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Nordic experiences of impact assessment of plans and programmes

– SEA workshop, 11-12 February 2002, Stockholm –

Workshop proceedings
edited by Tuija Hilding-Rydevik

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Nordregio - the Nordic Centre for Spatial Development
PO Box 1658
S-111 86 Stockholm, Sweden
Tel. +46 8 463 5400, fax: +46 8 463 54 01
e-mail: nordregio@nordregio.se
website: www.nordregio.se

Nordic co-operation
takes place among the countries of Denmark, Finland, Iceland, Norway and Sweden, as well as the autonomous territories of the Faroe Islands, Greenland and Åland.

The Nordic Council
is a forum for co-operation between the Nordic parliaments and governments. The Council consists of 87 parliamentarians from the Nordic countries. The Nordic Council takes policy initiatives and monitors Nordic co-operation. Founded in 1952.

The Nordic Council of Ministers
is a forum for co-operation between the Nordic governments. The Nordic Council of Ministers implements Nordic co-operation. The prime ministers have the overall responsibility. Its activities are co-ordinated by the Nordic ministers for co-operation, the Nordic Committee for co-operation and portfolio ministers. Founded in 1971.

Stockholm, Sweden
2003

Foreword

The Nordic countries have now had more than ten years of experience in research and development co-operation concerning Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA). The Nordic *Ad hoc* group of EIA, under the Nordic Council of Ministers, initiated and institutionalised this co-operation. Co-operation continues today across several arenas, for example through the Nordic EA Network, under the auspices of Nordregio. The Nordic EA Network mainly concentrates on co-operation in the context of R&D projects and connected seminars and conferences, and a home page is maintained and the electronic Nordic EA Newsletter is distributed.

The implementation of the new EU Directive 2001/42/EC, "On the assessment of the effects of certain plans and programmes on the environment" (SEA directive), adopted on the 31 May 2001, by the European Parliament, on 5 June 2001 by the Council, and in force from the 27 June 2001, is an important area of R&D where co-operation may provide an important stimulus to the national implementation work of the directive in the Nordic countries. The national implementation work may therefore obtain important insights into the peculiarities of national planning and SEA systems by consulting a number of different views, experiences and solutions from the other Nordic countries pertaining to the implementation of the directive.

A Nordic workshop designed to discuss the need for mutual Nordic R&D work in relation to the implementation of the new EU SEA directive was in this light held on the 11-12 of February 2002 at Nordregio in Stockholm. The participants were as follows:

Denmark: Henrik Hvidtfeldt, Research Centre for Forestry and Landscape,
Gert Johanssen, Environment Ministry.
Finland: Mikael Hildén, Pauliina Jalonen, Helena Valve, Finnish Environment Institute.
Iceland: Ásdis Hlókk-Sigurdadóttir, Icelandic Planning Agency.
Norway: Arne Tesli, Norwegian Institute for Urban and Regional Research – NIBR.
Sweden: Ebbe Adolfsson, Swedish Environmental Protection Agency, Lars Emmelin, Blekinge Technical University, Robert Johannesson, Swedish National Board for Housing, Building and Planning.
Nordregio: Hólmfrídur Bjarnadóttir, Tuija Hilding-Rydevik (workshop project leader).

The workshop programme consisted of the following:

- National presentations on the current SEA legislation.
- National experiences this far on implementing SEA and experiences from R&D projects.
- National proposals for R&D needs.
- Overview of R&D issues from an international point of view.
- Report from the EU working group on the guidelines for EU SEA directive implementation.
- Report from a project concerning EIA and quality.

- Discussions.

A number of the presentations made and discussions undertaken during the workshop are documented in this working report. The workshop activities will be followed by more in depth *national studies* and two more workshops during 2002/ beginning of 2003.

The Nordic Council of Ministers financed the workshop itself, the preparations for it, and subsequent work thereafter. The workshop activities are part of the Nordic action programme for 2001 – 2004, *Planning as an instrument for sustainable development in the Nordic countries,* which was accepted by the Nordic planning ministers in October 2001. The aim of the action programme is to highlight the role of spatial planning in promoting sustainable development. This programme is expected to complement the Nordic sustainability strategy and the Environmental Action Programme undertaken by the Nordic council of ministers in 2001.

Stockholm, February 2003

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Introduction

Tuija Hilding-Rydevik, Nordregio, Stockholm, Sweden

The need to implement Environmental Assessment for plans was already being discussed, in an international perspective, as early as the beginning of the 1980s[1]. Such notions were later expanded to encompass the additional areas of policies and programmes. The concept of EIA for PPPs (Plans, Programs, Policies) was thus "invented" and the term Strategic Environmental Assessment (SEA) was subsequently introduced with reference to impact assessment for so called strategic level planning and decision-making. The level of expectation surrounding SEA has over the last twenty years been developed and explored by researchers and officials in a large amount of books, scientific articles and official reports. The actual amount of practical experience garnered in this context is however not particularly extensive when compared to for example the Environmental Impact Assessment of projects. The expectation that SEA can adapt planning and programming in an environmentally sustainable direction are continuously being put forward. As such, SEA is in many instances expected to contribute to the implementation of planning practices that are in line with Sustainable Development.

Implementation of the EU directive 2001/42/EC: *On the assessment of the effects of certain plans and programmes on the environment* across the countries of the EU thus increases the need to turn existing SEA experience and theories into operational legislation and practice. The Stockholm SEA workshop in 2002 aimed at contributing to this process by promoting an exchange of experience and discussions on a Nordic level. The workshop will be followed by further Nordic studies and exchanges of experiences during 2002.

The Stockholm workshop is also a part of the Nordic action programme, *Planning as an instrument for Sustainable Development in the Nordic countries,* adopted by the Nordic Planning Ministers in October 2001. This action programme is a complement to the Nordic Sustainability Strategy,[2] which to some extent has recognized the actual and possible contributions of planning in relation to Sustainable Development. Spatial planning in general is expected, both nationally in the Nordic context and across the EU, to contribute to sustainable development. These expectations have to some degree at least now been transformed into day-to-day practice[3].

SEA in the Nordic countries

Since the end of the 1980s and indeed throughout the 1990s national research and development projects concerning SEA have been conducted in the Nordic countries[4]. All of the Nordic countries have, since the middle of the 1990s thus adopted some

[11] Hilding-Rydevik (1990)
[2] Nordiska Ministerrådet (2001)
[3] Asplund and Hilding-Rydevik (2001)
[4] Overviews of the Nordic countries in Hilding-Rydevik (1996), Elling (1996a,b), Hilding-Rydevik och Heydenreich (2000)

kind of legal set of SEA requirements[5]. The type of policies and plans concerned however varies between countries.

Three Nordic comparative projects aiming to describe SEA practice and to develop SEA have been conducted[6]. Additional projects with the aim of further developing SEA have also been financed through various Nordic funding bodies[7]. It therefore seems as if SEA is best developed in relation to municipal land use planning – except in Denmark where such development work has been conducted predominantly on the regional level. The municipal level is now however the major focus for development projects.

In relation to national sector plans the transport sector has been active in developing SEA as an integral part of Nordic co-operation[8]. Indeed with regard to such plans, Finland has carried out several development projects. SEA for policies – the national land use plan and the national budget proposals – has been implemented in Denmark for several years. There remains however little in terms of the actual implementation of SEA in relation to regional development planning (Regionale utveklingsplaner (RUP) in Norway, or in terms of Swedish regional growth agreements etc and EU structural funds). There seems therefore to be a pressing need to incorporate environmental issues and sustainable development concepts into the regional development agenda[9]. Moreover, clear variations between the Nordic countries as to what extent Sustainable Development has been integrated into structural funds regional development programming remain[10].

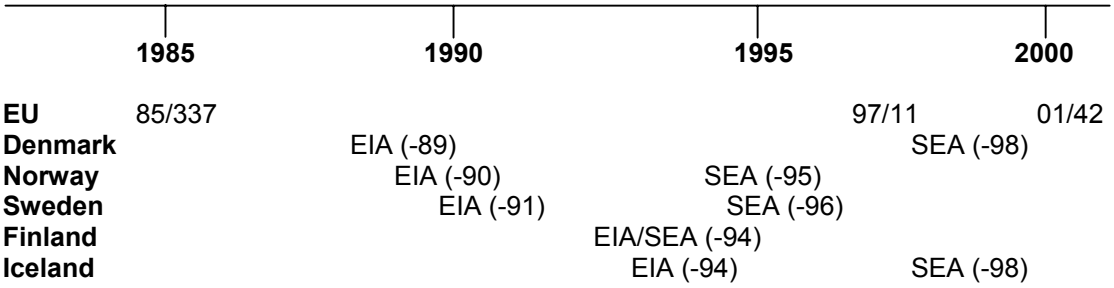

Figure 1. The date of adoption of EIA and SEA legislation in the Nordic countries (not revisions), and of EU Directives (number indicated in the figure) up to 1998. All of the Nordic countries had environmental protection laws before the introduction of EIA and SEA laws. These are not included here. It must also be noted that EIA demands in Sweden were included in the Swedish Road Act as early as 1987. The date referred to here concerns the adoption of the EIA paragraphs in the Natural Resources Act.[11]

The scope and impact of the EU SEA directive for Norway was investigated at quite an early stage[12]. Nordic meetings have been held to discuss the directive and exchange SEA experiences[13] in relation to the directive.

[5] Bjarnadóttir (2001)
[6] Bergsjø og Plathe (1996), Hildén m fl (1998), Nordiska Ministerrådet (1999)
[7] Carlman (1996), Fauchald och Greaker (1998)
[8] Nordisk Vegteknisk Forbund (1999)
[9] Hilding-Rydevik (2000)
[10] Aalbu m fl (1999)
[11] Figure revised from Hilding-Rydevik and Heydenreich (2000)
[12] Hanssen (1999)

SEA and the EU

The EU SEA directive (2001/42/EC) is to be incorporated into the national legislations of the EU member countries at the earliest by July 2004. All plans and programmes that are decided upon after July 2006 *must* however have SEA. As described in Ebbe Adolfsson's contribution, and EU Expert group will help the member countries to interpret the directive. The directive clearly reflects expectations that SEA will contribute to transparent planning practices through for example enhanced public participation. Sustainable development it is expected will then be promoted through SEA and the integration of environmental issues that goes with it.

Several case studies, research and development projects and research programmes[14] concerning both EIA and SEA have been conducted and financed by the EU Commission over the past ten years[15]. Moreover, new studies are continually emerging. Indeed a study concerning the role of SEA in integrating environmental issues was recently finalized[16] (even though integration was not defined) (see contribution by Tuija Hilding-Rydevik). Another study that was also recently finalized was, ANSEA – *An analytic strategic environmental assessment*[17]. The aim here was to focus on the development of the planning process and how the integration of environmental issues may be achieved by managing processes for plans, programmes and policies. Additionally, the development of Sustainability Assessment has been supported by EU DG Environment.

SEA beyond the EU

The international organisation IAIA (International Association for Impact Assessment) has been central in raising awareness of the issue of SEA since the beginning of the 1990s predominantly for example through the medium of yearly international conferences. IAIA has also supported studies in the field of SEA and there is also an Internet based discussion site on the IAIA web page where activity has been high. The IAIA currently for example supports a project on the *Integration of environmental, social and economic issues in spatial planning*[18]. The aim is to analyse experience from a number of countries all over the world in order to isolate the contributing factors concerning early considerations of environmental, social and economic issues. The aim is also to highlight factors that enhance the relationship between integrated spatial planning and impact assessment, especially SEA. In 1996 the IAIA also supported an international study aiming to describe the status of, challenges to, and the way ahead for SEA[19].

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[13] Ministry of Environment (1999), Nordiskt rundabordsseminarium – utmaningar, hinder och möjligheter för implementering av EUs SEA-direktiv. Köpenhamn, 15 maj 2000.
[14] EU Commission (1995) and (1997)
[15] See DG Environments hemsida för Environmental Assessment
http://www.europa.eu.int/comm/environment/eia
[16] Sheate et al (2001)
[17] ANSEA (2001)
[18] Eggenberger and Partidario (2000)
[19] Sadler and Verheem (1996)

Comments

This introduction has briefly described some of the previous and ongoing activities concerning SEA research and development. In spite of the large number of projects and debates conducted unanimity over SEA seems as distant as ever – though perhaps such unanimity should only be that of a very general level[20]. Since planning and programming processes are very much context dependent (national legislation culture, decision making culture etc) it follows that SEA implementation will have to follow the same pattern. The SEA Stockholm workshop has shown that clear differences exist between the planning systems of the Nordic countries, and it is clear that the contexts in which SEA will be implemented differ in many respects. The EU directive has, for EU member countries at least, given the proper framework and concepts to work with. Nevertheless, the actual content and role of SEA will not be seen until an established mode of "day to day" practice has evolved.

[20] See for example IAIA homepage www.iaia.org and Verheem 2000.

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The current international academic SEA discussion – important issues for research and development

Tuija Hilding-Rydevik, Nordregio, Stockholm, Sweden

The aim of this paper is to contribute to the workshop discussion through an examination of some of the recent results taken from research and development projects and articles in the field of Strategic Environmental Assessment (SEA). The aim is thus to obtain an overview of the SEA issues considered most important in the research and development focus of this general area. The following description concludes with a section of bullet points that seek to both analyse and summarize the issues raised in the main body of the text.

