends analysis or extrapolation		✓		✓		o	$	☺	•	x
Collective expert judgement	✓	✓	✓	✓	✓	o	$	😐	•	xx
Modelling			✓	✓		oo	$$	☹	•	x
Scenario building	✓		✓			oo	$$	☺	•	xx
Life-cycle Assessment	✓	✓	✓	✓	✓	oo	$$	☹		
Cost/Benefit Analysis			✓	✓	✓	oo	$$	☹		
Multi-criteria analysis			✓	✓	✓	oo	$$	☹	•	x

Key:

Application	✓	Applicable
Demand for data	o	Less
	oo	More
Cost and time requirements	$	Lower
	$$	Higher
Transparency for public	☹	Low
	😐	Moderate
	☺	High
Ability to cope with uncertainties	•	Able
Ability to address health issues	x	Low
	xx	High

A5.4 OVERVIEW OF BASIC PUBLIC PARTICIPATION TOOLS

32. The Protocol defines the basic requirements for public access to information and consultation (see section A4.3). These provisions may appear very similar to EIA. However, it is important to note that the scale, scope and range of some SEAs may make the practical public participation arrangements in SEA significantly different from EIA.

33. Public participation in SEA is likely to attract different publics. The complex nature of some SEAs calls for the use of techniques that facilitate focused problem-solving debate rather then mere problem exposure. This is an important challenge for SEA practice in the next few years.

34. In order not to confuse the public with too many opportunities for participation, selected tools should, where possible, provide a single public participation process serving the SEA and plan- or programme-making purposes. These tools may:

- Provide information
- Gather comments
- Engage the public concerned in collaborative problem solving

35. There are many public participation tools and various techniques often differ with minor adaptations. The most common tools are outlined in Table A5.2 below and described in detail in Annex A5.2.

36. Inadequate resources and capabilities of disadvantaged groups and individuals may limit their participation, so attention should be given to selecting appropriate public participation techniques to facilitate their inputs. If the chosen tools are difficult to use by the disadvantaged, there is danger that only better-resourced groups and individuals will participate in the SEA and their views may not necessarily raise all public concerns.

Table A5.2: Overview of basic public participation tools

Public participation tool	Enables …			Key features		
	Provision of information	Gathering of comments	Collaborative problem solving	Usual cost of application	Problem-solving ability	Ease of commenting
Range of printed material inviting comments	✓	✓		$		😐
Displays and Exhibits	✓	✓		$		😐
Staffed displays and exhibits	✓	✓	✓	$$	•	☺
Information hotline	✓	✓		$		☺
Internet/web-based consultations	✓	✓	✓	$	•	😐
Questionnaires and response sheets		✓		$$		☺
Surveys		✓		$$		☺
Public hearings	✓	✓		$		😐
Workshops	✓	✓	✓	$	••	☺
Advisory committee	✓	✓	✓	$	••	☺

Key:

Enables	✓	Yes
Usual cost of application	$	Lower
	$$	Higher
Problem-solving ability	•	Low
	••	High
Ease of commenting	😐	Moderate
	☺	High

CHAPTER A6: POLICIES AND LEGISLATION

A6.1 INTRODUCTION TO THE CHAPTER

The Protocol refers throughout to 'the environment, including health'. To avoid repetition, the Manual refers only to 'the environment', but this should always be understood to include health. For more information on health issues, please see [Annex] [Chapter] [XX].

1. This Chapter discusses the Protocol's article 13 on policies and legislation. The emphasis is on applying 'principles and elements' of the Protocol, rather than an SEA process similar to that for plans and programmes.

2. A volume on *Strategic Environmental Assessment at the Policy Level – Recent progress, current status and future prospects*, edited by Barry Sadler, has been prepared by the Regional Environment Center for Central and Eastern Europe, on behalf of the Czech Ministry of Environment, as additional information to the Manual.[36]

Legal obligations

Article 13 – Policies and Legislation

1. Each Party shall endeavour to ensure that environmental, including health, concerns are considered and integrated to the extent appropriate in the preparation of its proposals for policies and legislation that are likely to have significant effects on the environment, including health.
2. In applying paragraph 1, each Party shall consider the appropriate principles and elements of this Protocol.
3. Each Party shall determine, where appropriate, the practical arrangements for the consideration and integration of environmental, including health, concerns in accordance with paragraph 1, taking into account the need for transparency in decision-making.
4. Each Party shall report to the Meeting of the Parties to the Convention serving as the Meeting of the Parties to this Protocol on its application of this article.

There are further provisions relating to policies and legislation in the preamble and in article 1(b) (in 'objective'), and article 24.4 (in 'entry into force').

There is no corresponding provision in the SEA Directive.

3. Article 13 requires that Parties 'endeavour' to ensure that environmental concerns are considered and integrated to the extent appropriate in the preparation of their proposals for policies and legislation, and that the appropriate principles and elements of the Protocol should be considered when doing so. As far as a Party applies article 13, practical arrangements should take into account the need for transparency in decision-making.

What are policies and legislation?

4. The Protocol does not offer a definition of 'policies and legislation', though policies are generally considered to be strategic proposals at a higher or more general level than plans and programmes. The Oxford English Dictionary defines a policy as a "principle or course of action adopted or proposed as desirable, advantageous, or expedient; [especially] one

[36] Sadler, B. (ed.) (2005), *Strategic Environmental Assessment at the Policy Level – Recent progress, current status and future prospects*, prepared by the Regional Environment Center for Central and Eastern Europe, on behalf of the Czech Ministry of Environment. Available at http://www.unece.org/env/eia/documents/PolicySEA/SEA of Policies volume.pdf

formally advocated by a government, political party, etc." and legislation as the "enactments of a legislator or legislature". Article 13 states that the policies and legislation subject to article 13 are those that are likely to have significant effects on the environment.

Guidance

5. The Protocol provides very little information on how environmental concerns can be considered and integrated in the preparation of proposals for policies and legislation.

6. However, the potential for furthering sustainable development is substantial when environmental concerns can be considered and integrated into decision-making at these more strategic levels. And the lack of a clear process means there are opportunities for innovative and imaginative approaches to the consideration and integration of environmental concerns in the preparation of proposals for policies and legislation. Given the very different nature of individual policies and legislation, flexibility will be essential. This is therefore an exciting and challenging area of work with great potential.

7. The consideration and integration of environmental concerns will generally take different forms in the preparation of proposals for policies and those for legislation. A policy might for example undergo a form of SEA as part of the process of development, including elements such as assessment of potential environmental effects, consideration of alternatives, and public consultation. However, this approach would not usually be applicable in a legislative context, because proposals for laws are considered and debated under prescribed Parliamentary or other legislative procedures. Environmental matters may well be discussed in the course of such procedures, but any formal assessment of the type envisaged under the Protocol would normally have to take place before the proposed law is presented to the legislature. There is a parallel between this situation and the Protocol's provisions on plans or programmes that are adopted "through a formal procedure by a parliament or government". In these cases, SEA takes place before the finalized plan or programme is submitted to the formal procedure leading to adoption.

8. The Manual websites (including http://www.unece.org/env/sea/) provide links to information on different approaches taken by countries for both policies and legislation, as also described in the volume mentioned in paragraph 2 above.

A6.2 POSSIBLE APPROACHES

9. This section suggests how environmental concerns might be considered and integrated in the preparation of proposals for policies and legislation, as far as a Party applies article 13 – what below is termed the 'consideration and integration' process.

10. The lack of a strict requirement for the SEA of policies and legislation gives the Parties the opportunity to approach the consideration and integration of the environment in policies and legislation more flexibly, undertaking pilot studies and gradually developing experience and skills. For example, Parties might choose to consider at first only those policies and legislation with the clear potential to have significant (positive or negative) environmental effects. A strict definition of the field of application and of significance criteria might be developed later.

11. However, two key features of the 'consideration and integration' process are apparent in the Protocol – the need to **integrate** (art. 1(b) and art. 1(e)) and to ensure **transparency** (art. 13.3). Box A6.1 below presents suggestions on how to make integration more effective and means by which transparency may be achieved. Practical methods of implementing these approaches are presented in the tools Chapter A5.

12. Other elements to be considered might be those developed in articles 4 to 12 for plans and programmes (i.e. the 'principles and elements' referred to in art. 13.2):

- Field of application and determination of significant effects
- Scoping and environmental report
- Public participation, consultation with environmental and health authorities, and transboundary consultations
- Decision-making
- Monitoring

13. However, these elements should not be considered to occur in a strict sequence. There may be much iteration, returning to earlier elements, and the elements may merge or overlap. Information gathering will inevitably be at a higher and more broad-brush level than for plans and programmes, and, similarly, any prediction and evaluation of effects will be less precise than for plans and programmes. Some existing SEA-like processes for policies and legislation discourage the production of a separate environmental report, with the findings of the SEA instead being incorporated into existing documentation that follows the policy or legislation through its development. Support documentation might be made available to the public separately.

14. Parties might also find useful the guiding principles in the guidelines on implementing the Canadian 'Cabinet Directive on the Environmental Assessment of Policy, Plan and Programme Proposals',[37] set out in Table A6.1 below.

15. A consideration for those Parties that are also Parties to the Aarhus Convention is the application of Articles 7 and 8 of that Convention, as discussed in Box A6.2 below.

16. Finally, Parties might wish to set up an 'advisory service' or 'help desk' to support application of the Protocol to policies and legislation. It might be provided by, for example, the environment ministry, the prime minister's office, the finance ministry, some other central department, or some combination of these.

Box A6.1: Suggestions on integration and transparency

Integration requires early initiation of the 'consideration and integration' process within the policy- or legislation-making process. The combination of the objectives of the policy or legislation with wider environmental objectives would appear an effective starting point for integration. Integration may be made more effective by:[38]

- Starting early, before any irreversible decisions have been made
- Including a strong voice on environment within the group developing the policy or legislation
- Agreeing within the group and with decision-makers how the 'consideration and integration' process, including any environmental assessment, will be used
- Tailoring the 'consideration and integration' process to fit the policy- or legislation-making process and, in particular, its timetable
- Aiming to use the principles and elements of environmental assessment to enhance discussion of environment concerns
- Promoting transparency to provide support for the integration of environmental concerns

Transparency may be achieved by various means, including for example:[39]

- Public information on the outcome and reasoning (i.e. why a policy or legislation has been adopted, taking environmental concerns into consideration)
- Public information at earlier stages of the policy- or legislation-making process or the 'consideration and integration' process, including notification that such a process is beginning or has begun
- Early consultation with environmental and health authorities on the results of an assessment of the possible environmental effects of the policy or legislation
- Early public participation, involving not only relevant NGOs, but also the wider public and other Parties to the Protocol when appropriate

[37] Canadian Environmental Assessment Agency (2000), *Strategic Environmental Assessment: The 1999 Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals; Guidelines for Implementing the Cabinet Directive*, available at http://www.ceaa-acee.gc.ca/016/directive_e.htm
[38] Echoing the discussion in Chapter A3.
[39] Echoing art. 7 to 11 applied to plans and programmes.

Table A6.1: Guiding principles from the Canadian guidelines

Guiding principles	
Early integration	The analysis of environmental considerations should be fully integrated into the development of a policy …. To support sound decision-making that is consistent with the principles of sustainable development, the consideration of environmental effects should begin early in the conceptual planning stages of the proposal, before irreversible decisions are made. In this way, [SEA] can support the analysis of options and identify issues that may require further consideration.
Examine alternatives	One of the most critical aspects of any [SEA] is the opportunity to evaluate and compare the environmental effects of alternatives in the development of a new policy …. This comparison will help identify how modifications or changes to the policy … can reduce environmental risk.
Flexibility	… [Authorities] have discretion in determining how they conduct [SEAs], and are encouraged to adapt and refine analytical methodologies and tools appropriate to their circumstances.
Self assessment	Each individual [authority] is responsible for applying [SEA] to its proposed policies … as appropriate, determining how an assessment should be conducted, performing the assessment and reporting on the findings of the assessment.
Appropriate level of analysis	The scope of analysis of potential environmental effects should be commensurate with the level of anticipated effects.
Accountability	[SEA] should be part of an open and accountable decision-making process within … government. Accountability should be promoted through the involvement [i.e. participation] of affected individuals and organizations, when appropriate, and through documentation and reporting mechanisms.
Use of existing mechanisms	In conducting [an SEA, authorities] should use existing mechanisms to conduct any analysis of environmental effects, involve the public if required, evaluate performance and report the results. Such mechanisms shall also be used to report statements of environmental effects.

References

17. The EC has developed a number of tools for the consideration and integration of the environment into the preparation of proposals for polices and legislation, including:

    - The Secretariat-General supports the Impact Assessment process aimed at structuring and supporting the development of policies in the EC, available at http://ec.europa.eu/governance/impact/key_en.htm (see, for example, the EC's internal guidelines on Impact Assessment, at http://ec.europa.eu/governance/impact/docs/key_docs/sec_2005_0791_en.pdf)

    - The Directorate General for Development provides Terms of Reference for Strategic Environmental Analysis for Policy, within the Environmental Integration theme at http://ec.europa.eu/development/Policies/Crosscutting_en.cfm.

18. Further references are provided in 'Strategic Environmental Assessment at the Policy Level – Recent progress, current status and future prospects', and on the Manual websites (including http://www.unece.org/env/sea/).

19. In addition, some countries have developed methods for the consideration and integration of health in the preparation of proposals for policies and legislation. One example is

"policy appraisal and health" in the United Kingdom, which includes simple screening questions for health and well-being.[40]

Box A6.2: Public participation provided for in the Aarhus Convention

Article 7 (Public participation concerning plans, programmes and policies relating to the environment)
… *To the extent appropriate, each Party shall endeavour to provide opportunities for public participation in the preparation of policies relating to the environment.*

Article 8 (Public participation during the preparation of executive regulations and/or generally applicable legally binding normative instruments)
Each Party shall strive to promote effective public participation at an appropriate stage, and while options are still open, during the preparation by public authorities of executive regulations and other generally applicable legally binding rules that may have a significant effect on the environment.
To this end, the following steps should be taken:
(a) Time-frames sufficient for effective participation should be fixed;
(b) Draft rules should be published or otherwise made publicly available; and
(c) The public should be given the opportunity to comment, directly or through representative consultative bodies.
The result of the public participation shall be taken into account as far as possible.

Article 8 might be interpreted as an obligation is to strive to provide public participation during the preparation of legislation (etc.), while options are still open, by setting up a basic procedural framework including time limits, notification and the opportunity for commenting, and by taking the resulting comments into account as far as possible.[41]

[40] http://www.dh.gov.uk/PublicationsAndStatistics/Legislation/HealthAssessment/fs/en.
[41] After *The Implementation Guide to the Aarhus Convention*, ECE/CEP/72, pages 119-122, available at http://www.unece.org/env/pp/acig.htm.

PART B: TRAINER'S GUIDE

CHAPTER B1: CAPACITY DEVELOPMENT FRAMEWORK FOR THE PROTOCOL

B1.1 INTRODUCTION TO THE CHAPTER

The Protocol refers throughout to 'the environment, including health'. To avoid repetition, the Manual refers only to 'the environment', but this should always be understood to include health. For more information on health issues, please see [Annex] [Chapter] [XX].

1. This Chapter highlights the importance of a proper approach to ensure the overall effectiveness of capacity-development interventions for SEA. It covers the following issues:

   - A capacity-development framework for SEA (section B1.2), outlining the main issues that should be analyzed in the design of strategies that aim to develop capacities for effective implementation of the Protocol, and presenting examples of capacity-development tools.

   - Capacity assessment (section B1.3), outlining the key issues that should be addressed in capacity assessment and presenting simple capacity-assessment tools.

   - Tips for designing relevant SEA capacity-development strategies (section B1.4), describing key assumptions for capacity development

   - Concluding remarks (section B1.5), describing the basic issues that influence the quality of systematic capacity development for SEA.

   - An example of a detailed capacity-assessment questionnaire used in five countries in Eastern Europe, Caucasus and Central Asia (Annex B1.1).

   - Examples of simple terms of reference for national capacity-development strategies for the introduction of SEA and the implementation of the Protocol requirements (Annex B1.2).

B1.2 INTRODUCTION TO CAPACITY DEVELOPMENT FOR THE PROTOCOL

B1.2.1 Capacity-development framework for the Protocol

2. Effective implementation of SEA systems generally requires development of three types of capacity: system capacity, institutional capacity and human capacity. Key issues in the development of these capacities are summarized in Table B1.1 below.

Table B1.1: Capacity-development framework for the Protocol[42]

Types of capacity	System capacity	Institutional capacity	Human capacity
Key elements	o Legal, policy and procedural frameworks within which institutions and individuals operate	o Ability of an organisation to effectively operate within the given system	o Skills & expertise of individual persons and their motivation
Objectives	o Develop overall legislative, policy and regulatory frameworks o Improve inter-institutional coordination	o Develop organizational performance and functioning capabilities	o Develop skills, o Support long-term motivation and commitment
Specific interventions (non-exhaustive list)	o Legislative, policy and regulatory reforms o Practical guidelines to assist interactions between key players in SEA process o Monitoring and review of the effectiveness of the entire system	o Institutional audits o Internal management guidelines o Improved working conditions (e.g. tools and means of communication)	o Development of basic skills o Advanced professional development o Professional certification
Cross-cutting interventions (non-exhaustive list)	o Awareness raising about benefits of SEA and principles for its sound application o Platforms that facilitate regular professional debate and policy dialogue between the key stakeholders (e.g. professional networks or regular conferences to review and discuss states of practice) o Pilot projects that test proposed changes in legislation or guidance, are implemented as part of inter-institutional learning and involve local expert through on-job training o Award schemes that identify and reward good practices		

[42] Adapted from Jurkeviciute A. and J. Dusik (2004), *REC approach to capacity development for EIA/SEA reforms*, unpublished material, REC Environmental Assessment Team

System capacity

3. System capacity is determined by the quality of the overall system within which institutions and individuals operate. Systems may be ineffective (i.e. not reaching their objectives) or inefficient (i.e. too slow, costly, complicated or resource demanding). The development of system capacity aims to enhance the effectiveness of the entire system through legislative, policy and regulatory reforms, the provision of practical guidelines and the monitoring and review of the effectiveness of the entire system.