Integration or not, and what constitutes a successful SEA implementation?

The EU SEA directive (2001/42/EC) aims at the "integration of environmental considerations into the preparation and adoption of plans and programmes"[21]. The directive does however leave open the possibility of the SEA process to be run either parallel to, or integrated in the broader planning and programming processes. The question therefore remains, which solution is best, and best with regard to what outcome?

An EU project on the role of SEA in the integration of environmental issues was recently finalized[22]. While in their recent work Sheate *et al* make a useful classification of all of the integration strategies found in their 20 case studies from across a range of EU countries. This project identified the key models of processes, institutions and communication mechanisms used in order to achieve integration:

The Constitutional/Legislative Model:

- Specific legal provisions for environmental protection and integration in a country's constitution.
- "Consolidated" legislation (use of generic or framework cross-sectoral legislation.
- Legislation that imposes duties on public bodies.

The Process/Strategy Model:
(co-ordinated government led strategy for environmental integration)

- Greening Government.
- Sustainable Development Strategies.
- Local Agenda 21.
- Land Use Planning.

[21] 2002/42/EC
[22] Sheate et al (2001)

The *Ad hoc* institutional Model:
(may exist outside of a centrally co-ordinated strategy)

- Audit Committees/Independent Auditor.
- Environmental Protection Agencies and Authorities.
- National Commission/Councils on Sustainable Development.
- Round Tables.

Sheate *et al* point out that a mix of the above elements is used in their case studies. In their analysis of the case studies and of the literature in the field they found that the following "tools" were useful in the attempt to foster integration:

- SEA
- Strategic Environmental Analysis (SEAN)
- E-test
- Environmental Appraisal/Audit
- Sustainability Appraisal/Assessment
- Integrated Environmental Assessment
- Economic Tools/Instruments
- Green Accounting
- Environmental Management Systems
- Objectives, Targets and Indicators
- Environmental Monitoring and Reporting
- Public participation, Education and Awareness Raising
- Matrices/Appraisal Tables

One of the most important conclusions of the Sheate *et al* study is that it seems that process and/or institutional character is preferred above and beyond technical methods. The research team however argue that such process-oriented tools are more suitable to a political context because of the need for greater flexibility and also in respect of the need to ensure the easy flow of information. Process based methods are also considered likely to sustain better possibilities for public participation. In respect of the role of SEA with regard to integration however they concede that results continue to vary. It therefore seems that *ad hoc methods, rather than the more formal* methods associated with SEA, are more likely to be applied at the strategic decision levels.

Sheate *et al* have identified *four* discrete types of SEA in their studies.

- **EIA inspired SEA:** Originating from the ecological and/or resource management disciplines; includes a baseline assessment of preferred options or alternative locations. We find here a greater emphasis on technical methodologies and on the necessity to undergo a systematic assessment procedure. This form of SEA is generally used at the programme level and is often an incremental development from EIA.

- **Policy analysis/appraisal-inspired SEA:** Originating from political science. The likely impacts of a preferred option are appraised against objectives; there is no baseline survey, and often little or no direct public participation. This model is often seen within regional and spatial land use planning, and in sustainability appraisals.
- **Integratory SEA:** Focuses on an "objective led" process, and is a combination of the first two models. Impacts are appraised against a combination of an environmental baseline survey and objectives. The process begins early in the development of the policy, and investigates alternative means of achieving those objectives. Public participation is normally an important component of the process. This form of SEA is often found where there is a strong body of national environmental legislation and an active policy framework already exist.
- ***Ad hoc* mechanisms of environmental integration:** A collection of independent institutions and processes such as roundtables, audit committees and "state of the environment" reports. These tools often fulfil similar roles found within elements of an SEA. However, there is no systematic process providing discrete "hooks" into the developing policy.

In the final report the team also discuss the role played by SEA in integration, and what role it can, or should, play for example in future:

- Advocacy role[23] – raise the profile of environmental issues.
- Awareness raising – more actors become exposed to environmental consequences.
- Co-ordination and communication – enables more informed decisions regarding the trade-offs to be made.
- Guidance and training catalyst.
- Information – more informed decisions regarding trade-offs between economic, environmental and social factors, helps to set objectives, indicators and targets.
- Accountability – SEA creates and auditable trail which helps transparency and accountability.
- Catalyst for further mainstreaming initiatives.
- Education and social learning (compare awareness raising).
- Selection of the most sustainable option.
- Monitoring and quality control.

Kornøv and Thissen[24] state that the SEA dilemma is as follows:

> "SEA's dilemma is whether to stick to the original objectives, provide partial analysis and play an advocative role, or to aim at 'good' decision making by providing balanced over all assessments and 'outside' support to the learning and negotiation process of stakeholders and policy makers."

[23] taken from Kornøv and Thissen (2000)
[24] (2000)

Issues

This brief description of these project results highlights the R&D issues of:

- Integrating SEA, or not, into the planning and programming process.
- When is integration, and when is integration not, the most suitable solution, and in which contexts, which in turn is related to the issue of
- What is meant by "integration" in practice.
- What are we aiming at when introducing SEA (besides implementing the EU SEA directive)(when is SEA a success?). This issue in turn highlights the issue of
- What the shortcomings of the different planning and programming processes are in relation to the environment and to sustainable development, and in what instances is SEA a solution, or at least a partial solution?

"Process SEA"

On the 4th of February 2002 a conference was held in Milan, Italy in order to present the findings of the EU research project, *Towards an analytic strategic environmental assessment (ANSEA),* (more information can be found at www.taugroup.com/ansea). The main idea behind the project being to focus on the decision-making process and to assess that, as opposed to assessing the environmental impacts.

Partidário best summarises the rationale behind the project,[25] noting that a key objective of SEA is to change the way in which decisions are made by integrating environmental values into the PPP decision-making process. Therefore the ANSEA team noted that it was not enough to focus exclusively on environmental impacts in order to "ensure full integration of environmental values in the PPP decision-making process." What the ANSEA team presented was therefore an assessment "tool" that will enable assessment "centred on the quality /consistency of a decision-making process against a set of environmentally relevant procedural criteria" to be carried out. A list of comprehensive criteria has already been proposed, but the intention is now to define the procedural criteria for every specific decision making context.

This ANSEA assessment is supposed to be carried out:

- *Ex ante* (forward planning) – for guidance to all those involved in the PPP.
- *In itinere* (on-going assessment and feed-back).
- *Ex post* (assessment or audit) – the quality of the whole process can be evaluated.

By assessing the process, and by defining procedural criteria, the ANSEA team expects that processes can be conducted in order to secure proper consideration of environmental issues. The ANSEA approach is therefore expected to complement SEA.

The positive side of the ANSEA approach is that they succeed in re-focusing the SEA development discussion on the planning and decision-making process while also making some attempt to link the SEA discussion to planning theories.

[25] (1996)

Notwithstanding this however there remains a large number of awkward assumptions inherent in their work – for example that it is possible beforehand to obtain full information on how a decision-making process is going to be conducted, and the expectation that decision-making processes can be controlled. General impressions from the Milan conference nevertheless remain positive, and it is widely felt that credit must be given to the attempts made by the ANSEA team. In order for ANSEA to become something more solid however it is also generally acknowledged that they must be more theoretically astute, and that the integration of theory and practice must be better represented in order that the international research community can better test their approach.

Issues

The R&D issues highlighted by the above project results are for example:

- When developing SEA how much emphasis should be put on the actual assessment of environmental impacts in relation to that which is put on the "design" and control of processes? What is achieved by focussing on one or the other? So far there does not seem to be any evidence to suggest that good quality EIS's have a greater impact on decision-making processes than do EIS's of a lower quality.[26]
- Is SEA something more than the mere integration of environmental issues?
- To what extent can the "design" of different planning and programming processes have an impact on the acceptance of environmental issues as legitimate and important welfare issues?

Defining SEA and context dependence

As pointed out in the introduction, no unanimous approach to SEA as yet exists. The need to adapt any chosen approach to its particular context seems however to be generally[27] expected to increase its effectiveness[28]. Verheem[29] moreover proposes that agreement and "the unanimous approach" should encompass the goals of SEA. Brown and Therivel[30] moreover argue that agreement must be reached over the question of the utility of SEA. At present, little agreement exists beyond a small circle of Environmental Assessment practitioners. The utility issue is an important one considering the experiences of EIA where, seen from an international perspective, and after more than 30 years of experience, we still do not have sufficient "thick" descriptive data on the sought and expected outcomes pertaining to different EIA systems viewed from a broader societal point of view[31]. And after more than 30 years, Wood[32] states that "there has been, as yet, no reliable quantification of the effectiveness of EIA". We may not be able to quantify the effectiveness of SEA, but as Therivel notes, we need at least to explore the expected utility.

[26] Lee, Walsh & Reeder (1994).
[27] see for example Verheem (2000), Brown and Therivel (2000), Kornøv and Thissen (2000)
[28] Verheem (2000)
[29] (2000)
[30] (2000)
[31] Hilding-Rydevik (2002)
[32] (1999)

Issues

- What are the possible approaches available to those seeking a general description and definition of SEA? Why is this needed?
- We need to carefully analyse the contexts where SEA is going to be implemented – policy, plan, programme; decision culture; legislative culture etc.
- What achievements can be expected from SEA? When will SEA be a success – for example a national SEA-system and an SEA process – is this a meaningful avenue to explore?

Gaining insight from the theories and results produced by other disciplines

In implementing, developing and researching SEA one is in effect entering into the context of planning and decision-making. As regards empirical and/or theoretical approaches however, these arenas have long since been thoroughly explored by for example the planning and decision sciences, business economy and psychology. By using theories and insights from these disciplines SEA research and development need not therefore attempt to reinvent the wheel[33] but may instead gain knowledge that may be particularly useful for understanding the context of SEA implementation – planning and decision-making – in order to be able to "design" SEA approaches that are suitable for different situations. The application of for example planning and decision theories may also broaden the research field of SEA. In relation to SEA research and development the need to "connect" with the theories of other disciplines is something that has been explicitly raised by several researchers[34] during the later part of the 1990s. There are indeed several ready-made examples available of projects where such connections have been made[35] in relation to both EIA and SEA. There is however ample room for further studies in this area.

Issues

To "connect" SEA research and development to the empirical findings and existing theories of other relevant disciplines, and to further SEA as a research field in its own right.

Nordic studies on SEA

From an investigation of three Nordic SEA reports[36] the following issues have been identified as challenges:

- "Environmental assessments can be difficult because explicit and transparent planning and decision-making is counter to the administrative and political tradition which suggests that hiding information from potential

[33] Hilding-Rydevik (1996)
[34] Hilding-Rydevik (1996a,b), Kornøv and Thissen (2000), Lawrence (2000),
[35] for example ANSEA (2001), Emmelin (1998), Hilding-Rydevik (1990), Leknes (1999), Sager (2001) Swenssen (1997)
[36] TemaNord (1999), Hildén et al (1998), Nordisk Vegteknisk Forbund (1999)

opponents is a key to success"[37] – the demand for openness and transparency can therefore be a problem.

- Scepticism towards SEA.
- Involvement of the environmental sector is not desired.
- The relationship between the SEA results and decision-making – knowledge concerning the role of the document and the process, seems to be lacking – as is the relationship between SEA and the development of new alternatives.
- SEA work often starts too late.
- Environmental Assessment inevitably deals with conflicting interests.
- EA as a political process or a process with input from the public and experts.
- Public participation – how to conduct it and how to take care of the input.
- "The policy making process in the Nordic countries often progresses through a series of compromises. Under such circumstances explicit alternatives may sometimes be met with superstition, because they appear somewhat unrealistic attempts to predetermine the policy process"[38].
- How the impact assessment should be conducted in the face of uncertainty, lack of data and reference points, scarcity of indicators, difficult to deal with cumulative impacts.
- How to weigh "apples and pears" against each other in the assessment.
- How to use qualitative and quantitative data together.
- How to monitor decisions.
- Is tiering a myth or a possible reality?

It seems that the focus on processes more than the quantitative assessment of impacts was the approach used in all of the Nordic case studies. There also seems to be an agreement that SEA should be integrated into the planning process in a timely fashion, that is to say, as early as possible. The case studies seem to reveal that most attempts to implement SEA have been in the context of existing planning or programming processes.

Conclusions

Some of the general and overarching issues in the academic discussion concerning SEA have been described in this contribution. In addition to these however there are a clutch of more "SEA specific" issues related to such as screening, scoping, handling of alternatives, methods for impact prediction and assessment, public participation and monitoring, all of which have to be dealt with in an situation where the EU SEA directive is to be implemented. These issues are of course referred to in the

[37] Hildén et al (1998)
[38] Hildén et all (1998)

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Guidance for implementing directive 2001/42/EC: "On the assessment of certain plans and programmes on the environment" (the SEA directive)

Ebbe Adolfsson, Swedish Environmental Protection Agency, Stockholm, Sweden

Background

In June 2001 the European Parliament and the Council of the European Union adopted the Directive on the assessment of the effects of certain plans and programmes on the environment (2001/42/EC), the "SEA-directive". The Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with the Directive before 21 July 2004. The EU's EIA/SEA Experts group will prepare a guide to assist Member States in implementing the Directive. A drafting group under this group is working on the preparations.