4. **Legislative, policy and regulatory reforms.** The Protocol may be transposed into a national setting through, for example, an Environmental Protection Act (a framework environmental law), declaring that the provisions of the Protocol be applied, establishment of the national framework law on SEA (through either a separate act or amendments to existing environmental protection legislation or EIA laws) or through amendments to existing planning or sectoral legislation.

5. **Practical guidance for SEA** is generally one of the most effective means for capacity development. It may be issued in the form of generally-applicable guidance or as specific guidelines that customize general SEA procedures and approaches to the needs of a specific plan- or programme-making process. Guidelines may contain a description of the key elements in SEA, expected outputs of SEA and their links with plan and programme making, tools and methods that can be applied and may even include checklists to review whether the requirements of the Protocol were complied with. A list of examples of practical guidance, with hyperlinks, may be found on the UNECE website (http://www.unece.org/env/sea/), and this list will be kept up to date as new examples become available.

6. **Periodic reviews of the entire SEA system** can be used to provide feedback on the effectiveness of the entire SEA system and to propose a plan for future reform. There is also a need for a monitoring and audit system.

Institutional capacity

7. Institutional capacity is the ability of an organization to operate effectively within the given system. The development of institutional capacity aims to enhance overall organizational performance through internal institutional audits, internal SEA management guidelines and internal communication mechanisms.

8. **Internal institutional audits** can be performed periodically to review whether an institution operates effectively within the SEA system, to identify achievements and obstacles in its internal functioning and to suggest means and actions to enhance organizational performance. Such audits may focus on internal coordination within the organization, and on the capacity and accountability of staff. Staff performance evaluations may be conducted routinely as a part of an organization's self-evaluation process to identify gaps and suggest improvements.

9. SEA may benefit from improved internal communication of different departments. **Internal management guidelines** can specify processes for internal communication and decision-making. However, choice of the right **communication mechanisms** is important, and electronic tools in SEA can make work more efficient. Nonetheless, team discussions and expert consultations can more effectively clarify conflicting opinions and enhance

synergies between various parts of an organization. Such consultations also contribute effectively to the development of institutional capacity.

Human capacity

10. Human resources comprise the skills and expertise of people and they play a central role in SEA. The development of human capacity aims to ensure that key people have appropriate skills and are committed to their work. This can be done through, among other means, the development of basic skills, advanced professional development and certification.

11. **Development of basic skills** is the starting point in the development of human capacity. It usually includes the availability of SEA and related courses in universities, awareness-raising workshops, seminars and, increasingly also, films and web-based distance learning tools[43] that target relevant stakeholders.

12. **Advanced professional development** may occur through advanced courses and studies in selected disciplines. Other effective means include on-the-job training, where experts acquire advanced know-how through involvement in real SEAs and communication with more experienced colleagues.

13. **Certification** for SEA may be one of the means to increase human capacity and skills. SEA certification may be established as a sub-system of certification of environmental professionals or EIA experts. It is important to ensure that certification of SEA experts should be combined with periodic training, workshops and other capacity-development activities.

Cross-cutting capacity-development interventions

14. In addition to specific tools to build capacities of different types, there are several tools that create 'enabling environments' for development of all three types of capacity identified above. These include awareness raising about the benefits of good practice, platforms for regular professional debate, pilot projects and award schemes. Top-down support for SEA is critical. Therefore, policy makers and other high-ranking government officials (not only in the field of the environment) should be aware of the benefits of good SEA practice.

15. **Awareness raising about the benefits of SEA and principles for its effective application** can enhance appreciation of this instrument among plan and programme makers and decision-makers. In a changing political environment, this tool can be used for promotion of SEA in different sectors and on different levels. It can be done through, for example, promotional materials that present examples from real-life cases and that present the views of decision-makers and practitioners.

16. **SEA pilot projects** can be used to develop, test or demonstrate new SEA approaches. Such projects provide practical experience and establish precedents of good SEA practice. They are typically used in the early stages of the introduction of the SEA process. They test possible SEA formats and linkages with similar existing practices and procedures that

[43] For example, joint World Bank/IAIA Distance Learning Programme on SEA developed for China, available at http://info.worldbank.org/etools/docs/library/107861/sea/sea/index.html

may be linked or merged in the future, such as EIA. They can be implemented as a part of inter-institutional learning and involve local experts through on-the-job training.

17. **Platforms for regular professional discussion and policy dialogue** between the key stakeholders can be supported through professional networks, regular conferences to review and discuss the state of practice, or through email discussion lists. Such regular interactions between institutions and individuals, from different professional and geographical areas, establish a professional debate that may significantly influence development of the entire SEA system, can promote capacity-development initiatives within key institutions and might coordinate various interventions to develop human resources for SEA. An example of a successful networking facility is the global International Association for Impact Assessment (http://www.iaia.org/) that also has numerous national affiliates.

18. **Award schemes** can be used to identify and recognize good SEA practices. Award ceremonies may be linked with national SEA conferences that discuss approaches and debate the key issues in current practice. SEA awards may be given to institutions or individuals for completed SEA projects that demonstrate the principles of good practice, for example for SEA in specific sectors or for innovative practices in a specific element of SEA (e.g. assessment tools, public participation techniques, consideration of alternatives, assessment of cumulative impacts, etc.).

B1.2.2 Key issues in capacity development

19. Capacity development is not a finite process, so at any point only key issues may be addressed with the possibility to reassess the impact of the initial capacity-development strategy.

20. SEA capacity-development effort should start with a strategic design that answers the following questions:

- Which capacities need to be built for SEA?
- What are the priorities and in what sequence should they be approached?
- How should various capacity-development interventions be linked to achieve a synergetic effect?
- What combination of capacity-development tools will be most effective?

21. Selection of one or more strategic directions depends on the time and resources available as well as the cooperation and commitment of participating stakeholders. Therefore, preparation of a capacity-development strategy should be preceded by a stakeholder analysis and the assessment of their needs and capacity.

B1.3 CAPACITY ASSESSMENT

B1.3.1 Capacity assessment – purpose and tools

22. Any capacity development for the Protocol will be ineffective unless it is well planned. The causes of a lack of capacity as well as its symptoms should be understood better to match problems and solutions.[44]

23. The design of any effective capacity-development intervention should therefore begin with a review of existing capacities, which may identify:

- The needs of key stakeholder groups in SEA
- Key gaps, and the desired focus of capacity-development assistance
- The parties that can be involved in delivery or supervision of capacity-development interventions
- The assumptions and risks in capacity-development programmes

24. Capacity assessment should always be carried out through consultations with key stakeholders – environmental authorities, planning authorities, consultants and NGOs that are likely to be involved in SEA.

25. Capacity assessment might be conducted by a variety of methods, taking into account the time and resources available and the extent of the capacity-development strategy.

26. Workshops are usually least expensive and time-consuming – they may take anything from two hours to two days, or more, depending on the group of people.

27. Interviews and surveys are more time-consuming but provide broader and deeper insights than a simple workshop. Interviews and surveys have been used to carry out capacity assessments for the Protocol in five countries in Eastern Europe, Caucasus and Central Asia, as outlined in Annex B1.1.

B1.3.2 Key questions for SEA capacity assessment

28. The capacity assessment should enable the identification of the key weaknesses of the system, the key players and the best possible capacity-development efforts.

29. System and problem analysis should address:

- The review of the planning framework
- The identification of plans and programmes that will undergo SEA
- Experience with current environmental assessment systems for plans and programmes
- The most challenging aspects of the practical implementation the Protocol

30. Stakeholder analysis should address:

[44] Morgan, P., (1998), *Capacity and capacity development – some strategies*. Note prepared for the Political and Social Policies Division, Policy branch CIDA, Quebec.

- Key stakeholders in SEA reforms and their networks
- Key providers of capacity-development services in SEA and resources available from their past, ongoing and planned capacity-development initiatives

31. A capacity-assessment framework that is focused on these issues has been used by UNDP and the REC in analyzing capacities for the implementation of the Protocol in five countries in Eastern Europe, Caucasus and Central Asia. Capacity assessment has been carried out through interviews and surveys and the questionnaire used is provided in Annex B1.1.[45]

[45] Also available at http://europeandcis.undp.org/index.cfm?wspc=EnvG_Home_1_IEP_SEA.

B1.4 TIPS FOR DESIGNING SEA CAPACITY-DEVELOPMENT STRATEGIES

32. A capacity-development strategy or programme should outline a longer-term strategy (objectives and priorities) as well as a short-term plan (immediate priority actions) to build up capacity in the specific areas determined during the SEA capacity assessment. Some issues for consideration when elaborating capacity-development strategies are outlined in Annex B1.2.

33. The preparation of a capacity-development strategy should ideally facilitate consultations among relevant authorities, practitioners, providers of capacity-development services (universities, national training institutes for public administration, etc.) and other stakeholders interested in SEA reforms (e.g. NGOs) in order to ensure that it addresses the common priorities and is not biased to the needs or agenda of a particular group.

34. It is usually helpful if the strategy identifies responsible institutions for implementation of various priority actions and also outlines the review of the strategy at the end of the short-term action plan. Such a review could be combined with a meeting among key stakeholders or stakeholder representatives to analyze progress, to identify lessons learnt, to revisit the objectives and to set up an action plan for a new period.

35. The elaboration of a capacity-development strategy is rarely a linear process – the strategy may undergo several reviews and changes with new information input over time.

36. Since capacity development for implementation of the Protocol is very similar to any other institutional or structural capacity development, it is recommended to review other resources developed for capacity development such as the UNEP EIA Training Resources Manual,[46] CIDA Capacity Development Tool Kit,[47] and UNDP Capacity Development resources and tools.[48]

[46] UNEP (2002), *EIA Training Resources Manual, version 2*, UNEP ETB, 2002 http://www.unep.ch/etu/publications/EIAMan_2edition_toc.htm
[47] CIDA (2000), *Capacity Development Tool Kit*, CIDA Quebec, http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUImages/CapacityDevelopment/$file/CapDevOSVol1No1-E.pdf
[48] UNDP (2006), *Capacity Assessment Practice Note*, UNDP (2006) *Capacity Development Practice Note*, and others, available at http://capacity.undp.org/.

B1.5 CONCLUDING REMARKS

37. The authorities responsible for the implementation of the Protocol can play a significant role through awareness raising and through supervision of the implementation of the national legislation on SEA. With certain simplifications, it can be concluded that the quality of capacity development is a good indicator of real interest to develop an effective SEA system in any given country.

38. Systematic capacity development will not proceed unless key institutions in charge of SEA acknowledge the need for capacity development in SEA. This may be politically sensitive since some countries may not wish to admit openly a lack of capacity. However, this acknowledgement is a vital precondition for any systematic capacity development.

39. The availability of human and financial resources is another natural prerequisite for SEA capacity development. Taking the initiative can enable good coordination of time and effort. However, real actions will require the allocation of sufficient resources for implementation.

CHAPTER B2: EXAMPLE STRUCTURE OF PRACTICAL EXERCISE FOR USE IN TRAINING COURSE ON THE PROTOCOL

B2.1 INTRODUCTION TO THE CHAPTER

The Protocol refers throughout to 'the environment, including health'. To avoid repetition, the Manual refers only to 'the environment', but this should always be understood to include health. For more information on health issues, please see [Annex] [Chapter] [XX].

B2.1.1 Objective of the practical exercise

1. Effective training normally comprises a theoretical introduction combined with practical work on hypothetical or real-life case examples.

2. Theoretical information within this Manual is provided in Chapters A1 to A6. This Chapter brings key information presented in these Chapters into a practical exercise that focuses on the design of an optimal SEA approach for a chosen plan or programme.

3. The proposed tasks and the discussion items are formulated as a general framework. The trainer should adapt these framework questions to the aims of the capacity-building exercise and to the training-course participants' existing knowledge.

B2.1.2 Possible outcomes

4. This practical exercise should help participants to gain a better understanding about SEA and its relation to plan and programme making. The exercise can typically be used for discussion on:

   - A suitable SEA procedure for a specific approach to plan or programme making, which may be used to facilitate development of SEA guidelines for this plan- or programme-making regime

   - A detailed SEA approach for the development of a particular plan or programme, and that may be applied to facilitate elaboration of the terms of reference for such SEA

B2.1.3 Tasks in the practical exercise

5. The Chapter suggests that such a practical exercise takes place through the following sequence of tasks:

   - Task 1: Analyze the plan or programme making
   - Task 2: Discuss when and how to determine whether SEA is needed for the plan or programme
   - Task 3: Discuss practical arrangements for scoping
   - Task 4: Discuss the information to be provided in the environmental report and its logical links with the development of the plan or programme
   - Task 5: Discuss practical arrangements for consultations with relevant environmental and health authorities
   - Task 6: Discuss practical arrangements for public participation

- Task 7: Discuss practical arrangements for taking information generated within SEA into account in the plan- or programme-making process
- Task 8: Discuss practical arrangements for coordination of the SEA with the plan- or programme-making process
- Task 9: Discuss practical issues for design of monitoring and for linking SEA with subsequent environmental assessments
- Task 10: Present the proposed approach to SEA of the given plan or programme

B2.1.4 Complexity of the exercise

6. Depending on the needs of the target audience, its familiarity with plan or programme making and the time available for the practical work, the practical discussion may address the following:

- **The general approach to undertaking SEA within the given plan- or programme-making process**. This most simple discussion requires the audience be familiar with the requirements of the Protocol, have general knowledge of the procedure or steps in the respective plan- or programme-making process, and be aware of the various options for the integration of SEA into the development of plans and programmes. Successful accomplishment of this exercise may typically require two to five hours of work.

- **Detailed procedures to be followed in SEA for the given plan- or programme-making process**. This more advanced discussion requires the audience be familiar with the detailed requirements of the Protocol, have detailed knowledge of the procedure or steps in the respective plan- or programme-making process, and be aware of the various options for the integration of SEA into the development of plans and programmes. Successful accomplishment of this exercise may typically require six to eight hours of work.

- **SEA methods and tools appropriate for the given approach to plan or programme making**. Such an advanced discussion requires the audience be familiar with the detailed requirements of the Protocol, have detailed knowledge of the procedure or steps in the respective plan- or programme-making process, have a good understanding of: (a) options for the integration of SEA into the formulation of plans or programmes; and (b) analytical and participatory tools that can be used in the preparation of the environmental report and for carrying out consultations and public participation. Successful accomplishment of this exercise may typically require nine to 15 hours of work, depending on the complexity of the plan- or programme-making process.

- **Detailed terms of reference for SEA of the given plan or programme**. This most advanced discussion requires the audience be familiar with

    - The detailed requirements of the Protocol
    - The detailed features of plan or programme making
    - The detailed logical links between SEA and the development of plans or programmes
    - Methods that can be used: (a) in the preparation of the environmental report; and (b) for carrying out consultations and public participation

- Possible degrees of integration of SEA into the plan- or programme-making process

Successful accomplishment of this exercise may typically require anything between 15 and 30 hours of work, depending on the complexity of the plan- or programme-making process.

B2.1.5 Information that needs to gathered before the exercise

7. Successful completion of the practical exercise requires provision of the following information on the features of the given plan- or programme-making system or particular plan or programme:

- What is the focus of the plan- or programme-making process? Who develops the plan or programme and who should adopt it?
- Are there any requirements or guidelines for the plan or programme making that could help to identify the process steps and outputs?
- Is there a requirement for an environmental section or analysis within the plan- or programme-making process?
- What is the consultation process with authorities within this plan- or programme-making process? With whom? When?
- Are there any requirements for public participation in the plan- or programme-making process? With whom? When?

B2.2 TASKS FOR WORK ON A CASE STUDY

Task 1: Analyze the plan or programme making

8. This introductory exercise should help the participants to become familiar with the plan- or programme-making process that has been chosen to be subject to SEA. This information is needed to propose an effective and customized SEA approach for that particular context. Naturally, before embarking on the design of an 'abstract' SEA procedure, it is useful to know how the plan or programme making actually works and what is missing in relation to SEA. Such information will provide a basis for later consideration of how SEA can fit into the preparation of that plan or programme.

9. The analysis of the plan- or programme-making process should start with the gathering of basic information on the nature of the plan or programme. The participants should obtain information on the origins of the plan or programme, the authority responsible for developing it and the role of the decision-maker. It may also be useful to know how the plan or programme will be implemented (e.g. will it lead directly into specific projects, or will it be followed by another, more detailed programme or plan, etc).

10. Once the overall context has been clarified, the following detailed issues in the plan or programme making should be discussed:

    - What are the specific tasks in the development of the plan or programme?
    - Does the plan or programme development involve any environmental analyses that might be linked with the preparation of environmental report? When are these environmental analyses undertaken during the development of the plan or programme?
    - Does the plan or programme making already involve any consultations with relevant environmental and health authorities? Which authorities are consulted and when do these consultations occur during the development of the plan or programme?
    - Does the plan or programme making already provide for any access to information and public participation? Who from the public can access the information and participate and when are these opportunities provided during the development of the plan or programme?

11. This more detailed analysis of the plan- or programme-making process may be facilitated with the help of Table B2.1 below.

12. The following notes may be used as guidance in the detailed analysis of the plan- or programme-making process:

    - The plan- or programme-making tasks might include those related to information gathering, information analysis, communication with other stakeholders, plan drafting stages or phases, etc. These tasks may be identified in the relevant

legislation or guidance on preparation of the respective plan or programme, or from examples of similar plans or programmes in the past.

- Once the plan- or programme-making tasks have been outlined, the participants should proceed by identifying the likely environmental analyses that will be part of the plan or programme making. The participants should be aware that some basic environmental analyses might be routinely applied in plan or programme making. It is useful to know the scope and focus of such analyses in order to link them effectively with the preparation of the environmental report.