Purpose of guidance

Guidance is intended to assist Member States not only in transposing the Directive into national law, but also in setting up systems to meet its substantive requirements. Its aim, therefore, is to identify problems with the text of the Directive, analyse them, and offer solutions based on legal interpretation and practical experience.

These solutions cannot be definitive but may take the form of, for example, illustrations of what has been found (or thought) to be good or effective practice particularly in Member States. Legal interpretation will be very important in deciding what may be satisfactory, and such guidance will take full account of the jurisprudence of the European Court of Justice (ECJ). It should be emphasised that the guidance will be entirely consistent with the Directive. This is not an exercise in renegotiating the text.

Participants

It is agreed that this guidance should be prepared by a drafting group comprised of volunteers from a small number of Member States and the Commission, and that the group should be kept small to simplify the task of elaborating the guidance suggested. All Member States and the Accession countries are able to comment on the material, as it takes shape. When the draft is sufficiently developed, wider public participation will be necessary.

The drafting group consists of representatives of the Commission and of the following Member States: Austria, Finland, Germany, Netherlands, Sweden, and the UK. The group is jointly led by Finland and the UK.

Topics

The guidance provided will cover the following topics (the lead author of each topic is shown in brackets):

- Scope (Fin & UK)
- Screening and significance criteria (A)
- Environmental report & alternatives (Sw)
- Quality control (NL)
- Monitoring (including liaison with parallel IMPEL project) (D)
- Relation to other parts of EC legislation, tiering, avoiding duplication (D)
- Consultation (NL)
- Management and organisation of the SEA process (A)

There is a certain overlap between some of these subjects, but such issues as do exist in this regard are currently in the process of being resolved by co-operation between the respective authors and by discussion in the drafting group.

Progress

The drafting group had its first meeting in early November 2001. Initial drafts of each paper were discussed, and revised versions are enclosed with this paper. The aims of the drafts are to:

- Identify the aspects of the topic that are problematic.
- Explain why the problems arise (inherent in the Directive (e.g. lack of clarity), conflict with domestic law, practical problems etc).
- Analyse why they are problematic.
- Sketch out the kinds of solution which appear appropriate.

The next meeting will be held in the middle of March, after some more meetings (a workshop included, in the autumn) throughout the year the ultimate ambition is to conclude the guidance drafting period before 2003.

Which plans and programmes could be covered by the Directive on the assessment of the effects of certain plans and programmes on the environment, the "SEA Directive", in Finland?

– Some initial remarks

Mikael Hildén, Finnish Environment Institute, Helsinki, Finland
Helena Valve, Finnish Environment Institute, Helsinki, Finland

In implementing the SEA directive (2001/42/EC), and particularly in specifying its scope, a key issue is the manner in which the directive is linked to existing legislation. Currently the Finnish EIA Act requires that the environmental impact of all such public policies, plans and programmes which, when implemented, are likely to cause significant environmental effects, should be assessed. The practical implementation of this broad requirement has, however, caused some problems, which remain unresolved. Most crucially, only in some policy sectors have assessments become a self-evident component of policy preparation. Examples of "advanced" authorities can be found in the transport and waste management sectors, while e.g. energy authorities seem to be in the middle of a learning process, while agricultural and rural authorities continue to lag behind.

In general, Finland can now proceed in two different directions: It can either decide that all the requirements of the SEA directive apply to the same broad range of policies, plans and programmes as the present section 24 of the EIA Act, or, it can restrict the requirements of the directive to a subset of those presently covered. The latter could mean that, for example, national legislation will include separate sections that limit the scope of the procedural requirements of the directive only to those plans and programmes that correspond exactly to the definition and scope of the directive. Even this solution would, however, require one to solve the conundrum of how "setting the framework for development consent" should be interpreted.

In order to obtain a better idea of what kind of plans and programmes correspond to the definition of the directive related to "legislative, regulatory or administrative provisions" and which are likely to have significant environmental effects, the Finnish Environment Institute has reviewed the existing, formal planning requirements. The task revealed that there remain a number of systematic problems in the identification of the "official" plans and programmes that will thus require further attention.

One of the key issues here is the definition of authority. The seemingly unambiguous definition (Art. 2):

> "– which are subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and

– which are required by legislative, regulatory or administrative provisions"

becomes however even more ambiguous in a world of increased privatisation and the transfer of broader and more general tasks to private or semi-public actors. For example, do public utility firms and state enterprises count as "authorities" when the plans and programmes they produce are presented at some point to the authorities and/or when there is a general planning obligation? In addition to such common difficulties some sector-specific ambiguities also exist.

The following requirements for planning and programming were divided into groups as follows:

1) Plans and programmes drafted by municipalities, e.g.
   - Various land-use plans (these should be assessed in any case on the basis of the Building and Planning Act).
   - Municipal budgets and economic plans.
   - Municipal plans for oil destruction.

2) Rural development
   - Include EU-funded programs and national action plans.

3) Agriculture, Forestry and Fisheries
   - Include a set of plans and programs drafted by *private* institutions, but which nevertheless share many of the characteristics of plans drafted by public authorities. The institutions responsible for drafting tend to have statutory duties and the plans and programmes may be given to authorities for ratification. Moreover, the drafted plans and programmes may allocate or direct public funding, e.g. for measures supporting forestry.

4) Transport
   - Road planning.
   - Prevention of marine hazards; plans for co-operation.
   - Planning carried out by municipalities, but financed by the state: planning of transport systems in urban areas. However, the choice of making these plans is voluntary.

5) Environment, Health and Nature Protection
   - Waste management programs (national, regional).
   - Nature protection programs.
   - Plans for the management of nature protection sites.
   - Future plans according to the water framework directive.
   - A set of plans and programs that a private party has to draft in order to get a permit or licence to act. These plans and programmes are approved by authorities separately, or simultaneously, when they allow the activity to take place. Such a request concerns, for example, procession and delivery of

natural gas, and the drafting of snowmobile trails. Often, however, the scale of the activity equals that of an individual project.

6) Planning subsidies for private businesses

- Again the agent is private, though the request is public.

7) The general planning obligations given to authorities without reference to particular plans and programmes.

- For example, the road administration has to take care of the planning and programming of road and traffic conditions.
- Acts of specific institutions such as on Helsinki Metropolitan Area Council.

In December 2001 the Ministry of the Environment appointed a working group consisting of representatives from key ministries to develop the legislative solutions for the implementation of the directive. This working group subsequently met twice before the end of January 2002, and it has now begun to scan important issues. The following have been identified thus far:

The basic legislative solutions: Should nearly all provisions concerning the assessment of plans and programmes be collected in one act, or should the requirements mainly be scattered throughout the substance legislation?

What are the important planning and programming activities that may have significant environmental effects, whether or not they are specifically ”required by legislative, regulatory or administrative provisions”?

How should one take into account the detailed aspects of assessment requirements according to other acts, in particular the Nature Conservation Act (1096/1996), the Water Framework Directive (327/2000/EC), the Land Use and Building Act (132/1999) and the Environmental Protection Act (86/2000).

How should the issue of monitoring be dealt with? Nowadays some form of monitoring is included due to the cyclical nature of most plans and programmes, but to what extent do these requirements and practices meet those of the directive: “Member States shall monitor the significant environmental effects of the implementation of plans and programmes in order*, inter alia*, to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action.” (Article 10)

What are the links to the assessment of government bills? The directive could in some cases be claimed to apply directly to bills as the definition of plans and programmes also includes those that are adopted “through a legislative procedure by Parliament or Government”. However, even if one would exclude bills as such from the scope of the directive, it is obvious that there are close links. A case in point being the national climate strategy that will lead to new legislation building upon the plan and whose justifications arise partly from the assessments that were carried out for the plan.

The working group aims to present preliminary alternative solutions in order to meet the requirements of the directive in late spring or early autumn of 2002. The alternatives will be accompanied by a preliminary analysis of the environmental, as well as the other effects of the proposals, in order to pave the way for a discussion on the possible alternatives among a broad group of stakeholders.

The Norwegian Experience of Environmental Assessment for Plans and Programmes – Identification of R&D Needs Relative to the Objective of Sustainable Development

Arne Tesli, Norwegian Institute for Urban and Regional Research (NIBR), Oslo, Norway

Legal requirements for SEA at the national, regional and municipal level

Norwegian planning legislation is currently going through a process of revision, with a Government Commission being appointed to review the current planning legislation and present a recommendation for new legislation. The Commission's work will be finalised by the end of 2002. The Commission has however already presented a Commission Report from the first phase of its work, and it is clear that the commission will suggest a significant strengthening of the provisions for SEA in the new legislation.

In the existing planning legislation the requirements for SEA are primarily to be found in the Planning and Building Act (PBA).

Hanssen (1999) has shown which plans are covered by the current Norwegian legislation.

> "The directive lists sectors in which plans and programmes will be affected. These are sectors such as transport (including transport corridors, port facilities and airports), energy, waste management, water resource management, industry (including the extraction of mineral resources), telecommunications and tourism. Our study has looked at the planning regulations and practices of these sectors, adding agriculture and sea farming.
>
> We have seen that planning rarely leads to any formal planning decision by the sector authorities. The reason for this is to be found in the Planning and Building Act. According to this Act, all planning decisions within the public domain and within the geographical boundaries of a municipality or county are to be made by the political bodies of these entities. The sector authorities, in the event of such decision-making at the local and regional level, are therefore obliged to formulate their plans into planning processes according to the Planning and Building Act. For this reason, planning by the sector authorities at this level becomes a more or less structured input into the planning process according to the Planning and Building Act. This gives us a relatively clear-cut picture when it comes to planning at the local and regional level. We have therefore concluded that the requirements of the proposed directive should be made to apply to the planning processes according to the Act, at the local and regional level.
>
> There is also planning at the national level, and the situation here is the same. We see that the directive rarely covers planning decisions taken by the sector authorities. Planning in the sense of Article 2 takes place partly according to the Planning and Building Act and in part also according to the political will of the Storting. With very

> few exceptions planning decisions are made by the ministry, the cabinet or the Storting." (Hanssen 1999)

Some of these decisions deal with state involvement in the planning processes at the local or regional level, in part directly, or through the preparation of national policy provisions for planning. Only two such plans seem to be covered by the directive. As such it is of greater interest to look at the white papers and sector plans that are prepared by the ministries and presented to Parliament. These white papers and plans include major development processes, for instance in the transportation sector. However, they are not adopted by an act of legislation, and it is not clear whether such plans are in fact covered by the directive or not.

> "When it comes to plans that are adopted by sector authorities we find only two that are covered by the directive. These are the "airport plan" and "the appointing of port facilities with a National status". (Hanssen 1999)

We have also considered plans that are adopted by Parliament, and we have found only three that are covered by the directive. These are to be found within the transport and hydroelectric power sectors.

> "With regard to the various planning types referred to in the Planning and Building Act we have sought to single out those that will always be covered and those that will only be covered when serving the purposes specified in Article 2. We have concluded that there is only one planning type that always serves these purposes. This is the land-use part of the municipal master plan. With regard to the other types, the purposes they serve must be ascertained separately on each particular occasion." (Hanssen 1999)

In the new planning legislation that is expected to emerge from the Government Commission, environmental assessment will probably become an integrated part of ordinary planning procedures. The main argument for this is that in this way we will see a strengthening of the planning process in general, and a better basis upon which to make planning decisions. By letting the environmental assessment be linked to the plans – including physical planning and land-use plans – it is possible to have a more overarching and holistic assessment of the effects of different uses of land and resources than when the assessment is only linked to a single project. This is the main objective in having the environmental assessment tied to plans and programmes.

By merging what today are two separate processes (EIA and planning), the intention is to achieve simplification. The actors will not need to relate to two separate processes with different competent authorities. Instead the present-day separate environmental assessment will be incorporated as an integrated part of the ordinary planning work.

Preliminary assessment of plans and programmes that are likely to meet the criteria of the EU Directive

Hanssen's useful contribution to the literature made an assessment of the plans and programmes that are likely to be covered by the EU directive (Hanssen 1999). In Norway planning is conducted at the local, regional and national level. The form that such planning takes however varies a great deal. The different sectors have each handled their planning tasks in various ways, there is however one clear tendency: Planning within sectors clearly functions as an input to, or is an integrated part of,

planning according to the Planning and Building Act. We consider this planning to be covered by the EU directive when the linkage to the PBA is intended.

In Norway the Planning and Building Act must be considered to be the key legislative measure for the implementation of environmental assessments for the plans and programmes covered by the EU directive. The PBA is supposed to be used in conjunction with all physical planning tasks, and sector planning is, to a large extent, formalised through the link-up with the PBA.

In the case of Norway, the focus is therefore oriented towards the plans covered by the PBA. We consider the physical planning and the land use planning at the municipal level to be covered by the directive. The same is also the case for the development-oriented parts of the county plans. For other plans, it will depend upon to what extent they are development oriented, physical plans, as to whether they will be covered by the directive or not (Hanssen 1999).

According to Hanssen, only three of the white papers and proposals presented to Parliament are covered. The question is thus whether this kind of white paper and proposals for Parliament are supposed to fall beyond the scope of the types of plans and programmes supposedly covered by the directive.

Hanssen has also presented a summary of his discussion of the plans covered by the directive in tabular form (Hanssen 1999). An English version of this table is presented in Table 1 below.

Table 1. Norwegian plans covered by the EU directive

Sector and type of plan	**Covered by the Directive**	**Assessment criteria**			
		1	2	3	4
National Transport Plan *	Yes	Yes	Yes	Yes	Yes
Road-plan *	Not sure	Yes	Yes	Yes	NS
Railway-plan	Yes	Yes	Yes	Yes	Yes
National harbours and ports	Yes	Yes	Yes	Yes	Yes
Regional harbours	Not sure	Yes	NS	Yes	Yes
Plan for harbours and ports	PBA				
Plan for Air Traffic*	No	No	Yes	Yes	Yes
Plan for Airports	Yes	NS	Yes	Yes	Yes
Energy – Not Hydro-electric power	PBA				
Energy-supply planning	No	Yes	Yes	No	Yes
Waste management plans (Pollution Control Act)	PBA				
Hydro-electric development plans	Yes	Yes	Yes	Yes	Yes
Water resource management	PBA				
Industry	PBA				
Mineral resources	PBA				
Telecommunication	PBA				
Tourism	PBA				
Agriculture – except:	PBA				
- Reindeer husbandry	No	Yes	Yes	No	No
Aqua- Culture, Fish-farming	PBA#				
Petroleum exploration	No¤	Yes	Yes	Yes	Yes

Planning and Building Act					
- National guidelines (and regulations)	DPC	DPC			
- County plans	DPC	DPC			
- Municipal plans	DPC	DPC			
- The Municipal Land-use plan	DPC				
- Regulation plans	DPC	DPC			
- Building development plans	DPC				

DPC: Depending upon the contents of the plan.
* : Plans that are presented as white papers for the Parliament.
PBA: No separate type of plan. The planning function as input to, or as an integrated part of, the planning according to the PBA.
: Permission can be granted without the preparation of a plan according to the PBA.
¤: The conclusion of "No" is based on the assumption that the directive does not extend cover to the area at sea.

An overview of recent research and development projects dealing with SEA

Over the last few years, Norwegian researchers have been involved in several Nordic research projects focusing on the application of SEA. These have been summarized elsewhere, and a good overview is provided in Hilding Rydevik (2001).

Research project: Strategic thinking in Norwegian Environmental Assessments?

Research questions:

- Study the extent of strategic assessments in existing EIAs and planning practice in Norway.
- To what extent are strategic assessments being carried out in present-day EIA practice?
- To what extent is it reasonable to argue that this kind of strategic assessment should be carried out in Norwegian planning and policy formulation?

The extent of strategic environmental assessment in different sectors

We assume that the extent and content of strategic assessment varies across the different sectors, partly because the sectors are different; they have different planning traditions; and are subject to different planning experiences.

The hydroelectric power sector has clarified which projects have been given priority with regard to whether or not development will be carried out. The projects are considered relative to what has been clarified for development-consent in the strategic considerations made in the *Joint plan* (Samla plan). Beyond the assessments made in this plan, we expect relatively limited strategic thinking in the handling of the EIA-cases in this sector.

Proposals within the sector dealing with *quarries and mineral resources* are not handled within the framework of an overall general plan for the utilisation of mineral resources. Does this mean that the EIA process for quarries contains a larger element of strategic thinking than for instance projects in the hydroelectric sector?

The *railways* have adopted a two-phase approach to EIA, and it is natural to expect a larger element of strategic thinking in phase one than in phase two.

Individual projects in the *road sector* can be expected to have a relatively limited strategic element, while the more overarching type of planning undertaken in the transportation sector is expected to contain more of strategic thinking.

Identification of strategic elements
We want to identify and study what can be considered to be the *most crucial decisions* linked to a plan – this can be looked upon as an expression of the central strategy of the plan. We want to study these decisions, and in particular: To see whether they incorporate and take sufficiently into consideration some crucial environmental objectives. That is, whether environmental considerations function as a primary objective and principle for the decisions that are made.

Furthermore:

- Is there a unified/unitary and overarching handling of the cases that it is natural to discuss together within the given context?
- Has there been a mapping and assessment of the resources that are used, and resources that are/can be effected by the plan?
- Was a value-assessment and a prioritisation of how the resources should be utilised undertaken?

Norwegian experiences of SEA for plans and programmes

The ministry of environment has in cooperation with municipalities and other institutions, initiated a series of projects with a view to gaining experience with SEA for plans and programmes. Some of the municipalities that have taken part in such projects are: Oslo, Tinn, Ullensaker, and Skånland.

Some of the experiences of the project in the municipality of Oslo were as follows (Vihovde 2001):

- In order to achieve better progress in the handling of submitted plan-proposals, there is a definite need for better integration and co-ordination of the EIA and municipal planning.
- Scepticism remains, particularly among politicians, over calling the Assessment programme or the study programme for the plan, a "Planning-programme" (Planprogram). This is because the politicians are unsure to what extent a planning-programme will deprive them of room for manoeuvre, essentially creating inflexibility in the subsequent political handling of the case, a time where in fact the real discussions and decisions regarding the individual case are made. As it is today, the "planning-programme" is not a clearly defined product. Instead, the politicians prefer to use terms similar to these in connection with the determination of the assessment programme: "Recommendations of framework and conditions for development of ….(name of the area for the plan)".
- An early clarification of the framework, terms and conditions of the planning proposal can give the authorities a better ability to guide and control the subsequent process, and shift thus to the focus of the plan from a

perspective relating to "what the surroundings can take/accept" to one of "what the surroundings need".

The county plan is currently the most important tool of regional planning in Norway. The Government Commission however has noted that these county plans are still too weak to meet the needs of modern society. The Commission takes the view that it is necessary to strengthen the county plans in several ways:

- It is necessary to tie several measures and instruments to the county plans.
- The plan must commit or bind the state in a stronger fashion than it does today.
- The sectoral agencies and authorities must use the county plans as their planning instrument, and their economic means and decision-making should be more closely tied to the approved county plans.
- The county plans should be given a more central position with regard to questions related to the clarification of land-use planning and development patterns beyond the municipal borders.
- The land-use part of the county plans should be strengthened, and should commit the planning authorities to a greater extent than is currently the case.

Current needs for research on the application of SEA in Norway

There is a need to carry out more research and development work on how SEA can be carried out and implemented in practice in various sectors, and at different levels; national, regional and local – as well as cross-nationally.

It is of particular interest to look more deeply into the experience of applying SEA at the regional level, for county-plans.

What role can SEA and EIA play relative to the objective of sustainable development?

*Screening***:** What kind of criteria can be used to determine the kind of plans and programmes for which SEA should be required?

Scoping: How can the scoping for SEA for different plans be determined? What kind of methods should be applied in the SEA process; how "deep" should the analysis be; what kind of documentation is necessary, etc.

Public-participation: What should the relationship be between public participation and the ordinary handling of SEA-cases through the usual political channels?

Tiering: How can good tiering between SEA and project-oriented EIA be achieved? Can we observe more efficient EIA-cases as a result of SEAs?

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National contribution – Iceland

Ásdís Hlökk Theodórsdóttir, Planning Agency, Reykjavik, Iceland

In this paper the situation regarding legislation and the practice of strategic environmental assessment (SEA) in Iceland is described. A number of key research and development issues are also identified, which are considered to be in need special attention with regard to the implementation of SEA in Iceland.

Legal requirements for SEA at the national, regional and/or municipal level

The only legal requirements for the environmental assessment of policies, plans or programmes in Iceland are to be found in the Planning and Building Act no. 73/1997, which came into force in January 1998. According to art. 9, paragraph 5, development plans shall account for the impacts of the plan, its objectives and proposed development on the environment, natural resources and the community, including e.g. comparison of possible alternatives. This is taken a step further in the Planning regulations no. 400/1998, which came into force in July 1998. According to art. 3.3 regional and municipal plans shall account for impacts of the plan, its objectives and proposed development on the environment, natural resources and the community, including e.g. a comparison of possible alternatives. Planning alternatives shall be described, e.g. regarding location, land use, density, layout or individual developments and then compared with respect to environmental impacts. Also an attempt shall be made to use environmental assessment to ensure the better consideration of environmental concerns, and to further the aims of the planning regulations (which are amongst other things designed to encourage the rational and efficient utilization of land and natural resources, to ensure the preservation of natural and cultural values, and to prevent environmental damage and over-exploitation, based on the principles of sustainable development).

Preliminary assessment of which plans and programmes are likely to meet the criteria set out in article 3(2) of Directive 2001/42/EC

A preliminary assessment of which plans and programmes are likely to meet the criteria set out in article 3(2) of Directive 2001 performed in early 2002 gives the following results (here listed under the sectors identified in article 3(2) of the Directive). See table below. A detailed survey is to be conducted in the summer of 2002, where all ministries and institutions concerned will be consulted in order for an exhaustive list of the plans and programmes in question to be produced.

Agriculture:	Soil protection programme (Icel.: Landgræðsluáætlun). A 12-year programme listing and prioritising projects. Prepared by the Soil Protection Agency. Adopted as a parliamentary resolution by the Icelandic Parliament. Basis: Legislative (currently a governmental bill).
Forestry:	Regional afforestation plans (Icel.: Landshlutaáætlanir/ landshlutaverkefni um skógrækt). Plans spanning over four 10-year periods with the general aim of afforestation on at least 5% of the region's lowland. The plans set the framework for grants to individual afforestation projects in the respective region. Prepared and adopted by the respective board for each regional afforestation project appointed by the Minister for Agriculture. Basis: Legislative.
Fisheries:	None according to preliminary assessment.
Energy:	1) Acts for hydroelectric and/or geothermal power plants, where the Act itself constitutes e.g. a programme of hydroelectric and/or geothermal power plants, listing names, location and output energy of power plants which the Minister for Industry or the Icelandic Government may grant licences for. Prepared by the Ministry for Industry, adopted by the Icelandic Parliament. Basis: Legislative. 2) A framework programme on the utilization of hydro and geothermal energy resources (Icel.: Rammaáætlun um nýtingu vatnsafls og jarðvarma), ranking individual power plant alternatives with regard to power output, economic feasibility, macro and regional economic impact, impacts on natural and cultural assets and impacts on land use. Prepared by an *ad-hoc* steering committee established by the Minister for Industry, in co-operation with the Minister for the Environment. Adoption: To be decided. Basis: Administrative provisions (governmental decision).
Industry:	None according to preliminary assessment.
Transport:	1) Road programme (Icel.: Langtímaáætlun í vegagerð & Vegáætlun). A 12 year programme and a more detailed 4 year programme, listing road projects (name, location and cost). Prepared by the Public Road Administration, adopted by the Icelandic Parliament as parliamentary resolution. Basis: Legislative. 2) Programmes for harbours and coastal defence projects (Icel.: Hafnaáætlun & sjóvarnaáætlun). Four year programmes listing harbour projects and coastal defence projects (name, location and cost). Prepared by The Maritime Administration, adopted by the Icelandic Parliament as parliamentary resolution. Basis: Legislative. 3) Airport programme (Icel.: Flugmálaáætlun). A 4 year programme listing airport projects (name, location, description and cost). Prepared by the Civil Aviation Administration, adopted by the Icelandic Parliament as parliamentary resolution. Basis: Legislative. 4) Integrated transportation programme (Icel.: Samgönguáætlun). Planned to take the place of independent programmes for road, airport and harbour and coastal defence projects described above. Prepared by the Ministry for Transport in co-operation with the Public Road Administration, the Civil Aviation Administration and the Maritime Administration. Adopted by the Icelandic Parliament as parliamentary resolution. Basis: Legislative (currently a governmental bill).
Waste man.:	None according to preliminary assessment.
Water man.:	None according to preliminary assessment.
Telecomm.:	None according to preliminary assessment.
Tourism:	None according to preliminary assessment.
Town and country planning / land use:	1) Plans made according to the Planning and Building Act, i.e. regional plans, municipal plans, local plans and special regional plans (Icel.: Svæðisskipulag, aðalskipulag, deiliskipulag & sérstakt svæðisskipulag). Prepared by municipalities (municipal and local plans), regional planning committees (regional plans) and agencies responsible for the sectoral plan/programme in question (special regional plans). Adopted by municipalities (local plans), municipalities and the Minister for the Environment (municipal plans and regional plans) or Minister for the Environment only (regional plan for the central highlands and special regional plans). 2) National planning instruments (strategies prepared by the Ministry for the Environment (basis: administrative provisions). Parliamentary resolution on regional development prepared by the Ministry for Industry and the Regional Development Institute and adopted by the Parliament (basis: legislative).)
Art. 6 or 7 of Directive 92/43/EEC:	NA in EEA.