- Since consultations among authorities are usually an integral part of any plan- or programme-making process, it is useful to review whether any arrangements for consultations with environmental and health authorities exist within the plan or programme making and what is their timing.

- The analysis of the plan or programme making may be concluded by an analysis of arrangements for public access to information and public participation during the development of the plan or programme.

Table B2.1: Possible review framework for the plan- or programme-making process

Tasks in the development of the plan or programme	Existing environmental analyses	Consultations with the authorities	Public access to information and consultations with the public concerned

Task 2: Discuss when and how to determine whether SEA is needed for the plan or programme

13. This exercise should help the participants to discuss when and how to determine whether SEA is needed for the plan or programme. The participants should be aware that the timing of such a determination would have major implications on the effectiveness of the proposed SEA process. If such a determination occurs too late, it is likely to lead to delays and to less effective SEA.

14. Initial points to discuss include the following:

- What information is needed to determine whether SEA is required for the given plan- or programme-making process?

- Should the given plan- or programme-making process be automatically subject to SEA or is a case-by-case determination required?

- When should such a determination be undertaken most effectively?

15. If the participants conclude that a case-by-case determination is required, then the following items should be discussed:

- What approach to 'significance testing' should be used?
- How should relevant authorities (and possibly the public concerned) be consulted?
- How should information about the outcome of determination be made available to the public?

16. Successful accomplishment of this exercise will require the participants be familiar with the information in this Manual on determining whether SEA is required under the Protocol, including the detailed description of the tests (see Chapter A3).

17. By the end of this exercise, the participants should be aware that the requirement to carry out SEA for a given plan or programme should be determined as early as feasible in the development of the plan or programme. Practical arrangements for an early determination of the need for an SEA should be have been identified.

Task 3: Discuss practical arrangements for scoping

18. Scoping is one of the most important elements in SEA. This exercise should help the participants to discuss when and how to undertake SEA scoping in relation to the plan or programme making.

19. The participants should be aware that the Protocol does not stipulate scoping as a rigid procedural stage (nor is a 'scoping decision' needed). They should note that scoping may be carried out either through a single procedural step or as an iterative process that may start with early advice and may be continued within various stages during the preparation of the environmental report.

20. Points to discuss include the following:

- What information needs to be generated during the scoping in order to determine the appropriate scope of the environmental report?
- What is the minimum information to be obtained in order to carry out SEA scoping effectively and when is this information available during the plan or programme development?
- What practical arrangements should be made to consult relevant authorities (and possibly the public concerned)?
- Should scoping be carried out through a single procedural step or rather as an iterative process that starts with early advice that is developed in detail as the plan or programme is developed?

21. Successful accomplishment of this exercise will require the participants be familiar with the information contained in the Manual on scoping and the treatment of alternatives within SEA (see section A4.2).

22. By the end of this exercise, the participants should understand that scoping should start early and should link with the plan or programme development.

Task 4: Discuss the information to be provided in the environmental report and its logical links with the development of the plan or programme

23. This exercise should help the participants to discuss the information to be provided in the environmental report and its logical links with the development of the plan or programme.

24. The participants should start by outlining the types of information to be provided in the environmental report based on the requirements of the Protocol. They can then compare their findings with the overview of the plan- or programme making steps and the environmental analyses during the preparation of the respective plan or programme, as identified in Task 1. Such a comparison may help them to discuss opportunities for linking the information in the environmental report with the development of the plan or programme.

25. Points to discuss include the following:

- What information will have to be provided in the environmental report for the given type of plan or programme (bearing in mind the strategic issues relevant to the plan or programme and the need to maintain the appropriate detail of assessment)?
- How will information in the environmental report differ from any existing analyses performed during the plan or programme making and are there any similarities or opportunities for synergies?
- What data will the SEA team need from plan and programme makers and what inputs can the SEA team provide into the development of the plan or programme?
- Optionally: what information should be provided in qualitative or quantitative form and which analytical tools could be used to deliver it (see Chapter A5)?

26. Successful accomplishment of this exercise will require the participants be familiar with the information contained in this Manual on the environmental report (section A4.2), logical linkages between SEA and the development of the plan or programme (Chapter A2) and, optionally, the overview of basic analytical tools in SEA (Chapter A5).

27. By the end of this exercise, the participants should be aware that the preparation of the environmental report may be linked effectively to, or incorporated into, the development of the respective plan or programme (though the report itself must be distinct from the draft plan or programme).

Task 5: Discuss practical arrangements for consultations with relevant environmental and health authorities

28. This exercise should help the participants to discuss the practical arrangements for consulting the relevant environmental and health authorities during SEA.

29. The participants should outline consultations with authorities that are needed based on the requirement of the SEA Protocol. They may then compare their proposals with the overview of the existing consultations with relevant authorities within the preparation of the respective plan or programme, as identified in Task 1. Based on this comparison, they can discuss whether SEA-related consultations with environmental and health authorities should be carried out as a separate process or if they can be combined with consultations with relevant authorities during the development of the plan or programme.

30. Points to discuss include the following:

- Which authorities need to be consulted within SEA?
- When and how should these consultations be performed in order to provide effective inputs?
- How do the proposed consultations differ from the existing consultations with authorities?
- Should separate consultations be organized for SEA and for the plan- or programme-making process, or is it better to have a single commenting process?

31. Successful accomplishment of this exercise will require the participants be familiar with information contained in this Manual on consultation with authorities (section A4.4), logical linkages between SEA and development of plan or programmes (Chapter A2) and, optionally, basic consultative tools in SEA (Chapter A5).

32. By the end of the exercise, the participants should be aware that the consultations with relevant authorities in SEA may be linked effectively to, or incorporated into, consultations with authorities during the development of the respective plan or programme.

Task 6: Discuss practical arrangements for public participation

33. This exercise should help the participants to discuss the practical arrangements for consultations with the public.

34. The participants should outline what is required in order to carry out public participation based on the requirement of the Protocol. They may then compare their proposals with the overview of the existing arrangements for access to information and public participation within the preparation of the respective plan or programme, as identified in Task 1. Based on this comparison, they can discuss whether SEA-related public participation should be carried out as a separate process or whether it could be combined with the public participation regime in the development of the plan or programme.

35. Points to discuss include the following

- What information should be made available to the public during SEA?
- Is it necessary to determine the public concerned in SEA (and if so how)?
- Should one stage of consultation be carried out or should consultation occur as iterative process?
- How do consultations in SEA differ from existing consultations with the public, and should separate consultations be organized for SEA and for the plan- or programme-making process, or would it be better to have a single commenting process?
- Optionally: what consultative tools could be used to facilitate public participation? (If the exercise allows enough time for further discussion, they may then also suggest appropriate consultative tools that could be used in such SEA – see Chapter A5.)

36. Successful accomplishment of this exercise will require the participants be familiar with information contained in this Manual on public participation (section A4.3), logical linkages between SEA and development of plan or programmes (Chapter A2) and, optionally, with basic consultative tools in SEA (Chapter A5).

37. By the end of the exercise, the participants should be aware that the arrangements for public participation in SEA may be linked effectively to, or incorporated into, the public participation regime for the development of the plan or programme.

Task 7: Discuss practical arrangements for taking information generated within SEA into account in the plan- or programme-making process

38. The exercise on taking into account the environmental report and results of consultations should discuss arrangements that would enable persons developing the plan or programme and those preparing the environmental report, or decision-making authorities for the respective plan or programme, to ensure that information generated within SEA is taken into account when developing a plan or programme and before approving it.

39. The key point to discuss is:

- How to ensure that due account is taken of the outcomes of the SEA (the environmental report and the measures to prevent, reduce or mitigate the adverse effects identified in it; the outcomes of consultations with relevant authorities; and the outcomes of public participation) when the plan or programme is adopted if:
  - SEA were to be partially integrated into the development of the plan or programme (i.e. it runs concurrently to the plan or programme development and provides inputs at key stages of the plan or programme making)? What happens if SEA experts and the experts who develop the plan or programme cannot reach consensus on certain issues?

- SEA were to be fully integrated into the development of the plan or programme? Again, what happens if the SEA experts and the experts who develop the plan or programme cannot reach consensus on certain issues?

- SEA were to be carried out in isolation from the plan or programme development or would start only once the plan or programme had been drafted? What happens if the SEA comes up with proposals for major changes in the plan or programme at a time when the drafting of the plan or programme has been completed?

Task 8: Discuss practical arrangements for coordination of the SEA with the plan- or programme-making process

40. This is exercise should help the participants to discuss the practical activities required for conducting SEA in the plan- or programme-making process.

41. The previous exercises helped the participants to discuss the detailed modalities for SEA scoping (Task 3), for obtaining information required in the environmental report (Task 4), for carrying out SEA-related consultations with authorities (Task 5), for conducting SEA-related public participation (Task 6) and taking information generated within SEA into account in the plan- or programme-making process (Task 7). Based on the conclusions of these earlier discussions, the participants should clarify the specific modalities for the work of the experts who should conduct the proposed SEA process.

42. Points to discuss include the following:

- What would be the main advantages and disadvantages of an SEA that is carried out in isolation from the plan or programme development, or that is delayed and starts only once the plan or programme has been drafted?

- What would be the main advantages and disadvantages of partial integration of SEA into the development of the plan or programme?

- What would be the main advantages and disadvantages of full integration of SEA into the development of the plan or programme?

43. Successful accomplishment of this exercise will require the participants be familiar with the information contained in this Manual on elements of the SEA procedure (Chapter A2), decision-making (section A4.6) and logical linkages between SEA and development of plan or programmes (Chapter A2).

44. By the end of the exercise, the participants should be aware of the main benefits and problems associated with various options for undertaking SEA during the development of the plan or programme.

Task 9: Discuss practical issues for design of monitoring and for linking SEA with subsequent environmental assessments

45. This exercise should help the participants to discuss the expected tasks of the SEA experts in designing monitoring for the plan or programme and for linking SEA with subsequent environmental assessments.

46. Points to discuss include the following:

- What is generally expected in the design of the post-SEA monitoring?
- How should post-SEA monitoring link with the monitoring for the plan or programme?
- How should SEA link to subsequent environmental assessments (i.e. EIA for specific projects for which the plan or programme sets the framework, or SEA for subsequent plans and programmes)?

47. Successful accomplishment of this exercise will require the participants be familiar with the information contained in this Manual on monitoring (section A4.7).

48. By the end of the exercise, the participants should be aware of the main challenges in the application of monitoring and of the practical linkages between this SEA and subsequent EIAs or SEAs.

Task 10: Present the proposed approach to SEA of the given plan or programme

49. This concluding exercise facilitates presentation of the suggested SEA approach. This may be also useful in elaboration of the specific terms of reference for the given SEA process.

50. The participants should summarize the main strengths and weaknesses of the proposed approach and openly acknowledge any assumptions and risks in its application. If time permits, the participants might estimate the number of working days to complete the whole SEA, identify the required skills among the SEA experts or determine any other issues that should be mentioned when such an SEA is presented.

51. Thus the participants might be asked to summarize the proposed SEA approach by outlining:

- The key tasks to be performed within the SEA and how they link to tasks in the plan or programme making
- Roles (tasks and mandates) of the SEA experts during the of the plan or programme
- The main strengths and weaknesses of the proposed approach, and the assumptions for its effective operation (being realistic about the risks)

- The expected number of working days to complete the SEA
- The required skills among the SEA experts, etc.

52. By the end of the exercise, the participants should be able present the proposed SEA approach to the competent authority, stakeholders or consultants who are interested in carrying out the SEA.

ANNEXES

ANNEX A0.1: UNECE PROTOCOL ON SEA

[UNOFFICIAL VERSION]

PROTOCOL ON STRATEGIC ENVIRONMENTAL ASSESSMENT TO THE CONVENTION ON ENVIRONMENTAL IMPACT ASSESSMENT IN A TRANSBOUNDARY CONTEXT

The Parties to this Protocol,

Recognizing the importance of integrating environmental, including health, considerations into the preparation and adoption of plans and programmes and, to the extent appropriate, policies and legislation,

Committing themselves to promoting sustainable development and therefore basing themselves on the conclusions of the United Nations Conference on Environment and Development (Rio de Janeiro, Brazil, 1992), in particular principles 4 and 10 of the Rio Declaration on Environment and Development and Agenda 21, as well as the outcome of the third Ministerial Conference on Environment and Health (London, 1999) and the World Summit on Sustainable Development (Johannesburg, South Africa, 2002),

Bearing in mind the Convention on Environmental Impact Assessment in a Transboundary Context, done at Espoo, Finland, on 25 February 1991, and decision II/9 of its Parties at Sofia on 26 and 27 February 2001, in which it was decided to prepare a legally binding protocol on strategic environmental assessment,

Recognizing that strategic environmental assessment should have an important role in the preparation and adoption of plans, programmes, and, to the extent appropriate, policies and legislation, and that the wider application of the principles of environmental impact assessment to plans, programmes, policies and legislation will further strengthen the systematic analysis of their significant environmental effects,

Acknowledging the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, done at Aarhus, Denmark, on 25 June 1998, and taking note of the relevant paragraphs of the Lucca Declaration, adopted at the first meeting of its Parties,

Conscious, therefore, of the importance of providing for public participation in strategic environmental assessment,

Acknowledging the benefits to the health and well-being of present and future generations that will follow if the need to protect and improve people's health is taken into account as an integral part of strategic environmental assessment, and recognizing the work led by the World Health Organization in this respect,

Mindful of the need for and importance of enhancing international cooperation in assessing the transboundary environmental, including health, effects of proposed plans and programmes, and, to the extent appropriate, policies and legislation,

Have agreed as follows:

Article 1

OBJECTIVE

The objective of this Protocol is to provide for a high level of protection of the environment, including health, by:

(a) Ensuring that environmental, including health, considerations are thoroughly taken into account in the development of plans and programmes;

(b) Contributing to the consideration of environmental, including health, concerns in the preparation of policies and legislation;

(c) Establishing clear, transparent and effective procedures for strategic environmental assessment;

(d) Providing for public participation in strategic environmental assessment; and

(e) Integrating by these means environmental, including health, concerns into measures and instruments designed to further sustainable development.

Article 2

DEFINITIONS

For the purposes of this Protocol,

1. "Convention" means the Convention on Environmental Impact Assessment in a Transboundary Context.

2. "Party" means, unless the text indicates otherwise, a Contracting Party to this Protocol.

3. "Party of origin" means a Party or Parties to this Protocol within whose jurisdiction the preparation of a plan or programme is envisaged.

4. "Affected Party" means a Party or Parties to this Protocol likely to be affected by the transboundary environmental, including health, effects of a plan or programme.

5. "Plans and programmes" means plans and programmes and any modifications to them that are:

(a) Required by legislative, regulatory or administrative provisions; and

(b) Subject to preparation and/or adoption by an authority or prepared by an authority for adoption, through a formal procedure, by a parliament or a government.

6. "Strategic environmental assessment" means the evaluation of the likely environmental, including health, effects, which comprises the determination of the scope of an environmental report and its preparation, the carrying-out of public participation and consultations, and the taking into account of the environmental report and the results of the public participation and consultations in a plan or programme.

7. "Environmental, including health, effect" means any effect on the environment, including human health, flora, fauna, biodiversity, soil, climate, air, water, landscape, natural sites, material assets, cultural heritage and the interaction among these factors.

8. "The public" means one or more natural or legal persons and, in accordance with national legislation or practice, their associations, organizations or groups.

Article 3

GENERAL PROVISIONS

1. Each Party shall take the necessary legislative, regulatory and other appropriate measures to implement the provisions of this Protocol within a clear, transparent framework.

2. Each Party shall endeavour to ensure that officials and authorities assist and provide guidance to the public in matters covered by this Protocol.

3. Each Party shall provide for appropriate recognition of and support to associations, organizations or groups promoting environmental, including health, protection in the context of this Protocol.

4. The provisions of this Protocol shall not affect the right of a Party to maintain or introduce additional measures in relation to issues covered by this Protocol.

5. Each Party shall promote the objectives of this Protocol in relevant international decision-making processes and within the framework of relevant international organizations.

6. Each Party shall ensure that persons exercising their rights in conformity with the provisions of this Protocol shall not be penalized, persecuted or harassed in any way for their involvement. This provision shall not affect the powers of national courts to award reasonable costs in judicial proceedings.

7. Within the scope of the relevant provisions of this Protocol, the public shall be able to exercise its rights without discrimination as to citizenship, nationality or domicile and, in the case of a legal person, without discrimination as to where it has its registered seat or an effective centre of its activities.

Article 4

FIELD OF APPLICATION CONCERNING PLANS AND PROGRAMMES

1. Each Party shall ensure that a strategic environmental assessment is carried out for plans and programmes referred to in paragraphs 2, 3 and 4 which are likely to have significant environmental, including health, effects.

2. A strategic environmental assessment shall be carried out for plans and programmes which are prepared for agriculture, forestry, fisheries, energy, industry including mining, transport, regional development, waste management, water management, telecommunications, tourism, town and country planning or land use, and which set the framework for future development consent for projects listed in annex I and any other project listed in annex II that requires an environmental impact assessment under national legislation.

3. For plans and programmes other than those subject to paragraph 2 which set the framework for future development consent of projects, a strategic environmental assessment shall be carried out where a Party so determines according to article 5, paragraph 1.

4. For plans and programmes referred to in paragraph 2 which determine the use of small areas at local level and for minor modifications to plans and programmes referred to in paragraph 2, a strategic environmental assessment shall be carried out only where a Party so determines according to article 5, paragraph 1.

5. The following plans and programmes are not subject to this Protocol:

(a) Plans and programmes whose sole purpose is to serve national defence or civil emergencies;

(b) Financial or budget plans and programmes.