Overview of recent research and development projects dealing with SEA

Iceland has participated in two Nordic research and development projects on the environmental assessment of policies, plans and programmes. First in the research project "EIA and its application for policies, plans and programmes in Sweden, Finland, Iceland and Norway", conducted during the period 1996-1997 (Hilden et al 1998) and later in the project "Nordisk prosjekt om strategiske miljøvurderinger for planer og programmer" conducted in 1997-1998 (Lerstang 1999). The Icelandic contribution in the former project dealt with the potential for SEA application in comprehensive land use planning and sectoral planning. The latter described the approach of two regional plans in Iceland (Eyjafjordur and Heradssvaedi), which at the time were in the early stage of their planning processes, to environmental assessment. The approach to SEA presented in the study was applied in the National Planning Agency's guidelines for the two regional plans. In the final remarks of the previous study the potential benefits of applying SEA to land use planning in Iceland and the problems relating to the application of SEA were identified as:

> "At this time, the potential benefits of applying SEA may be:
> – A request for policies and plans being made (since currently policy and plan making seems to be lacking in certain fields).
> – A request for clear and consistent presentations of existing policies and plans.
> – To ensure environmental considerations in policy- and plan making.
> – An improvement of the coordination between sector plans and the consistency between land use plans at different levels.
> – An added aid to the reformation of the planning process."

There will be some problems related to the application of SEA to land use planning. Some notable weaknesses include:

> – "The fact that SEA is still evolving means that it encompasses many approaches (see e.g. Thérivel and Partidário, 1996). Chances are then that basic mistakes are still being reproduced.
> – The traditions in Icelandic public policy making (essentially the lack of a tradition for clear and open policy making).
> – The lack of academic discussions, literature etc. on the political aspect of planning in the Icelandic language, may make research and development of SEA complicated.
> – The lack of baseline data on the environment.
> – Increased paperwork and the increased cost of public administration."
> (Jonsdottir 1998, p. 101)

Other activities regarding development of SEA in Iceland have primarily revolved around the development of guidelines and education/training, and primarily focused on environmental assessment of land use plans at the municipal level. The following provides a brief description of the main contributions:

The National Planning Agency has organised courses at the University of Iceland Institute for Continuing Education on municipal planning and environmental assessment of land use plans in 1998, 1999 and 2001. The courses have been directed towards local authority planners, planning consultants and local authority planning committee members.

The National Planning Agency has been developing guidelines on the environmental assessment of municipal plans. Work on the guidelines is ongoing. The guidelines, in preliminary draft form, have been available to municipalities and planning consultants and are available on the Planning Agency's website. It is hoped that the final version will be published in 2002.

The Public Road Administration has developed draft guidelines on how to carry out the environmental assessment of the 12-year road programme. It is expected that the main emphasis of the SEA of the long term road programme will be on "synergistic effects" and that, in accordance with the programme's aims, the emphasis will be on macro economic impacts, as well as on the impacts on the natural environment (Arason 2002).

Practical application of SEA of plans and programmes

In order to give an overview of the practical application of SEA in Iceland, and to be able to draw conclusions about the practical application of SEA, the projects known to the current author are listed below and described with reference to the requirements of the EU SEA Directive in order to give a common basis of requirements for strategic environmental assessment.

Plan/ programme	**Type of plan/ programme and environm. assessm.**	**Time of planning process/EA process.**	**Preparation / adoption.** (art. 2(a) 2001/42/EC)	**Basis.** (art. 2(a) 2001/42/ EC)	**Environm. report.** (art. 2(b), art. 5, ann. I 2001/42/EC)	**Timing of EA.** (art. 4(1) 2001/42/EC)	**Consult.** w. environm. authorities at the scoping stage. (art. 2(b), art. 5(4) 2001/42/EC)	**Consult.** w. environm. authorities at the review stage. (art. 2(b), art. 6 2001/42/EC)	**Consult.** w. the public at the review stage. (art. 2(b), art. 6 2001/42/EC)	**Decision making,** the taking into account of the ER and consult. (art. 2(b), art. 8 2001/42/EC)	**Information on the decision** (art. 9 2001/42/EC)	**Monitoring** (art. 10 2001/ 42/EC)
Plans for Fossvogsdalur on the boarder of the municipalities Reykjavik and Kopavogur	*Plan/progr.:* Two planning scenarios for the valley Fossvogsdalur *EA:* Environmental assessment of two planning scenarios for the valley Fossvogsdalur	1989-1990.	*Preparation:* Initiated by the local auth. in question and the National Plann. Board. The EA was commissioned by the National Plann. Board, without direct link to a particular planning process or a particular planning proposal. *Adoption:* NA.	EA commissioned by the National Planning Board.	An independent environmental report describing the main environmental impacts of two planning scenarios.	NA, as the EA was not directly linked to a particular planning process or planning proposal.	Not carried out.	No formal consultation period. The EA only-/primarily included the production of an experts' report.	No public consultation was carried out.	The EA was not directly linked to a particular planning decision.	NA.	Not included.
Environmental assessment for Skutustadahreppur	Plan/progr.: Four planning scenarios for the municipality Skutustadahreppur in north-eastern Iceland. EA: Environmental assessment of four planning scenarios for the municipality.	1991-1993.	*Preparation:* Initiated and carried out by the National Planning Agency in co-op. with the municipality, the Nature Conservation Council and the Ministry for the Environment. ***Adoption*** NA.	EA initiated and carried out by the National Planning Agency.	An independent report describing the main environmental impacts of four planning scenarios.	Preceded work on a new municipal plan for Skutustadahreppur.	Not carried out (note though that the Planning Agency, the Nature Conservation Council and the Ministry for the Environment were responsible for the EA).	No formal consultation period. The EA only-/primarily included the production of an experts' report.	No public consultation was carried out, except that the results were presented at public meetings at different stages in the EA process.	The EA was not directly linked to a particular planning decision.	NA.	Not included.

Municipal plans	*Plan/progr.:* Comprehen. land use plans at the municipal level. *EA:* General assessment of few selected planning objectives.	Since 1998. Environm. assessment has been included to some degree on most municipal plans approved after Jan. 1998, when the Planning and Building Act came into effect.	*Preparation:* Municipalities. *Adoption:* Municipalities and the Minister for the Environment.	Planning and Building Act (PBA) and Planning Regulations (PR).	Discussion on environm. assessment incorp. into the planning proposal. In most cases a short general descr. of the main foreseen likely environm. impacts of a few selected planning objectives, sometimes with compar. to other planning alternatives.	Has primarily been presented in the final planning proposal presented for formal publ.consult. prior to final approval of the plan, although also to some extent in draft proposals presented dur. informal consult. earlier in the planning process.	In most/all cases only with the National Planning Agency.	The planning proposal itself is subject to consult. with environm. authorities according to the Planning regulations. The environm. assessment contained in or accomp. the planning proposal is then also presented to these authorities.	The planning proposal itself is subject to public consultation according to the PBA. The EA contained in or accompanying the planning proposal is then also presented to the public.	The PBA sets the framework for the municipalities' handling of comments made to a plan proposal during public consultation. These apply equally to comments made on the EA aspects of the planning proposal.	The Planning and Building Act requires that municipalities advertise their decision.	Not included.
Regional plans	*Plan/progr.:* Comprehen. land use plans for two or more municipal. *EA:* See municipal plans above.	See municipal plans above.	*Preparation:* Regional planning committees appointed by municipal. *Adoption:* Municipal. and the Minister for the Environm.	PBA, PR.	See municipal plans above.	See municipal plans above.	See municipal plans above.	See municipal plans above.	See municipal plans above.	See municipal plans above.	See municipal plans above.	Not included.

Special regional plans	*Plan/progr.:* Sectoral plan.[1] Two special regional plans have been approved since the PBA came into effect.[2] *EA:* Plan for power lines in east. Icel. acc. w. an EIS for the project acc. to the EIA Act. Plan for a fibre optic cable over the central highlands incl. general assessment of environm. impacts.	2000-2001.	*Preparation:* The company responsible for the development or plan/progr. in question. *Adoption:* The Minister for the Environment.	PBA.	Case: A high voltage power line in eastern Iceland: Plan proposal accompanied with an EIS. Case: A fibre optic cable over the central highlands: See municipal plans above.	Only presented in the final planning proposal presented for formal public consultation prior to final approval of the plan.	Primarily with the National Planning Agency.	See municipal plans above.	See municipal plans above.	See municipal plans above, except that the National Planning Agency reviews comments made during public consultation.	-	Not included.

[1] A plan dealing with particular development or plans for particular development, land use or protection within more than one municipality.

[2] Two other examples exist of special regional plans prepared according to art. 15 of the Planning and Building Act. One is a special regional plan for afforestation in Northern Iceland discussed elsewhere in this paper. The other is a special regional plan for the power plant Kárahnjúkavirkjun. There the planning proposal was put on public consultation along with the EIS for the project in the summer 2001. Following the Minister for the Environment's EIA verdict on the power plant in December 2001 the proposal for the special regional plan is undergoing revision and is likely to be put out for public consultation again later this year.

A framework programme on the utilization of hydro and geothermal energy resources	*Plan/progr.:* All relevant project alternatives for hydro and geothermal energy utilization. *EA:* Environmental assessment of project alter-natives for hydro and geothermal energy utilization in Iceland.	1999 – planning process ongoing.	*Preparation:* An ad-hoc steering committee established by the Minister for Industry, in co-operation with the Minister for the Environment. *Adoption:* Has not been decided.	Decision of the Icelandic Government.	An independ. report where environm. imp. of project altern. for the utiliz. of hydro and geotherm. power are assessed, using multicrit. analysis. The result, a list ranking individ. power plant alt. w. regard to power output, econ. feasibil., macro and regional econ. impact, imp. on natural and cultural assets and impacts on land use.	NA.	Consultation is carried out within four working groups working under the steering committee, dealing with different themes.	Not clear at this stage.	Not clear at this stage.	Not clear at this stage.	Not clear at this stage.	Not clear at this stage.
A special regional plan for afforestation in Northern Iceland	*Plan/progr.:* A special regional plan dealing with afforestation in Northern Iceland. EA: General environmental assessment of the plan's aims and objectives.	1999 – planning process ongoing	Preparation: The Board of the affore-station pro-gramme in Northern Iceland in consultation with the Planning Agency. Adoption: The Minister for the Environment.	The special regional plan is done according to art. 15 of the PBA. This is done voluntarily by the Board of the affore-station pro-gramme at the initiative of the National Planning Agency.	Will be in-cluded in the planning proposal.	At a late stage in the planning process, but has called for clarification of objectives and policy pre-sented in the plan.	Yes.	Yes.	Yes.	Yes, at least to the degree prescribed in the PBA.	Not yet clear.	Not yet clear.

A proposal for a new municipal plan for Reykjavik 2002-2024	*Plan/progr.:* Comprehen. land use plan for the municipality Reykjavik. *EA:* A more systematic assessment of the general aims presented in the planning proposal as well as more detailed assessment of selected objectives than previously done for municipal plans.	2001 – planning process ongoing.	*Preparation:* Municipality. *Adoption:* Municipality and the Minister for the Environment.	PBA, PR.	The planning proposal is accompanied with a special environmental report, discussing environmental impacts of the general aims of the plan and presenting a more detailed assessment of selected planning objective, addressing alternatives and mitigation measures.	Environmental report prepared on the basis of a final planning proposal, presented at formal public consultation of the planning proposal preceding the final approval of the plan.	In most/all cases only with the National Planning Agency.	The planning proposal itself is subject to consultation with environmental authorities according to the Planning regulations. The environmental assessment contained in or accompanying the planning proposal is then also presented to these authorities.	The planning proposal itself is subject to public consultation according to the PBA. The EA contained in or accompanying the planning proposal is then also presented to the public.	The PBA sets the framework for the municipality's handling of comments made to a plan proposal during public consultation. These apply equally to comments made on the EA aspects of the planning proposal.	The Planning and Building Act requires that municipalities advertise their decision.	Not included.

Most of the more recent examples of SEA in Iceland, with the exception of the framework programme on hydro and geothermal utilization, fall closest to the description of a "policy analysis/appraisal-inspired SEA" (see Sheate et al 2001) in that little if any baseline information is gathered specially for the assessment and the impacts are appraised against selected objectives or criteria. Even though the assessment itself does not include special public consultation, the EA is in most cases carried out in accordance with the Planning and Building Act, where there are clear rules on public consultation and decision-making. These do however have to be reviewed, if they are to fully meet the EU SEA Directive's requirements on all aspects of the process, i.e. the report, consultation, decision-making, information on the decision and monitoring.

Two of the earlier SEAs, the assessment in the Fossvogsdalur valley and the assessment in Skutustadahreppur were done in a more "EIA-inspired SEA" fashion (see Sheate et al 2001). These assessments also differ from most of the others described above in the sense that they were not carried out as a part of a particular planning process, but as independent assessments of selected planning scenarios. Therefore the link between EA conclusions and decision-making is less apparent. It is however likely that the EA in Fossvogsdalur was important for the consensus later reached by the municipalities of Reykjavik and Kopavogur on land use in the valley. Moreover, the EA undertaken in Skutustadahreppur is likely to have had at least an indirect influence on planning in Skutustadahreppur, with regard to both the municipal plan and planning for individual projects in the area.

The trend towards a more "policy analysis/appraisal-inspired SEA" can probably be partly explained by what has been considered acceptable detail and methods by the planning authorities and practicing planners. Thus, methods and approaches have been chosen with regard to time and financial resources, so for example the extensive gathering of detailed baseline information has in most cases not been considered acceptable or necessary for the decision-making level of plans and programmes. This does however put more weight on the selection of criteria and the transparency of the qualitative judgements given on the environmental impacts of the plan/programme in question.