Article 5

SCREENING

1. Each Party shall determine whether plans and programmes referred to in article 4, paragraphs 3 and 4, are likely to have significant environmental, including health, effects either through a case-by-case examination or by specifying types of plans and programmes or by combining both approaches. For this purpose each Party shall in all cases take into account the criteria set out in annex III.

2. Each Party shall ensure that the environmental and health authorities referred to in article 9, paragraph 1, are consulted when applying the procedures referred to in paragraph 1 above.

3. To the extent appropriate, each Party shall endeavour to provide opportunities for the participation of the public concerned in the screening of plans and programmes under this article.

4. Each Party shall ensure timely public availability of the conclusions pursuant to paragraph 1, including the reasons for not requiring a strategic environmental assessment, whether by public notices or by other appropriate means, such as electronic media.

Article 6

SCOPING

1. Each Party shall establish arrangements for the determination of the relevant information to be included in the environmental report in accordance with article 7, paragraph 2.

2. Each Party shall ensure that the environmental and health authorities referred to in article 9, paragraph 1, are consulted when determining the relevant information to be included in the environmental report.

3. To the extent appropriate, each Party shall endeavour to provide opportunities for the participation of the public concerned when determining the relevant information to be included in the environmental report.

Article 7

ENVIRONMENTAL REPORT

1. For plans and programmes subject to strategic environmental assessment, each Party shall ensure that an environmental report is prepared.

2. The environmental report shall, in accordance with the determination under article 6, identify, describe and evaluate the likely significant environmental, including health, effects of implementing the plan or programme and its reasonable alternatives. The report shall contain such information specified in annex IV as may reasonably be required, taking into account:

(a) Current knowledge and methods of assessment;

(b) The contents and the level of detail of the plan or programme and its stage in the decision-making process;

(c) The interests of the public; and

(d) The information needs of the decision-making body.

3. Each Party shall ensure that environmental reports are of sufficient quality to meet the requirements of this Protocol.

Article 8

PUBLIC PARTICIPATION

1. Each Party shall ensure early, timely and effective opportunities for public participation, when all options are open, in the strategic environmental assessment of plans and programmes.

2. Each Party, using electronic media or other appropriate means, shall ensure the timely public availability of the draft plan or programme and the environmental report.

3. Each Party shall ensure that the public concerned, including relevant non-governmental organizations, is identified for the purposes of paragraphs 1 and 4.

4. Each Party shall ensure that the public referred to in paragraph 3 has the opportunity to express its opinion on the draft plan or programme and the environmental report within a reasonable time frame.

5. Each Party shall ensure that the detailed arrangements for informing the public and consulting the public concerned are determined and made publicly available. For this purpose, each Party shall take into account to the extent appropriate the elements listed in annex V.

Article 9

CONSULTATION WITH ENVIRONMENTAL AND HEALTH AUTHORITIES

1. Each Party shall designate the authorities to be consulted which, by reason of their specific environmental or health responsibilities, are likely to be concerned by the environmental, including health, effects of the implementation of the plan or programme.

2. The draft plan or programme and the environmental report shall be made available to the authorities referred to in paragraph 1.

3. Each Party shall ensure that the authorities referred to in paragraph 1 are given, in an early, timely and effective manner, the opportunity to express their opinion on the draft plan or programme and the environmental report.

4. Each Party shall determine the detailed arrangements for informing and consulting the environmental and health authorities referred to in paragraph 1.

Article 10

TRANSBOUNDARY CONSULTATIONS

1. Where a Party of origin considers that the implementation of a plan or programme is likely to have significant transboundary environmental, including health, effects or where a Party likely to be significantly affected so requests, the Party of origin shall as early as possible before the adoption of the plan or programme notify the affected Party.

2. This notification shall contain, inter alia:

(a) The draft plan or programme and the environmental report including information on its possible transboundary environmental, including health, effects; and

(b) Information regarding the decision-making procedure, including an indication of a reasonable time schedule for the transmission of comments.

3. The affected Party shall, within the time specified in the notification, indicate to the Party of origin whether it wishes to enter into consultations before the adoption of the plan or programme and, if it so indicates, the Parties concerned shall enter into consultations concerning the likely transboundary environmental, including health, effects of implementing the plan or programme and the measures envisaged to prevent, reduce or mitigate adverse effects.

4. Where such consultations take place, the Parties concerned shall agree on detailed arrangements to ensure that the public concerned and the authorities referred to in article 9, paragraph 1, in the affected Party are informed and given an opportunity to forward their opinion on the draft plan or programme and the environmental report within a reasonable time frame.

Article 11

DECISION

1. Each Party shall ensure that when a plan or programme is adopted due account is taken of:

(a) The conclusions of the environmental report;

(b) The measures to prevent, reduce or mitigate the adverse effects identified in the environmental report; and

(c) The comments received in accordance with articles 8 to 10.

2. Each Party shall ensure that, when a plan or programme is adopted, the public, the authorities referred to in article 9, paragraph 1, and the Parties consulted according to article 10 are informed, and that the plan or programme is made available to them together with a statement summarizing how the environmental, including health, considerations have been integrated into it, how the comments received in accordance with articles 8 to

10 have been taken into account and the reasons for adopting it in the light of the reasonable alternatives considered.

Article 12

MONITORING

1. Each Party shall monitor the significant environmental, including health, effects of the implementation of the plans and programmes, adopted under article 11 in order, inter alia, to identify, at an early stage, unforeseen adverse effects and to be able to undertake appropriate remedial action.

2. The results of the monitoring undertaken shall be made available, in accordance with national legislation, to the authorities referred to in article 9, paragraph 1, and to the public.

Article 13

POLICIES AND LEGISLATION

1. Each Party shall endeavour to ensure that environmental, including health, concerns are considered and integrated to the extent appropriate in the preparation of its proposals for policies and legislation that are likely to have significant effects on the environment, including health.

2. In applying paragraph 1, each Party shall consider the appropriate principles and elements of this Protocol.

3. Each Party shall determine, where appropriate, the practical arrangements for the consideration and integration of environmental, including health, concerns in accordance with paragraph 1, taking into account the need for transparency in decision-making.

4. Each Party shall report to the Meeting of the Parties to the Convention serving as the Meeting of the Parties to this Protocol on its application of this article.

Article 14

THE MEETING OF THE PARTIES TO THE CONVENTION SERVING AS THE MEETING OF THE PARTIES TO THE PROTOCOL

1. The Meeting of the Parties to the Convention shall serve as the Meeting of the Parties to this Protocol. The first meeting of the Parties to the Convention serving as the Meeting of the Parties to this Protocol shall be convened not later than one year after the date of entry into force of this Protocol, and in conjunction with a meeting of the Parties to the Convention, if a meeting of the latter is scheduled within that period. Subsequent meetings of the Parties to the Convention serving as the Meeting of the Parties to this Protocol shall be held in conjunction with meetings of the Parties to the Convention,

unless otherwise decided by the Meeting of the Parties to the Convention serving as the Meeting of the Parties to this Protocol.

2. Parties to the Convention which are not Parties to this Protocol may participate as observers in the proceedings of any session of the Meeting of the Parties to the Convention serving as the Meeting of the Parties to this Protocol. When the Meeting of the Parties to the Convention serves as the Meeting of the Parties to this Protocol, decisions under this Protocol shall be taken only by the Parties to this Protocol.

3. When the Meeting of the Parties to the Convention serves as the Meeting of the Parties to this Protocol, any member of the Bureau of the Meeting of the Parties representing a Party to the Convention that is not, at that time, a Party to this Protocol shall be replaced by another member to be elected by and from amongst the Parties to this Protocol.

4. The Meeting of the Parties to the Convention serving as the Meeting of the Parties to this Protocol shall keep under regular review the implementation of this Protocol and, for this purpose, shall:

(a) Review policies for and methodological approaches to strategic environmental assessment with a view to further improving the procedures provided for under this Protocol;

(b) Exchange information regarding experience gained in strategic environmental assessment and in the implementation of this Protocol;

(c) Seek, where appropriate, the services and cooperation of competent bodies having expertise pertinent to the achievement of the purposes of this Protocol;

(d) Establish such subsidiary bodies as it considers necessary for the implementation of this Protocol;

(e) Where necessary, consider and adopt proposals for amendments to this Protocol; and

(f) Consider and undertake any additional action, including action to be carried out jointly under this Protocol and the Convention, that may be required for the achievement of the purposes of this Protocol.

5. The rules of procedure of the Meeting of the Parties to the Convention shall be applied mutatis mutandis under this Protocol, except as may otherwise be decided by consensus by the Meeting of the Parties serving as the Meeting of the Parties to this Protocol.

6. At its first meeting, the Meeting of the Parties to the Convention serving as the Meeting of the Parties to this Protocol shall consider and adopt the modalities for applying the procedure for the review of compliance with the Convention to this Protocol.

7. Each Party shall, at intervals to be determined by the Meeting of the Parties to the Convention serving as the Meeting of the Parties to this Protocol, report to the Meeting of

the Parties to the Convention serving as the Meeting of the Parties to the Protocol on measures that it has taken to implement the Protocol.

Article 15

RELATIONSHIP TO OTHER INTERNATIONAL AGREEMENTS

The relevant provisions of this Protocol shall apply without prejudice to the UNECE Conventions on Environmental Impact Assessment in a Transboundary Context and on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters.

Article 16

RIGHT TO VOTE

1. Except as provided for in paragraph 2 below, each Party to this Protocol shall have one vote.

2. Regional economic integration organizations, in matters within their competence, shall exercise their right to vote with a number of votes equal to the number of their member States which are Parties to this Protocol. Such organizations shall not exercise their right to vote if their member States exercise theirs, and vice versa.

Article 17

SECRETARIAT

The secretariat established by article 13 of the Convention shall serve as the secretariat of this Protocol and article 13, paragraphs (a) to (c), of the Convention on the functions of the secretariat shall apply mutatis mutandis to this Protocol.

Article 18

ANNEXES

The annexes to this Protocol shall constitute an integral part thereof.

Article 19

AMENDMENTS TO THE PROTOCOL

1. Any Party may propose amendments to this Protocol.

2. Subject to paragraph 3, the procedure for proposing, adopting and the entry into force of amendments to the Convention laid down in paragraphs 2 to 5 of article 14 of the Convention shall apply, mutatis mutandis, to amendments to this Protocol.

3. For the purpose of this Protocol, the three fourths of the Parties required for an amendment to enter into force for Parties having ratified, approved or accepted it, shall be calculated on the basis of the number of Parties at the time of the adoption of the amendment.

Article 20

SETTLEMENT OF DISPUTES

The provisions on the settlement of disputes of article 15 of the Convention shall apply mutatis mutandis to this Protocol.

Article 21

SIGNATURE

This Protocol shall be open for signature at Kiev (Ukraine) from 21 to 23 May 2003 and thereafter at United Nations Headquarters in New York until 31 December 2003, by States members of the Economic Commission for Europe as well as States having consultative status with the Economic Commission for Europe pursuant to paragraphs 8 and 11 of Economic and Social Council resolution 36 (IV) of 28 March 1947, and by regional economic integration organizations constituted by sovereign States members of the Economic Commission for Europe to which their member States have transferred competence over matters governed by this Protocol, including the competence to enter into treaties in respect of these matters.

Article 22

DEPOSITARY

The Secretary-General of the United Nations shall act as the Depositary of this Protocol.

Article 23

RATIFICATION, ACCEPTANCE, APPROVAL AND ACCESSION

1. This Protocol shall be subject to ratification, acceptance or approval by signatory States and regional economic integration organizations referred to in article 21.

2. This Protocol shall be open for accession as from 1 January 2004 by the States and regional economic integration organizations referred to in article 21.

3. Any other State, not referred to in paragraph 2 above, that is a Member of the United Nations may accede to the Protocol upon approval by the Meeting of the Parties to the Convention serving as the Meeting of the Parties to the Protocol.

4. Any regional economic integration organization referred to in article 21 which becomes a Party to this Protocol without any of its member States being a Party shall be bound by all the obligations under this Protocol. If one or more of such an organization's member States is a Party to this Protocol, the organization and its member States shall decide on their respective responsibilities for the performance of their obligations under this Protocol. In such cases, the organization and its member States shall not be entitled to exercise rights under this Protocol concurrently.

5. In their instruments of ratification, acceptance, approval or accession, the regional economic integration organizations referred to in article 21 shall declare the extent of their competence with respect to the matters governed by this Protocol. These organizations shall also inform the Depositary of any relevant modification to the extent of their competence.

Article 24

ENTRY INTO FORCE

1. This Protocol shall enter into force on the ninetieth day after the date of deposit of the sixteenth instrument of ratification, acceptance, approval or accession.

2. For the purposes of paragraph 1 above, any instrument deposited by a regional economic integration organization referred to in article 21 shall not be counted as additional to those deposited by States members of such an organization.

3. For each State or regional economic integration organization referred to in article 21 which ratifies, accepts or approves this Protocol or accedes thereto after the deposit of the sixteenth instrument of ratification, acceptance, approval or accession, the Protocol shall enter into force on the ninetieth day after the date of deposit by such State or organization of its instrument of ratification, acceptance, approval or accession.

4. This Protocol shall apply to plans, programmes, policies and legislation for which the first formal preparatory act is subsequent to the date on which this Protocol enters into force. Where the Party under whose jurisdiction the preparation of a plan, programme, policy or legislation is envisaged is one for which paragraph 3 applies, this Protocol shall apply to plans, programmes, policies and legislation for which the first formal preparatory act is subsequent to the date on which this Protocol comes into force for that Party.

Article 25

WITHDRAWAL

At any time after four years from the date on which this Protocol has come into force with respect to a Party, that Party may withdraw from the Protocol by giving written notification to the Depositary. Any such withdrawal shall take effect on the ninetieth day after the date of its receipt by the Depositary. Any such withdrawal shall not affect the application of articles 5 to 9, 11 and 13 with respect to a strategic environmental assessment under this Protocol which has already been started, or the application of article 10 with respect to a notification or request which has already been made, before such withdrawal takes effect.

Article 26

AUTHENTIC TEXTS

The original of this Protocol, of which the English, French and Russian texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

IN WITNESS WHEREOF the undersigned, being duly authorized thereto, have signed this Protocol.

DONE at Kiev (Ukraine), this twenty-first day of May, two thousand and three.

ANNEXES

ANNEX I

List of projects as referred to in article 4, paragraph 2

1. Crude oil refineries (excluding undertakings manufacturing only lubricants from crude oil) and installations for the gasification and liquefaction of 500 metric tons or more of coal or bituminous shale per day.

2. Thermal power stations and other combustion installations with a heat output of 300 megawatts or more and nuclear power stations and other nuclear reactors (except research installations for the production and conversion of fissionable and fertile materials, whose maximum power does not exceed 1 kilowatt continuous thermal load).

3. Installations solely designed for the production or enrichment of nuclear fuels, for the reprocessing of irradiated nuclear fuels or for the storage, disposal and processing of radioactive waste.

4. Major installations for the initial smelting of cast-iron and steel and for the production of non-ferrous metals.

5. Installations for the extraction of asbestos and for the processing and transformation of asbestos and products containing asbestos: for asbestos-cement products, with an annual production of more than 20,000 metric tons of finished product; for friction material, with an annual production of more than 50 metric tons of finished product; and for other asbestos utilization of more than 200 metric tons per year.

6. Integrated chemical installations.

7. Construction of motorways, express roads[*/] and lines for long-distance railway traffic and of airports[**/] with a basic runway length of 2,100 metres or more.

8. Large-diameter oil and gas pipelines.

9. Trading ports and also inland waterways and ports for inland-waterway traffic which permit the passage of vessels of over 1,350 metric tons.

10. Waste-disposal installations for the incineration, chemical treatment or landfill of toxic and dangerous wastes.

11. Large dams and reservoirs.

12. Groundwater abstraction activities in cases where the annual volume of water to be abstracted amounts to 10 million cubic metres or more.

13. Pulp and paper manufacturing of 200 air-dried metric tons or more per day.

14. Major mining, on-site extraction and processing of metal ores or coal.

15. Offshore hydrocarbon production.

16. Major storage facilities for petroleum, petrochemical and chemical products.

17. Deforestation of large areas.

[*/] For the purposes of this Protocol:
- "Motorway" means a road specially designed and built for motor traffic, which does not serve properties bordering on it, and which:
(a) Is provided, except at special points or temporarily, with separate carriageways for the two directions of traffic, separated from each other by a dividing strip not intended for traffic or, exceptionally, by other means;
(b) Does not cross at level with any road, railway or tramway track, or footpath; and
(c) Is specially sign posted as a motorway.
- "Express road" means a road reserved for motor traffic accessible only from interchanges or controlled junctions and on which, in particular, stopping and parking are prohibited on the running carriageway(s).

[**/] For the purposes of this Protocol, "airport" means an airport which complies with the definition in the 1944 Chicago Convention setting up the International Civil Aviation Organization (annex 14).

ANNEX II

Any other projects referred to in article 4, paragraph 2

1. Projects for the restructuring of rural land holdings.

2. Projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes.

3. Water management projects for agriculture, including irrigation and land drainage projects.

4. Intensive livestock installations (including poultry).

5. Initial afforestation and deforestation for the purposes of conversion to another type of land use.

6. Intensive fish farming.

7. Nuclear power stations and other nuclear reactors[*/] including the dismantling or decommissioning of such power stations or reactors (except research installations for the production and conversion of fissionable and fertile materials whose maximum power does not exceed 1 kilowatt continuous thermal load), as far as not included in annex I.

8. Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of 15 kilometres or more and other projects for the transmission of electrical energy by overhead cables.

9. Industrial installations for the production of electricity, steam and hot water.

10. Industrial installations for carrying gas, steam and hot water.

11. Surface storage of fossil fuels and natural gas.

12. Underground storage of combustible gases.

13. Industrial briquetting of coal and lignite.

14. Installations for hydroelectric energy production.

15. Installations for the harnessing of wind power for energy production (wind farms).

16. Installations, as far as not included in annex I, designed:

- For the production or enrichment of nuclear fuel;

- For the processing of irradiated nuclear fuel;

[*/] For the purposes of this Protocol, nuclear power stations and other nuclear reactors cease to be such an installation when all nuclear fuel and other radioactively contaminated elements have been removed permanently from the installation site.