Most of the SEAs have been carried out at a relatively late stage in the respective planning process. This can be explained by several factors: When the EA requirements were introduced into the Planning and Building Act and Planning regulations in 1998 many of the municipal and regional plans that have since been approved were already far into their planning processes, as such there was little real opportunity in these cases to conduct adequate SEAs. Moreover, a lack of knowledge amongst planning consultants and local authority planners and politicians about the role of SEA and possible methods of applying SEA in plan making has thus far limited the influence of SEA on planning decisions. The result is that SEA has in most cases had only a limited impact on the respective plans, and has rather served as an exercise in getting those involved in the planning process acquainted with the SEA tool in planning and decision-making. The promising lessons learned relate to the rather general understanding of the need to introduce SEA earlier in the planning process.

Current issues for research and development

From the current discussion and the experiences briefly described above, the following issues can be identified:

Institutional framework

- Analysis of existing plan/programme formulation and decision-making processes in order to identify the different stages in plan and programme formulation with regard to SEA. Also to identify elements of SEA already in place.
- Development of SEA application to existing plan/programme-making and the question of an independent review body, its role and place in the SEA and decision-making process.

Scope (tiering)

- Development of criteria/methods for scoping SEA of different plans and programmes with regard to tiering, i.e. in order to secure links between SEA of different tiers and types of plans and programmes and to avoid duplication of assessment.

Consultation

- Definition of "affected public"/"public concerned" in SEA of different plans/programmes.
- Definition of appropriate means of communication with regard to transparency, arenas of communication etc.

Environmental criteria

- The development of environmental criteria and indicators in order to make SEA as systematic and comparable as is feasible, as well as to form a basis for monitoring.

Guidance/training

- Needed for all key actors in SEA of plans and programmes: Those directly involved in policy and plan making, official bodies that are consulted on the scope and content of planning proposals and environmental assessments and the public.

Methods

- Development of methods that secure transparency and meaningful assessment of environmental impacts.

Monitoring

- Development of methods and approaches.

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Om implementering af SMV i kommuneplanlægningen i Danmark

Henrik Hvidtfeldt, Forskningscentret for Skov & Landskab, Hørsholm, Danmark

Indledning

Dette indlæg handler om nogle af de overvejelser og undersøgelser, der er i gang på Forskningscentret for Skov & Landskab som forberedelse til den formelle implementering i Danmark af EU's direktiv om vurdering af bestemte planers og programmers indvirkning på miljøet (Den Europæiske Union 2001). Arbejdet sker i tæt samarbejde med 3 udvalgte kommuner, Hvorslev, Hillerød og Århus. De 3 kommuner er udvalgt ud fra deres størrelse og geografiske placering. Hvorslev er en lille landdistrikt-kommune med ca. 7.000 indbyggere, beliggende i Midtjylland, Hillerød er en mellemstor bykommune med ca. 36.000 indbyggere, beliggende i Hovedstadsregionen, og Århus er den næststørste bykommune i landet med ca. 280.000 indbyggere, beliggende i Østjylland.

Arbejdet gennemføres for Miljøministeriets Landsplanafdeling i et 3-årigt projekt, der blev påbegyndt i år 2000. Arbejdet er foreløbig dokumenteret i 2 rapporter (Hvidtfeldt og Møller-Jensen 1999 & Hvidtfeldt og Kørnøv 2001).

Fordele og risici ved SMV af kommuneplaner

Allerede i forslaget til EU-direktivet er der markeret en række *fordele* ved SMV af planer. En lang række forskere og praktikere har ligeledes beskæftiget sig med emnet og også gjort sig overvejelser om, hvilke fordele og eventuelle problemer der kan være herved.

Mere generelt finder Kommissionen, at direktivet vil være et vigtigt skridt til at *sikre en bæredygtig udvikling* overalt i Fællesskabet (Kommissionen 1996).

Overføres betragtningerne i direktivforslaget om udmøntningen af direktivet til kommuneplanlægningen i Danmark, vil fordelene bl.a. være:

- At sikre en bedre integration af miljøhensyn i kommuneplanerne.
- At bidrage til målopfyldelsen med at bevare, beskytte og forbedre miljøkvaliteten i kommunerne.
- At åbne for at bedømme alternativer og mulighederne herfor.
- At vurdere kumulative og synergistiske virkninger fra små, men talrige projekter, dvs. at man ved SMV kan vurdere den samlede miljømæssige virkning af mange ensartede mindre aktiviteter eller projekter, der hver for sig er for små til at være omfattet af bestemmelserne om VVM og derfor ellers ikke vil blive miljøvurderet.
- At tilstræbe mere ensartede vurderingsmetoder i alle kommuner med henblik på at mindske eventuelle skævheder i den kommunale konkurrence om udvikling.

- At sikre, at der overordnet kan tages hensyn til konsekvenser for miljøet ved, at der foretages en miljøvurdering tidligt nok.

Det er bl.a. værd at hæfte sig ved to af de angivne fordele ved SMV i forhold til kommuneplanlægningen.

For det første, at man kommer tidligt ind i processen, før man almindeligvis har lagt sig fast på konkrete projekter. Herved vil det være muligt – og vigtigt – at ændre bestemmelser eller planindhold med negative miljøkonsekvenser før deres udmøntning i praksis eller meget tidligt at kunne afvise miljømæssigt uhensigtsmæssige projekter.

For det andet, at man ved SMV kan vurdere den samlede miljømæssige virkning af mange ensartede mindre aktiviteter eller projekter, der hver for sig er for små til at være omfattet af bestemmelserne om VVM og derfor ellers ikke vil blive miljøvurderet.

Blandt de *risici*, der kan være ved at indføre SMV, som noget der virker tungt og besværligt, er det nærliggende at nævne:

- At kravet om SMV af kommuneplaner overvejende kan blive et rent formelt krav til kommuneplanlægningen, der alene medvirker til at udvide, bureaukratisere og komplicere kommuneplanprocessen.
- At kravet om SMV kan blive udformet så kompliceret og teknisk, at det bidrager til at forstærke teknokratiseringen af de kommunale myndigheders aktiviteter.
- At kravet om offentlighed ved SMV kan blive endnu et område, der lægges til det, som offentligheden "skal" engagere sig i – med den mulige negative konsekvens, at beboerne siger fra over for væsentlige dele af offentligheden om den lokale planlægning.

Det siger sig selv, at EU-direktivet bør implementeres og udmøntes i praksis, så de mulige risici undgås og fordelene udnyttes optimalt. Afgørende for om det lykkes vil være om implementering og udmøntning kommer til at ske med forståelse og hensyntagen til de vilkår og den måde, hvorunder kommuneplanlægningen gennemføres på i praksis.

Hvilken situation skal SMV-direktivet implementeres i ?

Rammer og praksis for den hidtidige kommuneplanlægning må således betragtes som væsentlige udgangspunkter for indførelsen af strategisk miljøvurdering i den fremtidige kommuneplanlægning.

Det er nu mere end 25 år siden, at lov om kommuneplanlægning blev vedtaget i Danmark (Miljøministeriet juni 1975). Siden er loven blevet ajourført og tilpasset flere gange. Den største ændring skete, da man i 1991 med virkning fra 1992 samlede de forskellige love om fysisk planlægning i én lov – Lov om planlægning – og samtidig indskrev "bæredygtig udvikling" i lovens formålsparagraf (Miljøministeriet juni 1991). Lovene har været grundlaget for, at alle landets kommuner har udarbejdet og successivt ajourført kommuneplaner (og et utal af lokalplaner), der giver retningslinier for alle former for udbygning og omdannelse af landets kommuner.

Med bæredygtig udvikling indskrevet i planlovens formålsparagraf i 1991 blev et nyt paradigme introduceret i planlægningen, som hermed skal integrere både økonomiske, sociale og miljømæssige aspekter, og som forpligter kommunerne til at arbejde for at realisere målet om bæredygtig udvikling. Målet om bæredygtig udvikling har opnået accept i store dele af samfundet, men selve implementeringen udgør stadig en stor udfordring, idet der efterhånden foreligger en mangfoldighed af opfattelser af, hvad bæredygtighed reelt betyder.

Brundtland-kommissionens definition er, at: "En bæredygtig udvikling er en udvikling, som opfylder de nuværende behov uden at bringe de fremtidige generationers muligheder for at opfylde deres behov i fare" (FN-forbundet og Mellemfolkeligt Samvirke 1987). Men denne definition kan ikke let anvendes i praksis til at forstå og måle bæredygtighed – eller træffe beslutninger ud fra. Alene ud fra denne definition er det ikke klart, hvad en bæredygtig udvikling indebærer eller hvilke påvirkninger, der kan accepteres. Brundtland-kommissionen efterspurgte således også nye måder, hvormed skridt i retning mod en bæredygtig udvikling kan måles og evalueres.

I hvert fald fra 1991 – men i mange kommuner helt tilbage ved de første kommuneplaner fra sidst i 1970'erne – blev der taget miljøhensyn. Men det var i så fald typisk enkeltforhold som eksempelvis forurening af grundvand, lossepladser eller trafikstøj, der blev berørt.

De overordnede vilkår – nu og siden

For en indledende, overordnet betragtning er dagens situation – før direktivets implementering – *at* der ikke er krav om en systematisk procedure for miljøvurdering af kommuneplanerne, *at* den vurdering der eventuelt foretages er meget afhængig af den eller de planlæggere, der er ansvarlig for og gennemfører kommuneplanarbejdet, og *at* den vurdering der eventuelt foretages ofte ikke bliver nedskrevet eller på anden måde dokumenteret.

Forventningerne er, at direktivet kan sikre, *at* der sker en systematisk minimumsvurdering, *at* miljøkonsekvenser bliver beskrevet og publiceret og *at* beslutningsgrundlaget og de foretagne afvejninger synliggøres yderligere.

De specifikke vilkår i udvalgte kommuner – undersøgelse af kommuneplanarbejdet i ca. 60 danske kommuner

For at være på lidt mere sikker grund med hensyn til kommunernes arbejde med kommuneplanlægningen, er der via internettet i efteråret 2001 foretaget en spørgeundersøgelse til ca. 60 udvalgte danske kommuner.

Den ansvarlige for kommuneplanarbejdet i kommunen blev bedt om at svare på en række spørgsmål, hvoraf der her kun skal omtales et par af dem, der gav de mest markante resultater. Det handler *om* størrelsen af ressourceforbruget til kommuneplanlægningen, *om* miljøhensyn inddrages i kommuneplanarbejdet og hvilke bæredygtigheds-parametre der eventuelt indgik og hvordan, *om* der opstilles og vurderes planalternativer, og endeligt *om* hvilke barrierer, der eventuelt er for tværfagligt samarbejde internt i kommunen.

Om *ressourceforbruget* til kommuneplanlægningen viste undersøgelsen, at i langt de fleste kommuner (4/5 af samtlige undersøgte) var det kun en person, der arbejdede med kommuneplanlægning (det er ikke undersøgt i hvilket omfang, der anvendes eksterne konsulenter til hjælp med kommuneplanarbejdet). Kun i de større og største kommuner var der 2 personer eller flere, der arbejdede med kommuneplanlægningen. Det viste sig yderligere, at den ene person, der i de fleste (små) kommuner arbejdede med kommuneplanlægningen, i knap halvdelen af tilfældene (2/5 af samtlige undersøgte) brugte under 10 % af sin arbejdstid hertil, og at den anden halvdel (2/5 af samtlige undersøgte) kun brugte 10-30 % af sin tid på kommuneplanlægningen. Det vil således være yderst uhensigtsmæssigt ved implementeringen af EU's direktiv at lægge op til en ressourcekrævende indsats fra kommunernes side. Tværtimod vil det være helt afgørende for succes, at der opnås en så rationel og enkel måde at gennemføre den strategiske miljøvurdering af kommuneplanerne.

Om *miljøhensyn inddrages* i kommuneplanarbejdet viste undersøgelsen, at de fleste kommuner (mere end 4/5 af samtlige undersøgte) tager miljøhensyn, og at dette beskrives i kommuneplanen. De bæredygtigheds-parametre der indgår er først og fremmest grundvand, spildevand og vandmiljøet samt affald (mellem 1/2 og 3/5 af samtlige undersøgte) og i lidt færre kommuner desuden støj. Det er således først og fremmest de mere traditionelle miljøforhold, der behandles.

Om der opstilles og vurderes *planalternativer* viste undersøgelsen, at det sker kun i de færreste kommuner (1/5 af samtlige undersøgte). Undersøgelsen viste yderligere at i de tilfælde, hvor der blev opstillet og vurderet alternativer, handlede det om en mindre del af kommunen eller et specifikt problem som f.eks. havnens udvikling eller udformningen af et boligområde. Det er åbenbart, at det kun er i visse situationer, at det er relevant og hensigtsmæssigt at opstille og vurdere alternativer. Det vil formentlig være formålstjenligt at udarbejde vejledende retningslinier eller gode råd for, hvornår det vil være godt og skidt at opstille og vurdere planalternativer.