– For the final disposal of irradiated nuclear fuel;

– Solely for the final disposal of radioactive waste;

– Solely for the storage (planned for more than 10 years) of irradiated nuclear fuels in a different site than the production site; or

– For the processing and storage of radioactive waste.

17. Quarries, open cast mining and peat extraction, as far as not included in annex I.

18. Underground mining, as far as not included in annex I.

19. Extraction of minerals by marine or fluvial dredging.

20. Deep drillings (in particular geothermal drilling, drilling for the storage of nuclear waste material, drilling for water supplies), with the exception of drillings for investigating the stability of the soil.

21. Surface industrial installations for the extraction of coal, petroleum, natural gas and ores, as well as bituminous shale.

22. Integrated works for the initial smelting of cast iron and steel, as far as not included in annex I.

23. Installations for the production of pig iron or steel (primary or secondary fusion) including continuous casting.

24. Installations for the processing of ferrous metals (hot-rolling mills, smitheries with hammers, application of protective fused metal coats).

25. Ferrous metal foundries.

26. Installations for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes, as far as not included in annex I.

27. Installations for the smelting, including the alloyage, of non-ferrous metals excluding precious metals, including recovered products (refining, foundry casting, etc.), as far as not included in annex I.

28. Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process.

29. Manufacture and assembly of motor vehicles and manufacture of motor-vehicle engines.

30. Shipyards.

31. Installations for the construction and repair of aircraft.

32. Manufacture of railway equipment.

33. Swaging by explosives.

34. Installations for the roasting and sintering of metallic ores.

35. Coke ovens (dry coal distillation).

36. Installations for the manufacture of cement.

37. Installations for the manufacture of glass including glass fibre.

38. Installations for smelting mineral substances including the production of mineral fibres.

39. Manufacture of ceramic products by burning, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain.

40. Installations for the production of chemicals or treatment of intermediate products, as far as not included in annex I.

41. Production of pesticides and pharmaceutical products, paint and varnishes, elastomers and peroxides.

42. Installations for the storage of petroleum, petrochemical, or chemical products, as far as not included in annex I.

43. Manufacture of vegetable and animal oils and fats.

44. Packing and canning of animal and vegetable products.

45. Manufacture of dairy products.

46. Brewing and malting.

47. Confectionery and syrup manufacture.

48. Installations for the slaughter of animals.

49. Industrial starch manufacturing installations.

50. Fish-meal and fish-oil factories.

51. Sugar factories.

52. Industrial plants for the production of pulp, paper and board, as far as not included in annex I.

53. Plants for the pre treatment or dyeing of fibres or textiles.

54. Plants for the tanning of hides and skins.

55. Cellulose-processing and production installations.

56. Manufacture and treatment of elastomer-based products.

57. Installations for the manufacture of artificial mineral fibres.

58. Installations for the recovery or destruction of explosive substances.

59. Installations for the production of asbestos and the manufacture of asbestos products, as far as not included in annex I.

60. Knackers' yards.

61. Test benches for engines, turbines or reactors.

62. Permanent racing and test tracks for motorized vehicles.

63. Pipelines for transport of gas or oil, as far as not included in annex I.

64. Pipelines for transport of chemicals with a diameter of more than 800 mm and a length of more than 40 km.

65. Construction of railways and intermodal transhipment facilities, and of intermodal terminals, as far as not included in annex I.

66. Construction of tramways, elevated and underground railways, suspended lines or similar lines of a particular type used exclusively or mainly for passenger transport.

67. Construction of roads, including realignment and/or widening of any existing road, as far as not included in annex I.

68. Construction of harbours and port installations, including fishing harbours, as far as not included in annex I.

69. Construction of inland waterways and ports for inland-waterway traffic, as far as not included in annex I.

70. Trading ports, piers for loading and unloading connected to land and outside ports, as far as not included in annex I.

71. Canalization and flood-relief works.

72. Construction of airports[**/] and airfields, as far as not included in annex I.

[**/] For the purposes of this Protocol, "airport" means an airport which complies with the definition in the 1944 Chicago Convention setting up the International Civil Aviation Organization (annex 14).

73. Waste-disposal installations (including landfill), as far as not included in annex I.

74. Installations for the incineration or chemical treatment of non-hazardous waste.

75. Storage of scrap iron, including scrap vehicles.

76. Sludge deposition sites.

77. Groundwater abstraction or artificial groundwater recharge, as far as not included in annex I.

78. Works for the transfer of water resources between river basins.

79. Waste-water treatment plants.

80. Dams and other installations designed for the holding-back or for the long-term or permanent storage of water, as far as not included in annex I.

81. Coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works, excluding the maintenance and reconstruction of such works.

82. Installations of long-distance aqueducts.

83. Ski runs, ski lifts and cable cars and associated developments.

84. Marinas.

85. Holiday villages and hotel complexes outside urban areas and associated developments.

86. Permanent campsites and caravan sites.

87. Theme parks.

88. Industrial estate development projects.

89. Urban development projects, including the construction of shopping centres and car parks.

90. Reclamation of land from the sea.

ANNEX III

Criteria for determining of the likely significant environmental, including health, effects referred to in article 5, paragraph 1

1. The relevance of the plan or programme to the integration of environmental, including health, considerations in particular with a view to promoting sustainable development.

2. The degree to which the plan or programme sets a framework for projects and other activities, either with regard to location, nature, size and operating conditions or by allocating resources.

3. The degree to which the plan or programme influences other plans and programmes including those in a hierarchy.

4. Environmental, including health, problems relevant to the plan or programme.

5. The nature of the environmental, including health, effects such as probability, duration, frequency, reversibility, magnitude and extent (such as geographical area or size of population likely to be affected).

6. The risks to the environment, including health.

7. The transboundary nature of effects.

8. The degree to which the plan or programme will affect valuable or vulnerable areas including landscapes with a recognized national or international protection status.

ANNEX IV

Information referred to in article 7, paragraph 2

1. The contents and the main objectives of the plan or programme and its link with other plans or programmes.

2. The relevant aspects of the current state of the environment, including health, and the likely evolution thereof should the plan or programme not be implemented.

3. The characteristics of the environment, including health, in areas likely to be significantly affected.

4. The environmental, including health, problems which are relevant to the plan or programme.

5. The environmental, including health, objectives established at international, national and other levels which are relevant to the plan or programme, and the ways in which these objectives and other environmental, including health, considerations have been taken into account during its preparation.

6. The likely significant environmental, including health, effects[*/] as defined in article 2, paragraph 7.

[*/] These effects should include secondary, cumulative, synergistic, short-, medium- and long-term, permanent and temporary, positive and negative effects.

7. Measures to prevent, reduce or mitigate any significant adverse effects on the environment, including health, which may result from the implementation of the plan or programme.

8. An outline of the reasons for selecting the alternatives dealt with and a description of how the assessment was undertaken including difficulties encountered in providing the information to be included such as technical deficiencies or lack of knowledge.

9. Measures envisaged for monitoring environmental, including health, effects of the implementation of the plan or programme.

10. The likely significant transboundary environmental, including health, effects.

11. A non-technical summary of the information provided.

ANNEX V

Information referred to in article 8, paragraph 5

1. The proposed plan or programme and its nature.

2. The authority responsible for its adoption.

3. The envisaged procedure, including:

(a) The commencement of the procedure;

(b) The opportunities for the public to participate;

(c) The time and venue of any envisaged public hearing;

(d) The authority from which relevant information can be obtained and where the relevant information has been deposited for examination by the public;

(e) The authority to which comments or questions can be submitted and the time schedule for the transmittal of comments or questions; and

(f) What environmental, including health, information relevant to the proposed plan or programme is available.

4. Whether the plan or programme is likely to be subject to a transboundary assessment procedure.

ANNEX A1.1: LEGAL AND POLICY LANDMARKS IN THE EVOLUTION OF SEA

Drafting note: This list of landmarks is not intended to be exhaustive. National guidance documents might be removed and placed on the website.

1970 U.S. *National Environmental Policy Act* (1969) -- requires 'proposals for legislation and other major federal actions significantly affecting the…environment' to include a 'detailed statement…on the environmental impact' (Sec. 102 (2)(c))

California Environmental Quality Act -- modelled after NEPA and applies to activities proposed or approved by state agencies, including programmes, plans & staged projects (Guidelines Sec. 15165 - 15168)

mid-1970s Public inquiries and environmental reviews of major proposals -- consideration of policy issues (e.g. Mackenzie Valley Pipeline Inquiry, Canada, 1974-1977, Ranger Uranium Environmental Inquiry, Australia, 1975-1977)

1978 NEPA *Regulations* issued by Council on Environmental Quality -- specify actions subject to programmatic EIS as those that can be grouped generically, geographically or by technology (Sec. 1052.4 (b))

1987 Netherlands, *EIA Act* (amended 1994) -- applies to specified national plans and programmes, including all those fixing the locations of projects for which an EIA is mandatory

1989 Australia, *Resource Assessment Commission Act* – establishes independent inquiry body on resource policy issues (Commission disbanded in 1993, legislation retained)

World Bank, *Operational Directive 4.00* (amended 1991, 1999) -- refers to preparation of sectoral and regional EA (Annex A 6-8)

1990 Canada, *Environmental Assessment Process for Policy and Programme Proposals* by Order-in Council (amended 1999) -- applies to proposals submitted to Cabinet

1991 New Zealand, *Resource Management Act* -- landmark sustainability law combining policy, planning and regulatory functions into omnibus regime

UK, Guide on *Policy Appraisal and the Environment* -- advice for central government agencies (updated by good practice guidance, 1994; amended 1997)

UNECE (Espoo) Convention on EIA in a Transboundary Context (came into force 1997) calls on the Parties 'to the extent appropriate …shall endeavour to apply' the principles of EIA to policies, plans and programmes (Article 2(7))

1992 UNECE pilot study of EIA of Policies, Plans and Programmes -- recommends its application by member countries

Hong Kong, *Environmental Implications of Policy Papers* by decision of then Governor – applies to proposals to Executive Council (later development plans)

Czech EIA Act requires SEA for broad range of concepts (i.e. policies, strategies, plans and programmes) that are prepared or adopted by central government authorities

1993 Denmark, *Environmental Assessment of Government Bills and Other Proposals* by Prime Minister's Office (PMO) circular (amended 1995, 1998 when it became legally binding) -- applies to draft legislation to Parliament and to strategic proposals on which Parliament must be consulted

European Commission, *Environmental Assessment of Legislative Programme* by Internal Communication – applies to legislative proposals and other actions by Commission

1994 UK, Guide on *Environmental Appraisal of Development Plans* -- advice to local authorities on how to carry out their responsibilities under planning legislation (updated 1998)

Norway, *Assessment of White Papers and Government Proposals* by Administrative Order -- contains provisions relevant to environment but applies primarily to economic & administrative consequences

Slovakia, *EIA Act* – contains requirement to assess basic development policies, territorial plans in selected areas and any legislative proposal that may have an adverse impact on the environment (Art. 35)

1995 Netherlands, *Environmental Test* by Cabinet Directive -- applies to draft legislation, part of comprehensive review of enforceability, feasibility and impact on business

1996 *Proposal* by European Commission for a Directive on the assessment of the effects of certain plans and programmes (COM (96) 511; amended by COM (99) 73), hereafter SEA Directive

1998 Finland, *Guidelines on Environmental Impact Assessment of Legislative Proposals* by Decision-in-Principle -- apply to law drafting, also decrees, resolutions and decisions

UNECE (Aarhus) *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters* -- provisions for public participation in Articles 7 and 8 refer to plans, programmes and policies and to laws and regulations relating to environment

Declaration by the Environment Ministers of the UNECE region on Strategic Environmental Assessment (ECE/CEP/56) -- inviting countries and international finance institutions to introduce and/or carry out SEA 'as a matter of priority'

1999 Australia, *Environmental Protection and Biodiversity Conservation Act* -- introduces provisions enabling SEA of policies, plans and programmes

Finland, *Act on Environmental Impact Assessment Procedure* applies to policy, plans and programmes

UK, *Proposals for a Good Practice Guide on Sustainability Appraisal of Regional Planning Guidance* (finalized in 2000; replaced in 2005 by a guidance document *Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents*)

2001 European Council and Parliament, *SEA Directive* (2001/42/EC), adopted; came into operational force in July 2004, currently being transposed into national legislation by EU Member States

France, *L'évaluation environnementale des plans et programmes de transport* (SEA of transport plans and programmes), by Ministère de l'aménagement du territoire et de

l'environnement

2002 *Communication from the Commission on Impact Assessment* (COM (2002) 276 final) (reviewed in the light of experience and a further report issued in 2004: *Commission Staff Working Paper, Impact Assessment Next Steps - In support of competitiveness and sustainable development* (SEC (2004) 1377))

Austria, *Assessment of the significance of environmental effects: Screening approach and criteria applied in SEAs*, by Federal Ministry of Agriculture and Forestry, Environment and Water Management

2003 *Protocol on SEA* to the UNECE (Espoo) Convention on EIA in a Transboundary Context, adopted at Kiev

Scotland (United Kingdom), *Environmental Assessment of Development Plans*, by Development Department, Scottish Executive

2003 European Commission, *Implementation of Directive 2001/42/EC:* guidance on the requirements of the SEA Directive

2004 Ireland, *Implementation of SEA Directive: Draft Guidelines for Regional Authorities and Planning Authorities*, by Department of the Environment, Heritage and Local Government

2005 UK, *A Practical Guide to the Strategic Environmental Assessment Directive*

Strategic Environmental Assessment at the Policy Level: Recent Progress, Current Status and Future Prospects -- A volume prepared by the Regional Environment Centre for Central and Eastern Europe on behalf of the Czech Ministry of Environment

Hong Kong, *Strategic Environmental Assessment Manual*, Hong Kong Special Administrative Region

Bavaria (Germany), *Preliminary guidelines for preparing the environmental report*, Bavarian Government - Ministries of the Interior and of the Environment

European Commission, *The SEA Manual - a Sourcebook on Strategic Environmental Assessment of Transport Infrastructure Plans and Programmes*, by Directorate-General Energy & Transport

Austria, *Strategic environmental assessment: From scoping to monitoring*, by Federal Ministry of Agriculture and Forestry, Environment and Water Management

IAIA, Conference on International Experience and Perspectives in SEA, Prague

2006 Greening Regional Development Programmes Network, *Handbook on SEA for Cohesion Policy 2007*-2013

OECD/Development Assistance Committee, *Applying Strategic Environmental Assessment: Good Practice Guidance for Development Co-operation*

ANNEX A1.2:
IAIA PERFORMANCE CRITERIA FOR SEA[49]

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[49] Source: IAIA (2002), http://www.iaia.org/

A good-quality SEA process informs plan and programme makers, decision-makers and the affected public on the sustainability of strategic decisions, facilitates the search for the best alternative, and ensures a democratic decision-making process. This enhances the credibility of decisions and leads to more cost- and time-effective EIA at the project level. For this purpose, a good-quality SEA process is:

Integrated:

- Ensures an appropriate environmental assessment of all strategic decisions relevant for the achievement of sustainable development;
- Addresses the inter-relationships of biophysical, social and economic aspects; and
- Is tiered to policies in relevant sectors and (transboundary) regions and, where appropriate, to project EIA and decision-making.

Sustainability-led:

- Facilitates identification of development options and alternative proposals that are more sustainable.[50]

Focused:

- Provides sufficient, reliable and usable information for development planning and decision-making;
- Concentrates on key issues of sustainable development;
- Is customised to the characteristics of the decision-making process; and
- Is cost- and time-effective.

Accountable:

- Is the responsibility of the leading agencies for the strategic decision to be taken;
- Is carried out with professionalism, rigor, fairness, impartiality and balance;
- Is subject to independent checks and verification; and
- Documents and justifies how sustainability issues were taken into account in decision-making.

Participative:

- Informs and involves interested and affected public and government bodies throughout the decision-making process;
- Explicitly addresses their inputs and concerns in documentation and decision-making; and
- Has clear, easily-understood information requirement and ensures sufficient access to all relevant information.

Is iterative:

- Ensures availability of the assessment results early enough to influence the decision-making process and inspire future planning; and
- Provides sufficient information on the actual impacts of implementing a strategic decision, to judge whether this decision should be amended and to provide a basis for future decisions.

[50] i.e. that contributes to the overall sustainable development strategy as laid down in Rio 1992 [Agenda 21, Rio Declaration on Environment and Development, available from http://www.un.org/esa/sustdev/documents/agreed.htm] and defined in the specific policies or value of a country.