Om hvilke *barrierer* der eventuelt er *for tværfagligt samarbejde* internt i kommunen, viste undersøgelsen, at mangel på tid er den vigtigste barriere (næsten ¾ af samtlige undersøgte), men også at manglende forståelse hos andre faggrupper eller afdelinger kan være en betydelig barriere (mere end ½ af samtlige undersøgte). Dette delresultat tyder på, at det er vigtigt at tage hensyn til forskellige faggruppers baggrund og holdninger og i øvrigt afsætte den nødvendige tid for at få en nødvendig tværfaglig og dermed tilstrækkelig alsidig belysning af de miljømæssige konsekvenser af en række planretningslinier.

Alternative angrebssæt for implementering af direktivet

Der kan skelnes mellem en "deskriptiv" og en "normativ" vurdering af de miljømæssige konsekvenser. Ved en *normativ vurdering* forstås, at planlægningens konsekvenser vurderes i forhold til opstillede overordnede politiske mål om bæredygtighed. En *deskriptiv vurdering* er derimod alene baseret på en beskrivelse af planlægningens potentielle konsekvenser. Det vil sige, at disse konsekvenser ikke holdes op imod bæredygtighedsmål, som beskriver en ønsket retning for udvikling.

Den deskriptive vurdering af kommuneplanens konsekvenser kan betragtes som en del af den normative tilgang, jfr. diagram 1.

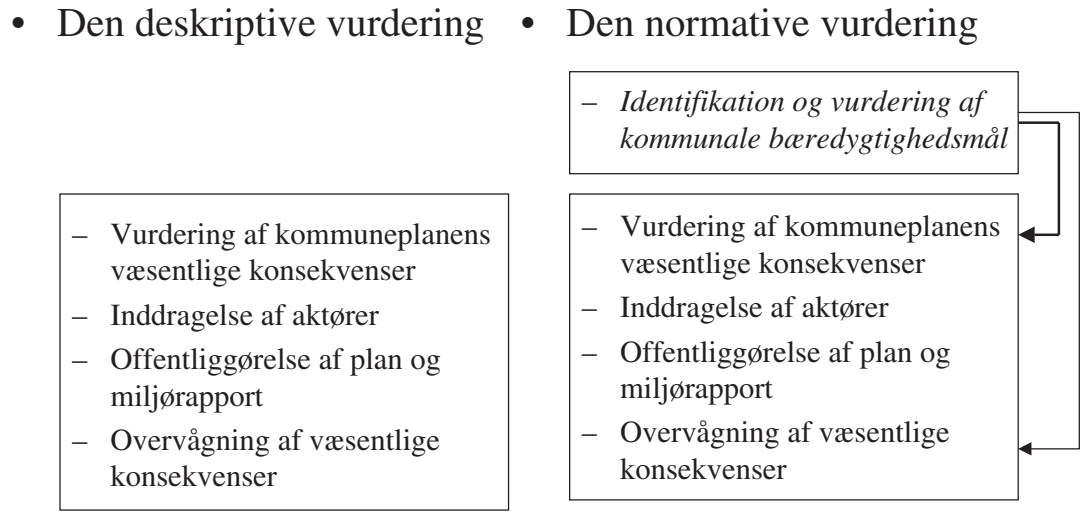

Diagram 1. Hovedindhold af henholdsvis en deskriptiv og en normativ miljøvurdering af en kommuneplan.

Den deskriptive vurdering

Ifølge direktivet betyder implementering af miljøvurdering i planlægningen:

- Konsultation hos myndigheder, når afgrænsning og detaljeringsniveau for informationer indeholdt i en miljørapport besluttes.
- Vurdering af de signifikante miljøeffekter af en plan under selve planudarbejdelsen og før vedtagelse af planen.
- Sikring af en tidlig og effektiv mulighed for myndighederne samt offentligheden for at udtrykke holdninger til planudkastet og den tilhørende miljørapport.
- Informering af og konsultation hos andre medlemslande, hvis der er grænseoverskridende effekter.
- Informering af alle berørte parter på en måde, hvor beslutningen og beslutningsgrundlaget gøres gennemsigtigt.

Ovenstående vurdering omfatter både vurdering af de signifikante miljøeffekter af lokaliseringsmuligheder (dvs. rammer i kommuneplanen) og specifikke planmål.

Den normative vurdering

Den normative vurdering rummer det samme som den deskriptive vurdering, men derudover holdes planlægningens konsekvenser op mod en række opstillede mål. Med bæredygtighedsmål som udgangspunkt kan strategisk miljøvurdering således systematisk bidrage til at vurdere, i hvilken grad kommuneplanen forfølger disse mål. Et job for strategisk miljøvurdering er da i denne situation kritisk at vurdere kommuneplanens mål overfor bæredygtighedsmålene – økologisk, socialt, kulturelt og økonomisk – så kommuneplanen kan forbedres og styrkes. Strategisk miljøvurdering kan på denne måde blive et miljømæssigt "sundhedscheck" på planen.

Udmøntning af den normative vurdering

I det danske forberedelsesarbejde med implementering af direktivet har vi valgt at fokusere på den normative tilgang til strategisk miljøvurdering. I direktivforslaget er kravet kun, at der foretages en deskriptiv miljøvurdering. Men at begrænse sig til en deskriptiv miljøvurdering indebærer efter vores opfattelse en risiko for, at betragtninger om bæredygtighed bliver mindre synlige i miljøvurderingen og i de efterfølgende politiske beslutninger.

Fordele ved den normative vurdering

En normativ tilgang kan sikre, at miljø- og bæredygtighedsmål er indarbejdet i hele planprocessen, for eksempel i valg af lokalisering af boliger og erhverv og i vurderingen af alternativer. Den normative tilgang til strategisk miljøvurdering kan herudover anvendes til:

- At afklare kommunale mål for bæredygtig udvikling.
- At identificere kvantitative mål (eksempelvis i form af indikatorer) for bæredygtig udvikling, som konsekvenserne af kommuneplanen kan vurderes i forhold til.
- At vurdere hvorvidt konsekvenserne af planen er i overensstemmelse med målene for bæredygtighed.

Et grundlag for konkretisering findes i de statslige udmeldinger

På næsten alle områder styres de kommunale aktiviteter i større eller mindre grad af lovgivning og nationale retningslinier. Det sker dels gennem krav om, at bestemte muligheder skal være til rådighed for borgerne, eller at kommunerne skal gennemføre bestemte aktiviteter, dels ved krav om mål og indhold for de pågældende aktiviteter. I denne sammenhæng er der sat fokus på, hvor og i hvilket omfang, der i lovgivning og andre statslige udmeldinger er fastlagt mål for de kommunale aktiviteter og den kommunale planlægning, og hvilke af disse mål, der handler om en bæredygtig udvikling.

Konkretisering af bæredygtighed i den økologiske, den økonomiske og den sociale og kulturelle bæredygtighed

I det følgende er der taget udgangspunkt i en bred tilgang til bæredygtig udvikling. Først er set på den mest traditionelle tilgang til bæredygtighed med miljøbeskyttelse og begrænsning af forureningen – den økologiske bæredygtighed. Dernæst er der set på den bæredygtighed, der knytter sig til at sikre en afbalanceret udvikling og økonomisering med ressourcerne (råstoffer, areal, energi osv.) – den økonomiske bæredygtighed. Endelig er der set på den bæredygtighed, der knytter sig til, at alle får dækket grundlæggende behov (føde, bolig, uddannelse, arbejde, deltagelse osv.) – den sociale og kulturelle bæredygtighed.

De tre delaspekter af bæredygtighed er udmøntet i målhierarkier. Opstilling af målhierarkier som en måde at indtænke bæredygtighed i kommuneplanlægningen er baseret på to forhold. For det første kan et målhierarki være med til at skabe overblik og sikre konsistens mellem overordnede mål for bæredygtig udvikling og kommunens lokale mål. For det andet kan hver enkelt kommune selv afklare de lokale bæredygtighedsmål knyttet til de overordnede mål for bæredygtig udvikling.

De nedenfor gengivne målhierarkier kan således danne grundlag for, at den enkelte kommune kan identificere de lokale planmål, der har relation til bæredygtig udvikling.

Udmeldinger om økologisk bæredygtighed
Udmeldinger om økologisk bæredygtighed findes først og fremmest i love og andet materiale fra Miljø- og Energiministeriet. Især Lov om miljøbeskyttelse, Lov om naturbeskyttelse og Lov om Planlægning indeholder en række udmeldinger af betydning for den økologiske bæredygtighed.

Desuden findes der enkelte udmeldinger i materiale fra andre ministerier. Det gælder bl.a. By- og Boligministeriet med Lov om byfornyelse, Trafikministeriet med handlingsplanen Trafik 2005 og Ministeriet for Fødevarer, Landbrug og Fiskeri med Fiskeriloven.

Nedenstående figur viser en udmøntning af de statslige udmeldinger, der vurderes at høre under den økologiske bæredygtighed. Det drejer sig om:

- At mindske og forebygge støj og forurening af luften.
- At mindske miljøbelastningen fra spildevand.
- At mindske miljøbelastningen fra affald og øge udnyttelsen af affaldsressourcerne.
- At beskytte vandmiljøet og grundvandet.
- At fremme biologisk mangfoldighed.

Udmeldinger om økonomisk bæredygtighed
Udmeldinger om økonomisk bæredygtighed findes i love og andet materiale fra flere ministerier. Det gælder bl.a. Miljø- og Energiministeriet med bl.a. Råstofloven, Skovloven og Lov om renere teknologi. Det gælder By og Boligministeriet med Lov om Byfornyelse. Og det gælder Fødevareministeriet med Landbrugsloven samt Trafikministeriet med handlingsplanen Trafik 2005.

I efterfølgende figur er vist en udmøntning af de statslige udmeldinger, der vurderes i forhold til økonomisk bæredygtighed. Det drejer sig om:

- At sikre et balanceret bymønster.
- At sikre balance i ressourceforbrug.
- At nedbringe miljøbelastningen fra servicesektoren.
- At sikre et afbalanceret erhvervsliv.

Udmeldinger om social og kulturel bæredygtighed
Udmeldinger om social og kulturel bæredygtighed findes ligeledes i love og andet materiale fra flere ministerier. Det gælder bl.a. Socialministeriet med Lov om social service, Lov om social pension og Lov om aktiv socialpolitik. Det gælder Sundhedsministeriet med Lov om sygehusvæsenet og Lov om forebyggende sundhedsordninger for børn og unge. Det gælder Undervisningsministeriet med Lov om Skoler og Lov om erhvervsuddannelser. Det gælder By- og Boligministeriet med Lov om byfornyelse og Lov om individuel boligstøtte. Og endelig gælder det Miljø- og Energiministeriet med Lov om Planlægning.

I den efterfølgende figur er vist en udmøntning af de statslige udmeldinger, der vurderes i forhold til social og kulturel bæredygtighed. Det drejer sig om:

- At sikre indkøbsmuligheder.
- At sikre gode og sunde bomuligheder.
- At sikre adgang til uddannelse og arbejde.
- At sikre adgang til kultur- og fritidsliv.
- At sikre borgernes mulighed for at deltage i planlægning af offentlige aktiviteter.
- At sikre social tryghed og en høj sundhedstilstand.

Anvendelse af målhierarkier som checklister

Vurdering af de kommunale planmål kan foretages i to trin, som tilsammen udgør en række vurderingskriterier.

Første trin består i at sammenholde de kommunale mål med de overordnede mål for bæredygtig udvikling til brug for at afklare:

- Har kommunen mål, der understøtter de forskellige nationale bæredygtighedsmål?
- Hvis ikke – vil kommunen afklare sin politik på disse områder og definere kommunale mål?
- Er målene lige så vidtgående som de nationale mål?

Opgaven består altså i at checke, hvorvidt kommuneplanen dækker bredden af bæredygtighedsbetragtninger, der er relevante for den enkelte kommune. Dette kan sikre, at intet væsentligt udelades og er på denne måde et vigtigt led i at få politikker for bæredygtighed ind i planen.

Andet trin består efterfølgende i at vurdere, hvorvidt de enkelte planmål er:

- Præcise, entydige, forståelige, realiserbare og forpligtende.

Hvorvidt et mål kan betragtes som realistisk at realisere i kommunen (*realiserbart)*, vil variere fra kommune til kommune bl.a. betinget af kommunens beliggenhed, økonomiske grundlag og befolkningssammensætning.

Hvorvidt et mål kan betragtes som noget kommunen har forpligtet sig til (*forpligtende)*, afhænger bl.a. af, hvor detaljeret det er beskrevet, om det er fulgt op med konkrete forslag eller anvisninger og er fulgt op med ressourcer i det kommunale budget.

Muligheder og krav om løbende tilpasning af målhierarkierne

Målhierarkierne er tænkt som et værktøj til brug for kommunerne til at vurdere, hvorvidt de har kommunale planmål eller ej inden for de enkelte bæredygtighedstemaer og – mål og skal betragtes som et dynamisk værktøj. Hierarkierne skal således ikke opfattes som indeholdende alle relevante bæredygtighedsmål for den kommunale planlægning nu og fremover. Udgangspunktet

har været en subjektiv udvælgelse ud fra en valgt definition af et bæredygtighedsbegreb.