ANNEX A5.1: DESCRIPTION OF SELECTED ANALYTICAL TOOLS

This Annex introduces the following techniques:

- Formal and informal checklists
- Matrices of impacts and of conflicts or synergies
- Collective expert judgements – Delphi Technique
- Overlay Mapping and Geographical Information Systems (GIS)
- Trend analysis and extrapolation
- Decision trees and impact networks
- Predictive and simulation modelling
- Scenario building
- Life-Cycle Assessment (LCA)
- Cost/Benefit Analysis (CBA)
- Multi-criteria analysis (MCA)

Technique	**Formal and informal checklists**
Description	A checklist presents a catalogue of issues that might be considered when assessing particular types of plan or programme. Checklists may list: • Environmental, including health, concerns usually associated with certain plans and programmes • Relevant environmental, including health, objectives for various development activities • Indicators or specific guiding questions that can be asked when evaluating a plan or programme in certain fields
Usual application within SEA	• Analysis context and baseline • Identification of issues and impacts
Advantages	• Help remember all the information relevant to a task • Provide a simple way of identifying whether certain issues are relevant to a proposal and help to avoid overlooking potential issues
Disadvantages	• Do not offer a very analytical approach to analysis • Encourage neglect of any important effects that are not present in the checklist • May cloud judgement with irrelevant information • Do not specify the nature of cause-and-effect relationships – are prone to pigeon-holing impacts into certain categories whereas, in reality, an impact may be part of a complex system.
Examples of practical application or key sources of further information	[Examples will be provided when supplied by countries to the Espoo Convention secretariat]

Technique	**Matrices of impacts and of conflicts or synergies**
Description	**Matrices of impacts** enable identification and presentation of potential impacts of proposed interventions (e.g. proposed objectives or actions) on the different components of the environment, including health. They are similar to checklists and can best be described as a two-dimensional checklist. They can use symbols, characters and numerical scores, in different scales or colours, to show the nature of the impact or its approximate scale or magnitude. Matrices can also illustrate cumulative and indirect impacts and impact interactions. For example, they may include columns or rows that summarize overall impacts of proposed interventions. Presented information should be easy to verify, and each matrix may need to be accompanied by a text explaining the nature of specific effects. **Matrices of conflicts or synergies** show relationships between proposed interventions (e.g. proposed objectives or actions) and relevant environmental, including health, objectives or on other objectives (e.g. in the case of more comprehensive assessments).
Usual application within SEA	• Identification of issues and impacts • Assessment of impacts • Contributing to development and comparison of alternatives
Advantages	• Provide a good visual summary of impacts, which is easy to interpret • Can be adapted to identify cumulative impacts as well as impact interactions • Is a useful tool for presenting results, for example from subjective assessments, or from numerical modelling • Can be designed to include the potential for interactions and can combine the impacts from various actions or from a number of projects. They can also be used to compare alternative options.
Disadvantages	• Matrices often present only direct impacts • May lead users to overcomplicate the analysis by considering all potential interactions between all proposed actions and all environmental, including health, issues. This is time consuming and may divert attention to minor impacts.
Examples of practical application or key sources of further information	Sample matrix for assessment of the measures of the National Development of the Czech Republic in the Proceedings of the International workshop on Public Participation and Health Aspects in SEA (the REC) http://www.rec.org/REC/Publications/Proceedings/SEAproceedings.pdf Matrix method suggested to screen alternative (in an SEA of carbon dioxide capture and storage) http://uregina.ca/ghgt7/PDF/papers/poster/143.pdf

Technique	**Collective expert judgements – Delphi Technique**
Description	Collective expert judgments iteratively canvass opinions and perspectives from recognized ‘experts’ in relevant fields. Specific means that meet this aim may include simple workshops, interviews or questionnaires with a problem-solving focus (for example, to assess possible impacts or risks), as well as more sophisticated techniques. These means are described in Annex A5.2 The Delphi technique represents the systematic and powerful tool for formulation of collective expert judgements. It enables identification of

	prevailing judgment within a large group of experts who do not directly interact with each other. This technique thus reduces costs and enables participation of experts from geographically dispersed locations. It also defines principles and steps that can be effectively used for formulation of expert judgements using other less time-consuming techniques (e.g. workshops, conferences, etc). The Delphi technique is based on the following key steps: • Clarify what information is needed, design the questions and determine the time line of the process. • Identify the appropriate number of experts to serve on the Delphi panel and explain the tasks. • Prepare and distribute the initial set of open-ended or closed-ended questions. • Collect and analyze the first responses and compile the responses. If open-ended questions were used extensively, analyze and present the first set of responses within an appropriate theoretical framework, typology, or outline. • Send the same question out to the same panellists a second and third time. The process may be repeated with additional waves, if necessary. Include the responses with the question so that panellists can read the other opinions and adjust their own opinions. Respondents will read each other's ideas and answer the question again. As information is exchanged, people incorporate each others' perspectives and information into their thinking and arrive at a fairly accurate understanding of the critical issues to consider in their decision-making process. • Always prepare and distribute a final report to panellists. One of the motivations for participating in a Delphi panel, particularly for specialists, is to learn firsthand, before others, what the results of the Delphi study are.
Usual application within SEA	• Analysis of context and baseline • Identification of issues and impacts • Assessment of impacts
Advantages	• Can deal with quite technical or complex issues. • Allows sharing of ideas and consensus in decision-making by a large number of stakeholders who are geographically distanced • Convenient to participants, as they can contribute from their own office or home.
Disadvantages	• Takes time for the organizers (can run for several months) • Participant commitment may falter if the process takes too long or they have other commitments • Large amounts of data need to be carefully assessed and distributed, so the process can be expensive to manage
Examples of practical application or key sources of further information	Nehiley, J. M. (2001) *How to Conduct a Delphi Study* Dick, B. (2000), *Delphi face to face*, available at http://www.uq.net.au/action_research/arp/delphi.html

Technique	**Overlay Mapping and Geographical Information Systems (GIS)**
Description	Overlay mapping and GIS are methods for identifying the spatial distribution of impacts. Both methods involve the preparation of maps or layers of information that are then superimposed on one another. They can: • Provide a composite picture of the receiving environment, including health (sensitive areas or resources, current pressures, etc.) • Present impacts of previous developments • Illustrate potential impacts of future activities • Map the cumulative impacts, or map the impacts on a number of receptors An important feature of spatial analysis is its ability to consider topographic data that become essential when planning infrastructure or analyzing certain impacts (e.g. noise, local air quality, visual impacts). Manual overlay mapping uses a series of transparent maps with different information shown on each layer. GIS allows the rapid construction of multi-layered electronic maps and can be regarded as the high-tech equivalent of overlay mapping. GIS can also be useful for handling large amounts of data. Once a base GIS has been prepared, further information can be added and amended as necessary; outputs and inputs are therefore easy to update.
Usual application within SEA	• Analysis of context and baseline • Identification of issues and impacts • Assessment of impacts • Contributing to development and comparison of alternatives
Advantages	• Both techniques enable visual presentation of past, present and future impacts
Disadvantages	• Both techniques can be expensive and time consuming.
Examples of practical application or key sources of further information	British Geological Survey report (2004) on *Strategic environmental assessment (SEA) and future aggregates extraction in the East Midlands Region* presents a number of GIS usage methods and approaches: http://www.mineralsuk.com/britmin/CR_04_003N.pdf

Technique	**Trend analysis and extrapolation**
Description	Accurate trend analysis is one of the most important aspects of any strategic assessment. In the context of SEA, its can be defined as an interpretation of environmental pressures and changes in the state of the environment, including health, over time. Trend analysis uses data sets and helps to trace any trends or patterns. Trends can be linear, exponential or cyclical and they should, where possible, be analyzed over a correct temporal scale. The presentation of trends can be fairly simple, e.g. a line graph, or quite complex, e.g. using three-dimensional graphics or video simulation. There are numerous computer programs that facilitate trend analysis (e.g. the simplest ones being computer spreadsheet software, more advanced ones including RATS, GAUSS, JMP, etc.). Trend analysis facilitates presentation of the main linkages between environmental pressures and corresponding (sometime delayed) changes in the state of the environment. As such, it can also assist predictions of future impacts. Some trends can be safely extrapolated on the assumption that the trend is going to continue in the same dynamic. When doing so, it is important to realize that virtually every trend has a corresponding counter-trend. Oversimplified extrapolation that does not consider how the trend will evolve once it reaches a key breaking point (e.g. when carrying capacity of the surrounding environment has been reached or exceeded), or once the counter-trend becomes stronger, may be misleading. Trend extrapolation can thus play an important role in medium-to-short term forecasts when no major counter-trends or breaking points are expected. Long-term trends can be precisely determined only through modelling, if at all.
Usual application within SEA	• Analysis of context and baseline • Assessment of impacts
Advantages	• Can greatly assist in the quantification of cumulative impacts in cases where environmental data are available over long periods of time
Disadvantages	• There are often situations where it is not possible to obtain relevant or sufficient data on specific environmental pressures. • In cases where there are gaps in data, it becomes important to use appropriate statistical methods to ensure the proper interpretation of trends. Such analysis may be quite cumbersome.
Examples of practical application or key sources of further information	Different examples of trend analysis are presented in the Transport Analysis Guidance on *SEA for Transport Plans and Programmes* (2004) by UK Department for Transport, available at http://www.webtag.org.uk/webdocuments/2_Project_Manager/11_SEA/2.11.pdf

Technique	**Decision trees and impact networks**
Description	Networks and systems illustrate the cause and effect relationship. They identify the pathway of an effect using a series of chains (networks) or webs (system diagrams) between a proposal and the wider environment in which it is proposed to operate. These techniques can help to illustrate implications of the plan or programme on the subsequent decisions and its knock-on effects on other developments (decision-trees) or a gradual progression from direct immediate effects to indirect or longer-term or delayed effects (effect networks). If sufficient data is available, it is possible to include quantitative measurements in the network diagram. This technique constitutes a simple form of modelling and allows the evaluation of effects and their interactions (see more on modelling below). In developing a network or system, the steps might comprise: • Consider and list the measures • Identify effects of each measure on other developments or on directly affected elements of the environment, including health • Identify secondary knock-on effects on other developments or environmental, including health, elements – thus illustrating pathways from direct effects to indirect implications • When doing so, determine whether any cumulative effects on the same development pattern or element of environment, including health, occur • If appropriate consider a loop to show any feedback • If appropriate use quantitative techniques as a simple form of modelling to evaluate the effects.
Usual application within SEA	• Identification of issues and effects • Assessment of effects • Contributing to development & comparison of alternatives
Advantages	• Use of flow diagrams can assist with understanding effects • Network diagrams clearly illustrate the interaction pathways – the mechanism of cause and effect is made explicit • Although network analysis may not be quantitative, it may still provide a good basis for choosing which processes could be quantified or modelled in further detail
Disadvantages	• No spatial or temporal scale can be provided • Network analysis uses a holistic approach to impact assessment, so it may require a considerable effort to complete • Diagrams can become too complex
Examples of practical application or key sources of further information	[Examples will be provided when supplied by countries to the Espoo Convention secretariat]

Technique	**Predictive and simulation modelling**
Description	Modelling is an analytical tool that enables the quantification of environmental, including health, effects by simulating environmental, including health, conditions. Often models use computer technology to predict the effects. A mathematical model lends itself to the spatial and temporal analysis of aspects of the environment such as air and water quality, water volume and flows, noise levels and airborne deposition on soils and vegetation. Other types of model include *socio-economic models, species habitat models and expert systems* that allow the effects of a project to be determined through a programme of decisions. The most advanced and used models are for *air quality, water quality and noise modelling as well as ecological and visual modelling*. There are a number of different models available for assessing those effects. They can be used to consider direct and cumulative effects of a number of measures proposed in the plan or programme and enable some assessment of indirect effects resulting from emissions or effects of development proposals.
Usual application within SEA	• Assessment of effects • Contributing to development & comparison of alternatives
Advantages	• Noise, air dispersion and hydrodynamic models are well developed and generalised in form and are therefore suited to the analysis of direct and cumulative effects • Modelling results can be combined with overlay techniques effectively, for example to assess different alternatives • Modelling is also a particularly useful tool for simulating effects over time and in space
Disadvantages	• Models are extremely costly and time consuming • The accuracy of the model is only as good as the baseline environmental data used to construct, calibrate and run it and the assumptions made in its design • It is difficult for any model to address realistically every intricacy of the natural system • Models also have a reputation for being pessimistic in their outcome and data can be manipulated relatively easily • Developing a new model is generally demanding in terms of cost, expertize, time and possibly data. For this reason it is best suited to larger and more complex projects • It is therefore often more appropriate to use a model that has been used previously and is therefore established and accepted
Examples of practical application or key sources of further information	[Examples will be provided when supplied by countries to the Espoo Convention secretariat]

Technique	**Scenario building**
Description	Scenario building is a process of designing hypothetical situations that incorporate the most uncertain and important driving forces affecting future development. The technique is aiming at addressing of the following questions: 1. What are the driving forces? 2. What are the uncertainties? 3. What is inevitable? 4. How about this or that scenario? Scenario building is sometimes associated with forecasting, which is also used to predict future events, but it uses calculations based on historical data. There are many scenario-building techniques. A method based on 8 steps of scenario-building approach described in *The Art of the Long View* by Peter Schwartz (see reference below) may be of interest in SEA. 1. Identify focal issue or decision: Where having scenarios will be helpful? What do you really want to know? 2. Identify the key forces in the local environment: What factors influence the focal issue or decision? What will decision makers want to know when making their choices? 3. Identify driving forces: What major trends influence the key forces? 4. Rank the key and driving forces on the degree of importance and the degree of uncertainty. Identified key or driving forces should be looked at carefully as they are more critical to providing different scenarios that are important. Select 2-3 to study further. 5. Select scenario logics: Following the ranking, take the information to define the key variables for building scenarios. 6. Flesh out the skeletal scenarios by looking at key factors and driving forces developed in steps 2 and 3. Each key factor and driving force should be given some role in the scenario. For example, if you had two key factors and 2 driving forces, that is 4 possible combinations that can be built into a narrative about the scenarios. 7. Define implications: Once the scenarios are defined, look for implications – what would happen in the different scenarios? Build these into your scenarios. 8. Select the leading indicators and signposts: Relate the scenarios to real situations – some are more likely than the others given the trends underway. Then, identify further indicators (e.g., leading indicators) that could alert you if this scenario plays out.
Usual application within SEA	• Assessment of effects • Contributing to development & comparison of alternatives
Advantages	• Scenarios provide a simplified version of reality and a way of creating a shared understanding of complex systems among those that work in them • They can be used to test ideas and explore consequences
Disadvantages	• Scenario development and interpretation requires relatively high technical skill • Scenario-based analysis is no better than the model itself and the data used. Careful testing and validation are necessary to avoid decisions or actions based on a flawed model. • Scenarios may involve complex mathematical operations or graphic images that are hard to understand and explain to non-technical audiences and policy makers

Examples of practical application or key sources of further information	• Detailed overviews of various approaches to scenario development can be obtained at: http://www.dit.ie/DIT/built/futuresacademy/whoweare/Scenario-Building.doc and http://www.gbn.com/ArticleDisplayServlet.srv?aid=27802 • Global Business Network (http://www.gbn.com/) • Information portals on scenario building can be found at http://www.plausiblefutures.com/index.php?cat=6691a and http://www.well.com/~mb/scenario/

Technique	**Life-Cycle Assessment (LCA)**[51]
Description	Life Cycle Assessment (LCA) is a technique for assessing the potential environmental, including health, effects and potential issues associated with a product (or service), by: • Compiling an inventory of relevant inputs and outputs • Evaluating the potential environmental, including health, effects associated with those inputs and outputs • Interpreting the results of the inventory and effect phases in relation to the objectives of the study LCA generally addresses at least energy but may also include emissions into air and water, land use and depletion of natural resources.
Usual application within SEA	• Identification of issues and effects • Assessment of effects • Contributing to development & comparison of alternatives
Advantages	• Comprehensive analysis of effects based on cradle-to-grave approach • LCA serves as validation for the system boundaries used in the evaluation of the environmental effects
Disadvantages	• Apart from energy it is very difficult to quantify emissions from all possible processes, requiring huge emission inventories • LCA must be used cautiously and, in the interpretation of the inventory, care must be taken with subjective judgments. Certain products do not provide enough information to accurately assess environmental effects (e.g. metals, VOC). Also, production processes and usage might differ from country to country. • Reliable methods for aggregating figures generated by LCA, and using them to compare the life-cycle effects of different products, do not yet exist • Preserving the confidentiality of commercially-sensitive raw data without reducing the credibility of LCAs is also a major problem • LCA does not have spatial and temporal resolution • In most situations it is impossible to prove conclusively using LCAs that any one product or any one process is better than any other, since many parameters cannot be simplified to the degree necessary to reach such a conclusion. Many LCAs have reached different and sometimes contradictory conclusions about similar products.

[51] *This description is based on adaptation of LCA provided by the EC-sponsored BEACON project (Build an Environmental Assessment CONsensus on the transeuropean transport network). This project offers a good overview of some SEA tools for transport sector - for more information see http://www.transport-sea.net/tools_cms.phtml?id=364*

Examples of practical application or key sources of further information	• INTERREG III B Project Alp Frail (http://www.alpfrail.com/) Operational Solutions for the transalpine railway freight traffic for sustainable management of connections of the economic areas within the alpine space, available at http://www.deutscher-verband.org/seiten/dv-ev-projekte/downloads/Alp_Frail-Kurzdarstellung-CADSES-en.pdf • Complete Life Cycle Assessment for Vehicle Models of the Mobility CarSharing Fleet Switzerland Gabor Doka, Doka Life Cycle Assessments Sabine Ziegler, Mobility Car Sharing Switzerland Conference paper STRC 2001 Session Emissions, available at http://www.strc.ch/doka.pdf • Umberto – software tool to model, calculate and visualize material and energy flow systems, available at http://www.umberto.de/en/ • Gabi 4 – Life Cycle Engineering, Green House Gas Accounting, Benchmarking and Energy Efficiency, available at http://www.environmental-expert.com/software/pr_eng/pr_eng.htm • Greet model, ANL – Fuel-Cycle Model for Transportation Fuels and Vehicle Technologies, available at http://www.transportation.anl.gov/software/GREET/ • E2database LBST – fuel chain analysis decision aiding tool, E3database for energetic, emissions-related and economic regional evaluation of hydrogen fuel chains, Agator, His, Schindler, available at http://www.waterstof.org/20030725EHECO3-48.pdf • GEMIS – Global Emission Model for Integrated Systems Germany, available at http://www.oeko.de/service/gemis/en/index.htm • SimaPro – collects, analyzes and monitors the environmental performance of products and services, available at http://www.pre.nl/simapro/simapro_lca_software.htm

Technique	**Cost/Benefit Analysis (CBA)**[52]
Description	CBA seeks to compare the monetary value of benefits with the monetary value of costs. A benefit is defined as anything that increases human well-being, and a cost as anything that decreases human well-being. In turn, human well-being is determined by what people prefer. Preferences are either revealed through choices and market behaviour or are stated through questionnaire (market research) procedures. Measurement of a preference is obtained by finding out the individual's willingness to pay for a benefit or for the avoidance of a cost, or their willingness to accept compensation for tolerating a cost or foregoing a benefit. These WTP ('Willingness to pay' for an environmental gain) and WTA ('Willingness to accept' compensation for an environmental loss) concepts provide estimates of what is known as consumers' surplus. The aim of maximizing benefits minus costs, or of requiring benefits to exceed costs, is fundamental to the concept of economic efficiency which has the overall goal of maximizing the sum of human well-being in a given economy. In many cases, WTP can be found from market behaviour and damages can be estimated directly. An example might be the effects of air pollution on crop productivity. The relationship between the two is secured from experimental or field observation and is known as a dose response function. The loss in yield can then be measured by the market value of the crops. This combination of a dose-response function and a market value is one instance of a production function approach.

[52] This description is taken from the UK report indicated in the list of sources.

	In other cases there is no evident market to refer to. Revealed preference analysis looks at 'surrogate markets', markets in goods and services that embody some environmental feature. An example would be a house and the market would be the housing market. Each house is seen as a 'bundle' of characteristics or attributes and these attributes contribute to the price of a house. Among the attributes might be peace and quiet or air pollution. By statistically regressing the price of the house on the attributes the 'hedonic price coefficient' can be found. Thus, many studies have found significant relationships between air pollution, disamenity and noise and house prices. Further manipulation of the data by then showing how the hedonic prices vary with income etc., produces measures of WTP for noise reduction etc. Stated preference techniques use questionnaires to elicit preferences in contexts where there may be no surrogate market. In principle, the questionnaires are similar to conventional market research for new or modified products. Contingent valuation asks directly what people are WTP, or asks if they are WTP 'X' where X is some starting point sum. Contingent ranking (or conjoint analysis) ranks alternatives and anchors one of the alternatives to a money price. Individuals' WTP is then inferred rather than derived directly from answers about WTP.
Usual application within SEA	• Assessment of effects • Contributing to development & comparison of alternatives
Advantages	• CBA is a widely used and recognized technique • It provides easy-to-understand information (in monetary terms) to the decision maker • It allows comparison of effects which might otherwise be difficult to compare, e.g. time savings for motorists versus loss of landscape value
Disadvantages	• There are many issues of contention in CBA, including appropriate discount rates and the reduction of future costs and benefits to net present values, and the valuation of health, life and environmental goods and services • There are many technical difficulties and much dispute regarding the methods used within CBA, such as contingent valuation
Examples of practical application or key sources of further information	UK Department of the Environment, Transport and the Regions, *Review of Technical Guidance on Environmental Appraisal:* A Report by EFTEC (Economics for the Environment Consultancy) http://www.defra.gov.uk/environment/economics/rtgea/1.htm • Boardman A, D Greenberg, A Vining, D Weimer, 1996. *Cost-Benefit Analysis: Concepts and Practice*, Prentice Hall, Upper Saddle River, USA. • Dixon J, L Fallon Scura, R.Carpenter and P.Sherman, *Economic Analysis of Environmental Impacts*, Earthscan, London, 1994. • Hanley N and C Spash, 1993. *Cost-Benefit Analysis and the Environment*, Edward Elgar, Cheltenham. • Mishan E, 1988. *Cost Benefit Analysis*, Allen and Unwin, London. • Pearce DW, D Whittington, S Georgiou and D James, 1994. *Project and Policy Appraisal: Integrating Economics and the Environment*, OECD, 2 rue Andre Pascal, Paris. • Risk and Policy Analysts Ltd, *Guidance on Environmental Costs and Benefits*, Report to the Environment Agency, January 1998. • Winpenny J, 1995. *The Economic Appraisal of Environmental Projects and Policies: a Practical Guide*, OECD, Paris.

Technique	**Multi-criteria analysis (MCA)**
Description	MCA is a method for evaluating alternative options against several criteria, and combining the separate evaluations into an overall evaluation. It can be used to identify a single most preferred option, to rank options, to short-list a limited number of options for subsequent detailed appraisal, or simply to distinguish acceptable and unacceptable options. MCA helps to manage that complexity by converting the evaluation to a numerical score. All MCA approaches incorporate judgments that are expressed in weights of criteria and in performance evaluations. Usual steps in a multi-criteria analysis are as follow: *1. Identify assessment criteria.* They can measure key consequences of proposed alternative options based on the relevant objectives or on their likely impacts. Carefully examine the proposed set of criteria to ensure that: • The set of criteria is complete (no significant criteria is missing) • There are no redundant criteria (these may include insignificant criteria or criteria where all options perform equally) • Criteria are measurable (it must be possible to assess - at least qualitatively - how well each option performs in relation to the criterion) • Criteria are mutually independent (there is no double counting) *2. Analyze relative importance of criteria (weighting).* Most MCA techniques enable to determine relative weights of each criteria in the decision -making. Methods of weighting vary from simple techniques (e.g. comparing criteria against each other to determine their relative weight) to complex methods (e.g. sociological surveys to determine importance of each criterion in the affected community). *3. Analyze performance (scoring).* Before scoring the performance, determination of what constitutes the best and the worst performance in a given context is required. Scoring performance may be done through three basic means: • Direct rating through expert judgments by assigning a score to each option (e.g. 0-100 point scale) • Determining performance against criterion-specific function that defines gradual progression from the worst to the best performance • Judging performance of options against each other. Methods vary – through simple ranking of options to determine the order of their performance (e.g. on criterion 1 the option A scores best, C second and B third) to complex calculations (based on fuzzy sets – see http://www.communities.gov.uk/index.asp?id=1142268) *4. Multiply weights and scores for each of the options and derivation of their overall scores.* Each option's performance on a criterion is multiplied by the weight of the respective criterion – this done for all the criteria. The sum yields the overall relative score for the given option. The results for all options are compared and discussed. *5. Analyze sensitivity to changes in scores or weights.* Sensitivity shows how changes in the scores or weight affect the results of MCA. Such analysis may be essential if: • There are serious uncertainties about performance of some options against selected criteria, or

	• If decision-makers or stakeholders argue about the relative weights of criteria used in MCA.
Usual application within SEA	• Assessment of impacts • Contributing to development & comparison of alternatives
Advantages	• MCA takes into account different criteria at the same time, which is impossible with the usual decision-making process based on a single criterion; • MCA may be used to bring together the view of the different stakeholders in the evaluation; • MCA is transparent and explicit (the scores and weights are recorded), easy to audit; • MCA may facilitate communication with decision maker and sometimes with the wider community.
Disadvantages	• MCA reduces rational debate about various pros and cons of proposed alternative options into discussion about abstract numbers (scores and weights) • MCA cannot facilitate consensus on very controversial decisions; • By presenting quantitative information (aggregated scores) MCA may create a false impression of accuracy despite the fact that application of MCA heavily depends on a value judgment; • The results may be manipulated by those who master MCA (i.e. simple sensitivity analyses that are normally performed within MCA show criteria that best influence outcomes and this knowledge can be used to produce different overall scores).
Examples of practical application or key sources of further information	Multi-criteria Analysis Manual of the UK Government, available at http://www.communities.gov.uk/index.asp?id=1142251 The Journal of Multi-Criteria Decision Analysis (ISSN: 1099-1360). By subscription only. More information can be obtained at http://www3.interscience.wiley.com/cgi-bin/jhome/5725?CRETRY=1&SRETRY=0 Department of the Environment, Transport and the Regions, *Review of Technical Guidance on Environmental Appraisal:* A Report by EFTEC (Economics for the Environment Consultancy) http://www.defra.gov.uk/environment/economics/rtgea/1.htm

ANNEX A5.2: DESCRIPTION OF SELECTED PUBLIC PARTICIPATION TOOLS

This Annex introduces the following techniques:

- Printed material inviting comments
- Displays and Exhibits
- Information hotline/ Staffed telephone lines
- Internet/Web-based consultations
- Questionnaires and Response Sheets
- Surveys
- Public Hearings
- Workshops
- Advisory Committee

Technique	**Printed material inviting comments**
Description	Printed materials are the easiest ways to publicize and provide information on a draft plan or programme and the SEA, or to publicize a participation process. Popular forms of the printed materials include: *fact sheets, flyers, newsletters, brochures, issues papers, reports, surveys etc*. These can be single purpose or produced as a series (e.g. newsletters). Printed material can be handed out, made available to be picked up, or mailed out either directly to a select mailing list, or included as 'bill stuffers' with regular mail outs such as utility bills, rates notice or other regularly posted bills. Printed materials aim to provide easily read information in words and drawings, to inform a wide range of stakeholders about the plan- or programme-making and assessment processes or documents. Printed material, whether handed out, dropped into letterboxes, distributed by mail, or mailed out with other material, is one of the easiest and most familiar methods for increasing awareness of an issue and soliciting responses to an issue or proposal. Available budget, and the use of other publicity methods and tools will determine just what type of printed material will best suit your need.
Advantages	• Printed materials can reach a large number of people through mailing or via free display • Comment sheets or questionnaires included with the material can allow for feedback • Can facilitate the public participation process • Printed information can be a low-cost publicity means, which is easily handed out and carried away • Can be economically distributed by doubling up with existing mailing lists • Can potentially reach a wide audience, or be targeted towards particular groups • Ongoing contact, information can be updated
Disadvantages	• The problem with most printed materials is the limited space available to communicate complicated concepts • Needs time to design, prepare text, visuals, proofread, print and fold. • There is no guarantee that the materials will be read – may be treated as junk mail • If mailed, the guarantee of being read is only as good as the mailing list itself; mailing lists need regular updating to avoid wasted time, energy and paper • Appearance of the material should be visually interesting but should avoid a 'sales' look • Can be lost if included with many other flyers and bill stuffers (consider

	using coloured paper and bold headlines if mailing as a bill stuffer, to ensure this is not just binned without reading) • Can exclude those who are not print literate unless visual elements are used • Information may not be readily understood and may be misinterpreted
Examples of practical application or key sources of further information	International Association for Public Participation (2000) *IAP2 Public Participation Toolbox*, available at http://www.iap2.org/

Technique	**Displays and Exhibits**
Description	These tools are events that are intended to provide project information and raise awareness about particular issues. Displays can be interactive, and can be used as part of a forum, workshop, exhibition, conference or other event. Displays and exhibits can include feedback opportunities such as blank sheets with one-line questions, and can include drawings, models, maps, posters, or other visual and audio representations illustrating an event, proposal or issue. Interactive displays can include 'post-it' idea boards, maps and flipcharts or blank posters for comments and questions. Displays and exhibits develop more concrete concepts of proposals or developments, and, where these provide options for interaction, provide public opinions and feedback that can be incorporated into the plan- or programme-making and assessment processes. Key issues to consider before, and the main steps to prepare for and carry out the methods, include: • Select a date and venue that will encourage the greatest number of participants to attend (generally weekends or public holidays/shopping centres/public spaces) • Arrange for a number of displays/exhibits to give details of the event/issue • Place the display/exhibit in a well-populated public space where those most affected by the issue/event are likely to pass by • Advertise and publicize the event with emphasis on the issue to be considered • Advertise times when display/exhibit will be open • Allow adequate time for setting up • Provide adequate staffing and consider the employment of volunteers, security and insurance issues • Provide coordinators to facilitate participation and answer questions • Collate feedback and publish results
Advantages	• The tool focuses public attention on an issue • It can create interest from media and lead to increased coverage of the issue • Allows for different levels of information sharing • Provides a snapshot of opinions and community issues based on feedback • People can view the displays at a convenient time and at their leisure • Graphic representations, if used, can help people visualise proposals
Disadvantages	• The tool needs a facilitator to encourage involvement and written feedback • Information may not be fully understood or misinterpreted if no staff provided to respond to questions or receive comments • Public must be motivated to attend • Can damage the proposal's reputation if done unprofessionally

Examples of practical application or key sources of further information	The Cooperative Research Centre for Coastal Zone, Estuary and Waterway Management (Australia) http://www.coastal.crc.org.au/research_outputs/alpha-list.asp International Association for Public Participation (2000) *IAP2 Public Participation Toolbox*. http://www.iap2.org/ US Dept of Transportation (1997) *Public Involvement and Techniques for Transportation Decision-Making: Transportation Fair*. Washington, (accessed 12/12/02) http://www.fhwa.dot.gov/reports/pittd/tranfair.htm Wates, N. (1999) *The Community Planning Handbook*. London, Earthscan.

Technique	**Information hotline/ Staffed telephone lines**
Description	An Information Hotline offers pre-recorded information on the planning document or an issue via the telephone and/or access to SEA and planning team members who can answer questions or provide additional information and assistance. It aims to deliver accurate, consistent information over the telephone to those who wish to know about an issue or who can provide additional information. Staffed telephone lines can serve as a link between the public and the developer during the duration of the plan or programme making and assessment, making the public feel involved. Key steps in application: • Determine the information to be recorded and timetable of updates • Advertise the phone number, e.g. via stationery and flyers printed, or a sticker e.g. on outgoing printed correspondence or promotional material. Advertise the number in the media, and ensure it is on all your outreach material • Set up a hotline number for callers by recording message and hooking up to the phone line. Record information that will answer the most commonly asked questions • If staffed phone line is used, assign the person to answer the calls. The person assigned to provide information has to be briefed and trained, and has to have a pleasant telephone manner, even with difficult callers • Set up a toll free number for non-local callers • In case of pre-recorded Information Hotline, offer the option of being put through to a specific person for more details • Record calls/common complaints/concerns in telephone journal for your records and input to the participation/consultation process
Advantages	• An Information Hotline offers an inexpensive and simple device that can ensure fast, easily and efficiently information dissemination • Provides a one-stop service to the public to access information about the planning activity. Can describe ways the public can get information and provide feedback. • Offers a reasonably low-cost for set up and updates • Portrays an image of 'accessibility' for an organisation, developer or the SEA team • A convenient way of receiving comments from interested parties. Not intimidating, easy for people to participate and provide comments. Promotes a feeling of accessibility.

Disadvantages	• Must be adequately advertised to be successful • If staffed, can be time consuming and limit staff member to perform other tasks • Designated contact must have sufficient knowledge of the activity to be able to answer questions quickly, accurately and professionally
Examples of practical application or key sources of further information	Department of Public Health (Flinders University) & South Australian Community Health Research Unit. (2000) *Improving Health Services through Consumer Participation - A Resource Guide for Organisations*. Commonwealth Department of Health & Aged Care. Canberra. Available at http://www.participateinhealth.org.au/how/practical_tools.htm. RCRA. 1996. *Public Participation Manual*. Ch 5: Public participation activities. http://www.epa.gov/epaoswer/hazwaste/permit/pubpart/chp_5.pdf. US EPA (2002) *National Pollutant Discharge Elimination System (NPDES) Public Involvement/Participation Hotlines*. (Accessed 11/12/02) http://cfpub.epa.gov/npdes/stormwater/menuofbmps/invol_3.cfm

Technique	**Internet/Web-based consultations**
Description	The tool typically comprises a website on the Internet. It is used to provide information or invite feedback. Care should be taken to keep the information up to date. More interactive forms of participation on the Internet may also be developed, e.g. on-line forums and discussion groups. Technically, the potential tools for Internet-based consultations can be: • HTML web pages with links to documents, pictures and graphics (moving or still) and sound • Dedicated email address to which non-structured submissions can be sent • Survey forms that elicit community response on particular issues (HTML or PDF to be faxed/mailed back) • Moderated bulletin boards that allow 'threaded' discussions about a range of issues • Virtual meetings using a chat room facility on specific topics • Web-casting (i.e. audio and visual broadcasting via the web) of meetings and events The Internet can enhance traditional techniques but it cannot replace them. The purpose of the website should be clearly articulated and information should be accurate and timely. The resource implications of maintaining the site need to be carefully assessed and budgeted for before it is established. It should be decided whether the management of the website will be done in-house or outsourced, what web-based tools to be used and what staff training is needed.
Advantages	• The most straightforward and inexpensive, resource-efficient technique to present and distribute information to those that have Internet access • The audience is potentially global • Costs are reduced as no printing or postage costs are incurred • Has a possibility to provide timely and accurate information about and a historical record of the planning, assessment and consultation processes • It is a way to invite stakeholders to comment on the specific proposals and a means of receiving feedback • An interactive medium allowing discussion and debate

Disadvantages	• There are significant resource implications in setting up a new website • The responses can be difficult to analyze if questions are open-ended • Because not all stakeholders will have access to the Internet, it cannot be used to replace the traditional means of consultation – alternative means of information dissemination will also be required
Examples of practical application or key sources of further information	iPlan initiative in New South Wales (Australia), http://www.iplan.nsw.gov.au/engagement/techniques/website.jsp (temporarily available at http://203.147.162.100/pia/engagement/techniques/website.htm)

Technique	**Questionnaires and Response Sheets**
Description	Questionnaires are a basic tool used to collect information, and are usually developed and tested to ensure that they are easily understood. Questionnaires ensure that exactly the same questions are presented to each person surveyed, and this helps with the reliability of the results. Questionnaires can be delivered via face-to-face interviews, telephone interviews, self-completed forms, mail outs or on-line. Questionnaires can be distributed by email as well as posted or faxed. Response sheets can be collected at a workshop, or can be picked up at a workshop and mailed back. These can also be mailed out in ways that reduce postage costs, when they are included in routine mail-outs such as the distribution of fact sheets or accounts. Questionnaire preparation steps**:** • Draft questions. Keep as short as possible. • Test questions with a small pilot group to determine whether they are unbiased, straightforward and not open to misinterpretation. Wording of questions has to be clear to avoid bias. • Indicate the purpose of the questionnaire at outset • Include qualitative data such as age, sex, address, education etc. to allow for further extrapolation of the results and/or inclusion into the mailing list. • Send out with questionnaires. If mailed and if the budget allows, provide free mail reply (stamped addressed envelope; freepost mailbox, etc.) to improve responses. • Document and publicize the responses.
Advantages	• Less personal if interviews or telephone surveys are not used, but anonymity can encourage more honest answers • Useful to generate both qualitative and quantitative data • Works well to reach respondents who live in a large area • Provides information from those unlikely to attend meetings and workshops • Permits expansion of the mail list • Can be used for statistical validation • Allows results to be extrapolated by subgroups • Allows the respondent to fill out at a convenient time • More economical and less labour intensive than interviews and telephone surveys as they provide larger samples for lower total costs
Disadvantages	• Low response rates can bias the results • Needs a return envelope/freepost address to encourage participation • Depends on a high degree of literacy

Examples of practical application or key sources of further information	US Department of transport (2002) *Public Involvement Techniques for Transportation Decision-Making* (accessed 13/12/02) http://ntl.bts.gov/DOCS/pubinvol.html

Technique	**Surveys**
Description	Surveys are a method used to collect information from a specific population. They can be used to collect broad general information from or about a large audience or specific information from target groups. Surveys can seek information that can be quantitative (facts and figures) and/or qualitative (opinions and values). Surveys use questionnaires to collect information, and these can be delivered through face-to-face interviews, self-completion written forms, telephone surveys, or electronic surveys (see also Questionnaires and Response Sheets). For a well-conducted survey using a large, random sample, surveys are usually high cost. Small-scale surveys using opportunistic sampling and volunteers can be relatively low cost, but may not produce results that can be generalised beyond a specific group of people. Surveys are designed to collect information in relation to a particular issue or planning document. The results of the surveys provide information about the demographics and/or opinions of a specific group of people. Relevant steps in designing and carrying out a survey: • Find out what is already known, and what relevant surveys are being done or planned elsewhere in order to avoid duplication, and define the scope of the survey • Talk to developer and relevant authorities to focus the questions • Determine the way the information will be obtained (see Questionnaires and Response Sheets) • Select your target audience. How will you sample them? How will you ensure that your survey gives a representation of the ideas of the group? • Pilot test the survey to ensure the readability and clarity of questions • Carry out the survey • Collate and analyse the results, prepare report • Make the report available to those surveyed, to appropriate authorities, and to the media
Advantages	• Provides traceable data • Surveys can serve an awareness raising purpose • When properly constructed, can reach a broad, representative public or targeted group • Can derive varied information from the results
Disadvantages	• Poorly constructed surveys produce poor results • Can be expensive if surveying a large audience • Care must be taken that wording of questions is unambiguous to prevent skewed results • Care is needed in sampling to make sure representative samples are taken • Surveys with tick boxes are the fastest and easiest to process, however, this limits the detail in the information collected

Examples of practical application or key sources of further information	COSLA. (1998). *Focusing on Citizens: A Guide to Approaches and Methods.* Available at: http://www.improvementservice.org.uk/component/option,com_docman/task,doc_download/Itemid,230/gid,122/ RCRA. (1996). *Public Participation Manual*. Ch 5: Public participation activities. http://www.epa.gov/epaoswer/hazwaste/permit/pubpart/chp_5.pdf US Department of Transportation (1996) *Public Involvement Techniques for Transportation Decision-Making* (13/12/02) http://www.fhwa.dot.gov/reports/pittd/surveys.htm

Technique	**Public Hearings**
Description	Public hearings are a formal way of presenting and exchanging information and views on a proposal. Formal public hearings generally tend to be best used in conjunction with more informal methods of engagement such as informal meetings and facilitation. http://www.iplan.nsw.gov.au/engagement/techniques/publichearing.jsp - top#top (temporarily available at http://203.147.162.100/pia/engagement/techniques/publichearing.htm) Important points to consider before organizing the event: • Clearly describe the purpose of the public meeting and the issue to be considered • Describe where in the spectrum the public hearing sits. Be particularly clear about the extent to which input provided could influence the outcome of the process. • Decide whether a public hearing is appropriate when you receive a request for one • Advertise the public hearing by public notice. • Send the notice to each person who requested a public hearing. • Carefully schedule presentations by interested parties and ensure presenters can speak for their allotted time without interruption. • Prepare a report/record of the public hearing and make it public.
Advantages	• During such events the public is allowed, by prior arrangement, to speak without rebuttal • Available evidence can be worked through systematically • Comments received can are recorded and made public • If run well, can provide a useful way of meeting other stakeholders. • Demonstrates that the responsible authority is open to all interested parties for consultations and information exchange.
Disadvantages	• It does not foster dialogue • An adversarial mood can be created • Public meetings can be intimidating and may be hijacked by interest groups or vocal individuals • Minority groups and those who do not like to speak in public are not easily included • Whilst appearing simple, can be one of the most complex and unpredictable methods • May result in no consultation only information provision

Examples of practical application or key sources of further information	[Examples will be provided when supplied by countries to the Espoo Convention secretariat]

Technique	**Workshops**
Description	A workshop is a structured forum where participants are invited to work together in a group (or groups) on an assessment of an issue or SEA step. The goals of a workshop are to bring participants together in a structured environment (that is, through large and small-group activities, discussions, and reflection) to resolve issues and build consensus on the assessment, rather than provide information and answer questions. Alternatively, workshops can be organised to target representatives from a particular stakeholder group, e.g. NGOs, or experts of one area. Workshops require a facilitator who is able to engage all participants in the discussion; therefore they are participatory tools that are best used with smaller numbers of participants. A variety of tools can be used within a workshop. These include many of the tools listed in this toolbox (see the CRC reference below), e.g.: focus groups and/or visioning. A report has to be prepared as on outcome of the workshop, recording opinions, suggestions or conclusions that have been collaboratively developed and agreed to by all participants, on an issue or proposal.
Advantages	• Excellent for discussion on criteria or analysis of alternatives • Fosters small group or one-on-one communication • Offers a choice of team members to answer difficult questions • Builds ownership and credibility for the outcomes • Maximizes feedback obtained from participants. Ability to draw on other team members to answer difficult questions • Maximized feedback obtained from participants • Fosters public ownership in solving the problem (see IAP2 reference below) • Can provide a more open exchange of ideas and facilitate mutual understanding. Useful for dealing with complex, technical issues and allowing more in-depth consideration. Can be targeted at particular stakeholder groups.
Disadvantages	• Hostile participants may resist what they may perceive as the 'divide and conquer' strategy of breaking into small groups • Facilitators need to know how they will use the public input before they begin the workshop • Several small group facilitators are usually needed. (IAP2) • To be most effective, only a small number of individuals can participate, therefore, full range of interests are not represented
Examples of practical application or key sources of further information	• Cooperative Research Centre for Coastal Zone, Estuary and Waterway Management (the Coastal CRC) http://www.coastal.crc.org.au/research_outputs/alpha-list.asp (Australia) • IAP2 – The International Association for Public Participation: http://www.iap2.org/

Technique	**Advisory Committee**
Description	Advisory committees generally comprise expert groups and governmental or non-governmental institutions with expertise in a specific field or interest in the draft plan or programme. In a consultation process, they can offer advice on appropriate changes to a plan or programme or recommend the introduction of specific measures. Although similar to task forces, advisory committees function as an ongoing structure while task forces tend to be formed on a short-term basis to focus specifically on the development of a particular proposal. Advisory committees are particularly useful for involving community representatives, especially people with required expertise, in complex, controversial or significant plan- or programme-making and assessment processes. Committees are not lobby groups – they have an important public function beyond individual members' own interests. Committees are more effective if their roles and tasks are clearly established before deciding on membership. Also establish selection criteria for membership. Time and resources must be committed to supporting the committee during the life of the project or the committee. The committee has to be informed of progress, the consultation results, developer and decision-maker conclusions; policy changes/emerging issues that will influence the committee's advice/role.
Advantages	• Advisory committees offer additional advice and guidance • They can help to reduce criticism from interest groups • They demonstrate a commitment to participatory engagement and suggest to the stakeholders that they will be able to influence decisions and outcomes within certain boundaries
Disadvantages	• Manage conflicts of interest that may occur during the life of the committee • May be time and resource consuming. Care needs to be taken to establish, manage and monitor their ongoing operation. • Where there are divergent views or where members have unequal status, knowledge or expertise, facilitation may be needed
Examples of practical application or key sources of further information	[Examples will be provided when supplied by countries to the Espoo Convention secretariat]

ANNEX B1.1: EXAMPLE OF A DETAILED CAPACITY ASSESSMENT FOR THE IMPLEMENTATION OF THE PROTOCOL USED IN SELECTED EECCA COUNTRIES[53]

[53] Taken from the terms of reference for national capacity needs assessments for the implementation of the Protocol in selected EECCA countries, implemented by UNDP and the REC under the workplan of the third meeting of the Parties to the Espoo Convention.

I. Identification of plans and programmes that will require SEA under the SEA Protocol

I.1. Are the terms 'plan' and 'programme' defined in national legislation? If so, please provide these definitions.

I.2. Please identify (with the assistance of the table below) those national and sub-national (e.g. region ('rayon') or province ('oblast')) plans and programmes in the country that will fall within the scope of the Protocol.

Sectors	List all strategic documents (irrespective of whether they are called plans, programmes, policies, strategies,….) in each given sector that are 'prepared or adopted by public authorities at all levels of government on a basis of legislative, regulatory or administrative provisions' *(simplified definition of plans and programmes adapted from art 2.5 of the SEA Protocol)*	Briefly describe their main features (e.g. number or plans during last 5 years and current and planned changes in the legislation)
Agriculture		
Forestry		
Fisheries		
Energy		
Industry		
Mining		
Transport		
Regional development		
Water management		
Telecommunications		
Tourism		
Town and country planning or land use		
Other national or sub-regional documents (e.g. Poverty Reduction Strategy Papers)		

II. Analysis of current environmental assessment provisions

II.1. Describe the current environmental assessment procedure for strategic decisions according to the existing provisions (under OVOS (EIA) or SER (state ecological review) systems) in the country and compare it with the existing practice:

- Screening mechanism and the extent of application during the past five years (or two to three years, if preferred): how many documents have been reviewed prior to being forwarded to the SER/SEA procedure and how many of them have undergone SER/SEA?

- Contents of the SEA report: legal requirements + how is the specific scope of the environmental assessment determined + possible methodological guidance or standards for preparation of SEA reports

- Review requirements: which types of authorities have the opportunity to comment on the environmental report, and are there any additional requirements for review through the SER system?

- Description of public participation provisions: description of legal requirements and references to any methodological guidance for public participation in SEA that has been produced in the country

- Mechanisms for taking account of the SEA report and of public comments in the plan- or programme-making process

II.2. Describe possible future changes in this legal framework (if any).

II.3. Analyze the main strengths and weaknesses of the current system and opportunities for its future development or improvement.

III. Analysis of the priority issues for the effective implementation of the Protocol

This analysis must reflect the opinion of the senior officials responsible for the practical implementation of the Protocol in each given country.

How to effectively:	Please mark as: 2 – top priority 1 – important 0 – not relevant	Which are the specific issues where assistance would be helpful?
Undertake SEA in plan and programme-making process in accordance with definition of SEA in art. 2.6 (e.g. how to link SEA to the decision-making process, etc.)		
Undertake SEA screening in accordance with art. 4 and 5 (e.g. how to combine mandatory and exclusions lists and when to apply case-by-case examinations, etc.)		
Organize SEA scoping in accordance with art. 6 (e.g. when to undertake scoping, how to select suitable methods for consultations with public and authorities, how to write terms of reference for SEA, etc.)		
Elaborate environmental baseline studies in SEA (in accordance with annex IV – items 2, 3 and 4)		
Use environmental objectives in SEA (in accordance with annex IV – item 5)		
Analyze the likely significant environmental, including health, effects (in accordance with annex IV – item 6)		
Compare alternatives of the plan or programme (in accordance with annex IV – item 8)		
Prepare post-SEA monitoring plans to meet requirement of art. 12 and annex IV – item 9		

How to effectively:	Please mark as: 2 – top priority 1 – important 0 – not relevant	Which are the specific issues where assistance would be helpful?
Analyze transboundary effects (in accordance with annex IV – item 10)		
Organize public review of the SEA report in accordance with art. 8 (e.g. how to identify the public concerned; how to inform the public and collect feedback, how to review public comments, etc.)		
Organize consultations with environmental and health authorities in accordance with art. 9 (e.g. how to identify relevant authorities, how to effectively consult them during SEA, etc.)		
Undertake transboundary consultations in accordance with art. 10 (e.g. when to notify, what level of document should be exchanged, how to organize effective transboundary consultations)		
Explain costs and benefits of SEA to decision-makers		
Apply SEA to policies and legislation in accordance with art. 13		
Draft laws or regulations to implement the Protocol		

IV. Key stakeholders in SEA reforms

IV. 1. Identify key institutions responsible for the SEA process (contact details and names of key officials).

IV. 2. Identify key stakeholders and networks promoting SEA/EIA reforms in the country (NGOs, EIA centres, professional newsletters and journals, etc.) and how these players cooperate in these reforms and how this cooperation may be strengthened.

V. Past, ongoing and planned initiatives to build SEA capacity in the country

V.1. Describe the key planned activities that the government wants to implement in order to ratify and implement the Protocol (pilot studies, new law, regulations, etc.).

V.2. Describe all past and ongoing donor assistance programmes in the field of SEA in the country.

V.3. What SEA/EIA courses (at universities, training programmes for public administration, etc.) exist or are planned in the country?

V.4. Describe any other NGO, consultancy or academic programmes.

VI. Recommendations for the most effective focus of the UNDP and REC project

Please determine and prioritize which types of interventions or activities may most effectively build capacity for implementation of the Protocol, including the development of SEA pilot projects in selected countries. When suggesting the focus of the project you may consider the following types of capacity development activities, among others:

- Pilot projects: supporting an SEA of a specific plan or programme (if this is a priority, indicate for which type of programming process this assistance would be provided)

- Assistance with legal reforms (drafting new laws or regulations to implement the Protocol)

- Development of national guidelines (specifying the SEA approach, the methods that can be applied, etc.)

- Development of training materials and training of trainers

- Promotional campaign (brochures, leaflets, website creation, etc.) to explain SEA to key policy- and decision-makers and administrators

ANNEX B1.2: EXAMPLE OF SIMPLE TERMS OF REFERENCE USED FOR NATIONAL CAPACITY-DEVELOPMENT STRATEGIES FOR IMPLEMENTATION OF THE PROTOCOL IN SELECTED EECCA COUNTRIES[54]

[54] Taken from the terms of reference for national strategies for implementation of the Protocol in selected EECCA countries developed under the workplan of the third meeting of the Parties to the Espoo Convention (for details, see Decision III/9 of the meeting) implemented by the UNDP, UNECE and the REC.

Introduction

This paper represents a framework for drafting of national strategies for implementation of the UNECE SEA Protocol in four selected countries in Eastern Europe, Caucasus and Central Asia (EECCA). These national strategies helped to map capacity-development needs of the target countries for the future implementation of the Protocol.

Process for elaboration of the strategy

Each strategy was developed through consultations with:

- National focal points for the Protocol in order to ensure that it becomes a national strategy
- Key environmental assessment practitioners and NGOs in the country
- Main international organisations that may support development of the SEA system in the country

Proposed structure of the strategy

I. Background

The background contained clear and concise information about:

- Planned timeline for the transposition of the Protocol into the national legal system.

- Explanation of the path the government would take for transposition of the Protocol, for example: extend and upgrade existing provisions for EIA so that they covered plans and programmes in line with the requirements of the Protocol; inclusion of new SEA requirements into the planning process; or a totally new assessment tool. The explanation briefly outlined why the path was chosen rather than the alternatives.

- Which legal documents would transpose the Protocol (e.g. a new law or decree, changes in existing laws or decrees, guidance documents, etc.).

II. Country needs assessment

Earlier national needs assessments were updated on the basis of detailed consultations with authorities and persons in charge of SEA Protocol implementation and with practitioners. Information presented in the country assessments was completed and was officially approved by the national focal points for the Protocol.

III. Medium-term strategy

The in-country team developed an overall long-term capacity-development strategy for SEA in the country based on detailed consultations with key stakeholders in environmental assessment reforms (authorities and persons in charge of Protocol implementation, key environmental assessment practitioners and NGOs). The strategy

addressed all types of capacities – system capacity, institutional capacity and human capacity, in accordance with the framework presented in an early draft of Chapter B1. The strategy looked five years ahead and suggested realistic targets for the development of each type of capacity, and realistic tools that could be used with national resources alone or with limited international assistance.

IV. Short-term priorities

Once the overall strategy was prepared, the three most important short-term actions until 2008 were identified. These priority actions were developed in the form of project outlines that clearly defined:

- Target groups, stakeholders and beneficiaries
- Proposed sequence of activities to carry out the action
- Linkages with other donor and capacity-development activities in the country
- Budget

V. Implementation arrangements

Implementation arrangements outlined:

- Responsible institution for oversight of implementation of the strategy
- Formal status of the strategy and its endorsement (e.g. by the ministry of environment or other relevant body such as a national council for sustainable development)
- Future working arrangements for securing resources for implementation on the national level (e.g. budget of the ministry of environment, fundraising with key donors)

The Protocol on Strategic Environmental Assessment (SEA) was adopted in Kiev (UKraine) on 21 May 2003. By the end of March 2007, there were six Parties to the Protocol.

The Protocol, once in force, will require its Parties to evaluate the environmental consequences of their official draft plans and programmes. SEA is undertaken much earlier in the decision-making process than project-level environmental impact assessment (EIA), and it is therefore seen as a key tool for sustainable development. The Protocol also provides for extensive public participation in government decision-making in numerous development sectors.

The Meeting of the Parties to the Convention on EIA in a Transboundary Context, which the Protocol supplements, decided to produce a capacity-development manual to support implementation of the Protocol. The Meeting of the Parties foresaw capacity development in SEA through preparation and dissemination of the manual.