Dertil kommer for det første, at hierarkierne er baseret på statslige mål, der allerede er et lille år gamle og som bygger på den forrige regerings udmeldinger. Det vil derfor allerede nu være nødvendigt at justere og supplere målhierarkierne i takt med at den nye regering formulerer nye statslige mål.

For det andet vil målene givetvis heller ikke være dækkende for alle de områder, som de enkelte kommuner finder nødvendige og relevante i kommuneplansammenhæng. Dette betyder, at kommunerne kan tage hierarkierne som udgangspunkt og dernæst supplere disse med yderligere mål, som de finder væsentlige.
Samtidig er det vigtigt at understrege, at kommunale forskelle gør, at man ikke direkte kan sammenligne dækningsgraden mellem de forskellige kommuner og derved vurdere, hvorvidt den ene kommune er mere bæredygtig end de andre. Der kan være lokale forudsætninger, der gør, at ét bæredygtighedsmål kan være relevant i en kommune og ikke i en anden. Et eksempel herpå er for Hillerød Kommune, hvor der ikke er formuleret mål for øget skovrejsning, idet det tilplantede areal i forhold til kommunens samlede areal allerede i dag udgør ca. 1/3.

Det videre arbejde med organisation, processer m.v.

Der er planlagt et videre forløb af projektet med en igangværende næste fase om organisering og processer og endnu en fase om virkemidler, evaluering, indikatorer m.v.

I den igangværende fase opstilles – med udgangspunkt i de deltagende kommuners organisering af arbejdet med kommuneplanlægning, SMV og Agenda 21 og de processuelle forløb i forbindelse hermed – modeller for hvordan dette kan gøres og der foretages en vurdering heraf ud fra de foreliggende erfaringer.

I en sidste fase beskrives og vurderes virkemidlerne til planernes gennemførelse ud fra de deltagende kommuners erfaringer. Og metoder til evaluering af planernes bidrag til målopfyldelse gennemgås. Herunder også brugen af indikatorer og datagrundlaget hertil.

Diagram 2. Økologisk bæredygtighed og en "afprøvning" heraf på Hvorslev Kommune. De grå felter omfatter områder, hvor kommunens kommuneplan skønnes at omfatte mål for en indsats.

Diagram 3. Økonomisk bæredygtighed og en "afprøvning" heraf på Hvorslev Kommune. De grå felter omfatter områder, hvor kommunens kommuneplan skønnes at omfatte mål for en indsats.

Diagram 4. Social og kulturel bæredygtighed og en "afprøvning" heraf på Hvorslev Kommune. De grå felter omfatter områder, hvor kommunens kommuneplan skønnes at omfatte mål for en indsats.

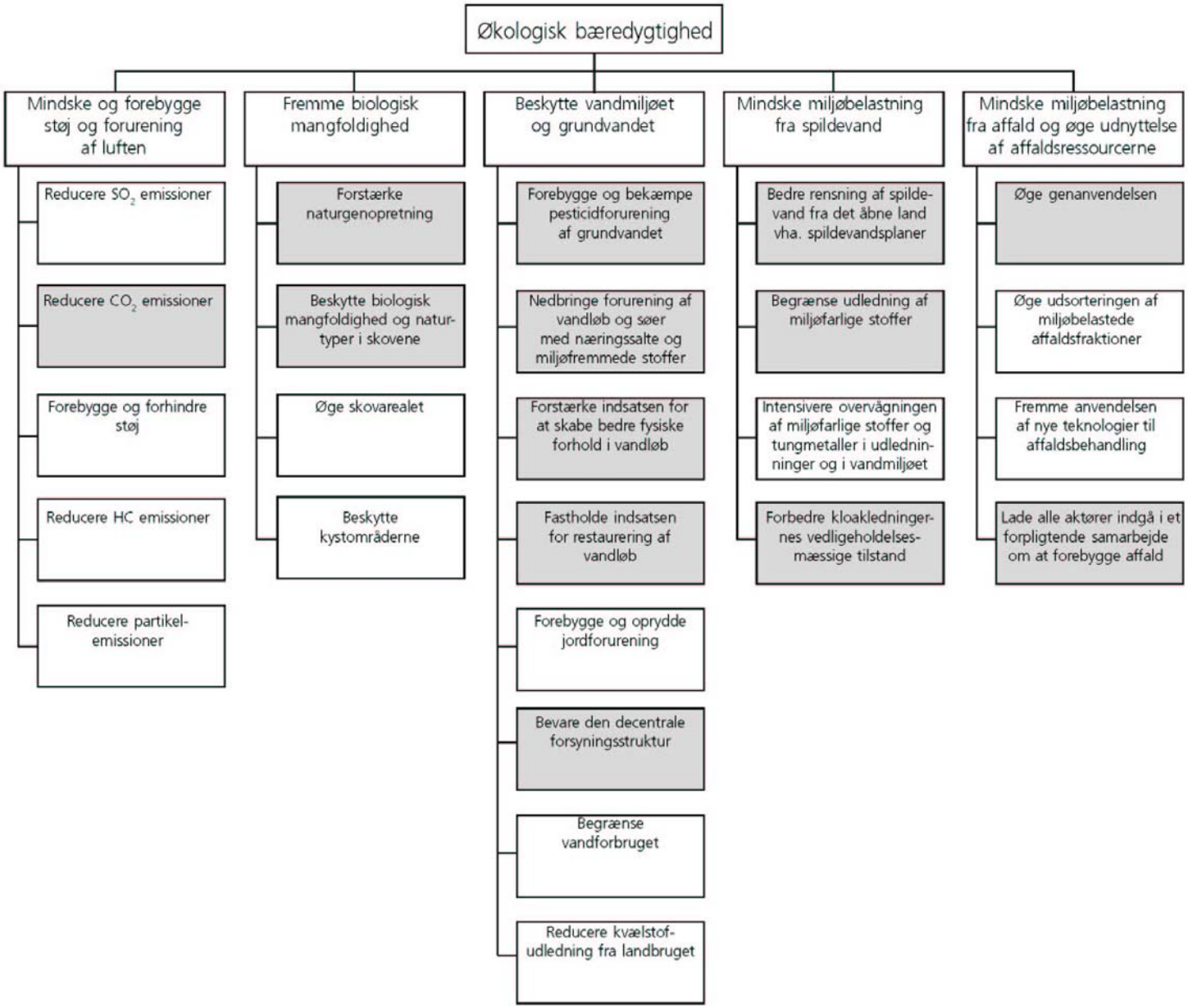
Økologisk bæredygtighed
Mindske og forebygge støj og forurening af luften
Reducere SO_2 emissioner
Reducere CO_2 emissioner
Forebygge og forhindre støj
Reducere HC emissioner
Reducere partikel-emissioner
Fremme biologisk mangfoldighed
Forstærke naturgenopretning
Beskytte biologisk mangfoldighed og natur-typer i skovene
Øge skovarealet
Beskytte kystområderne
Beskytte vandmiljøet og grundvandet
Forebygge og bekæmpe pesticidforurening af grundvandet
Nedbringe forurening af vandløb og søer med næringssalte og miljøfremmede stoffer
Forstærke indsatsen for at skabe bedre fysiske forhold i vandløb
Fastholde indsatsen for restaurering af vandløb
Forebygge og oprydde jordforurening
Bevare den decentrale forsyningsstruktur
Begrænse vandforbruget
Reducere kvælstof-udledning fra landbruget
Mindske miljøbelastning fra spildevand
Bedre rensning af spilde-vand fra det åbne land vha. spildevandsplaner
Begrænse udledning af miljøfarlige stoffer
Intensivere overvågningen af miljøfarlige stoffer og tungmetaller i udledninger og i vandmiljøet
Forbedre kloakledningernes vedligeholdelses-mæssige tilstand
Mindske miljøbelastning fra affald og øge udnyttelse af affaldsressourcerne
Øge genanvendelsen
Øge udsorteringen af miljøbelastede affaldsfraktioner
Fremme anvendelsen af nye teknologier til affaldsbehandling
Lade alle aktører indgå i et forpligtende samarbejde om at forebygge affald

Diagram 2

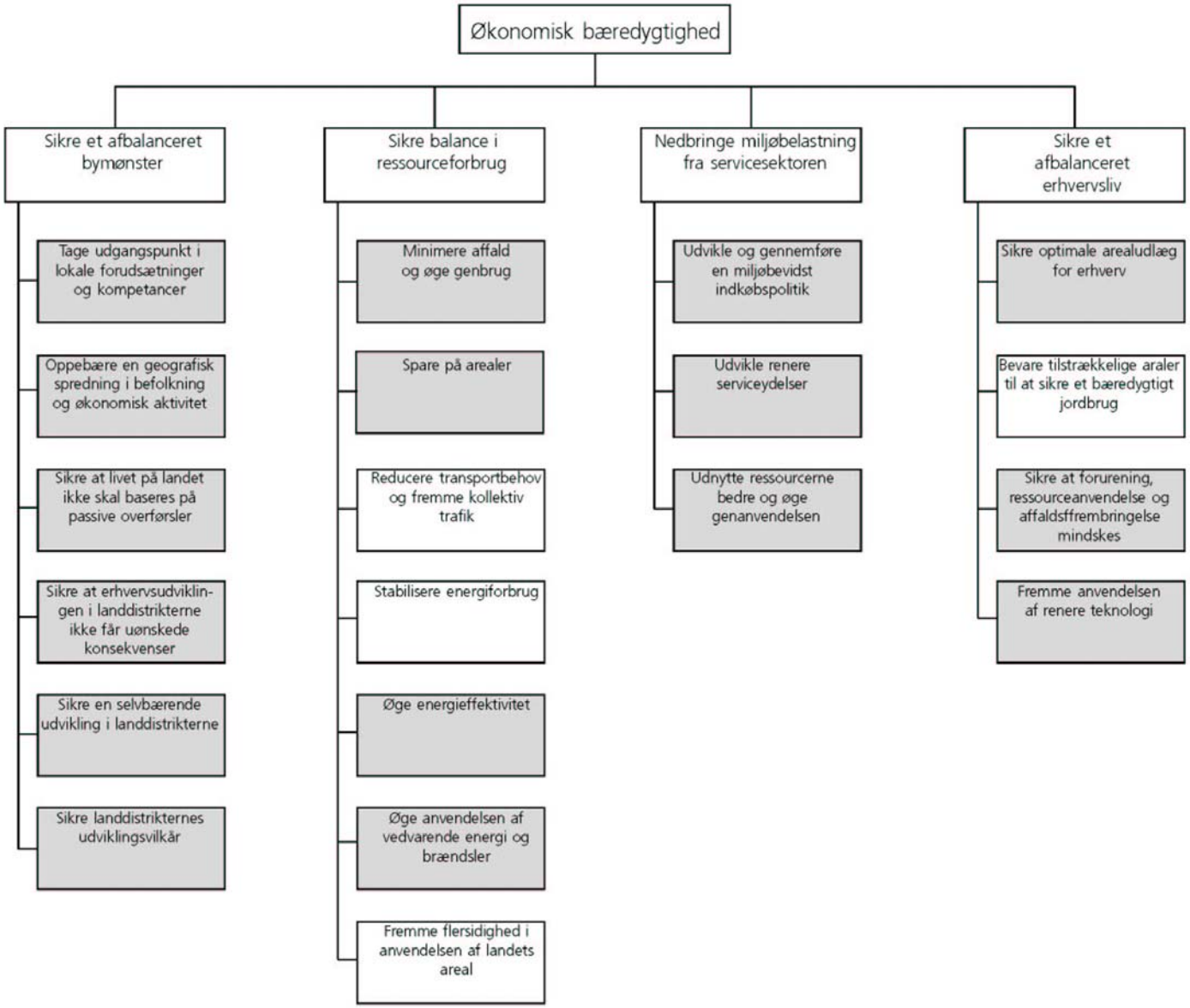
Økonomisk bæredygtighed
Sikre et afbalanceret bymønster
Tage udgangspunkt i lokale forudsætninger og kompetancer
Oppebære en geografisk spredning i befolkning og økonomisk aktivitet
Sikre at livet på landet ikke skal baseres på passive overførsler
Sikre at erhvervsudviklingen i landdistrikterne ikke får uønskede konsekvenser
Sikre en selvbærende udvikling i landdistrikterne
Sikre landdistrikternes udviklingsvilkår
Sikre balance i ressourceforbrug
Minimere affald og øge genbrug
Spare på arealer
Reducere transportbehov og fremme kollektiv trafik
Stabilisere energiforbrug
Øge energieffektivitet
Øge anvendelsen af vedvarende energi og brændsler
Fremme flersidighed i anvendelsen af landets areal
Nedbringe miljøbelastning fra servicesektoren
Udvikle og gennemføre en miljøbevidst indkøbspolitik
Udvikle renere serviceydelser
Udnytte ressourcerne bedre og øge genanvendelsen
Sikre et afbalanceret erhvervsliv
Sikre optimale arealudlæg for erhverv
Bevare tilstrækkelige araler til at sikre et bæredygtigt jordbrug
Sikre at forurening, ressourceanvendelse og affaldsffrembringelse mindskes
Fremme anvendelsen af renere teknologi

Diagram 3

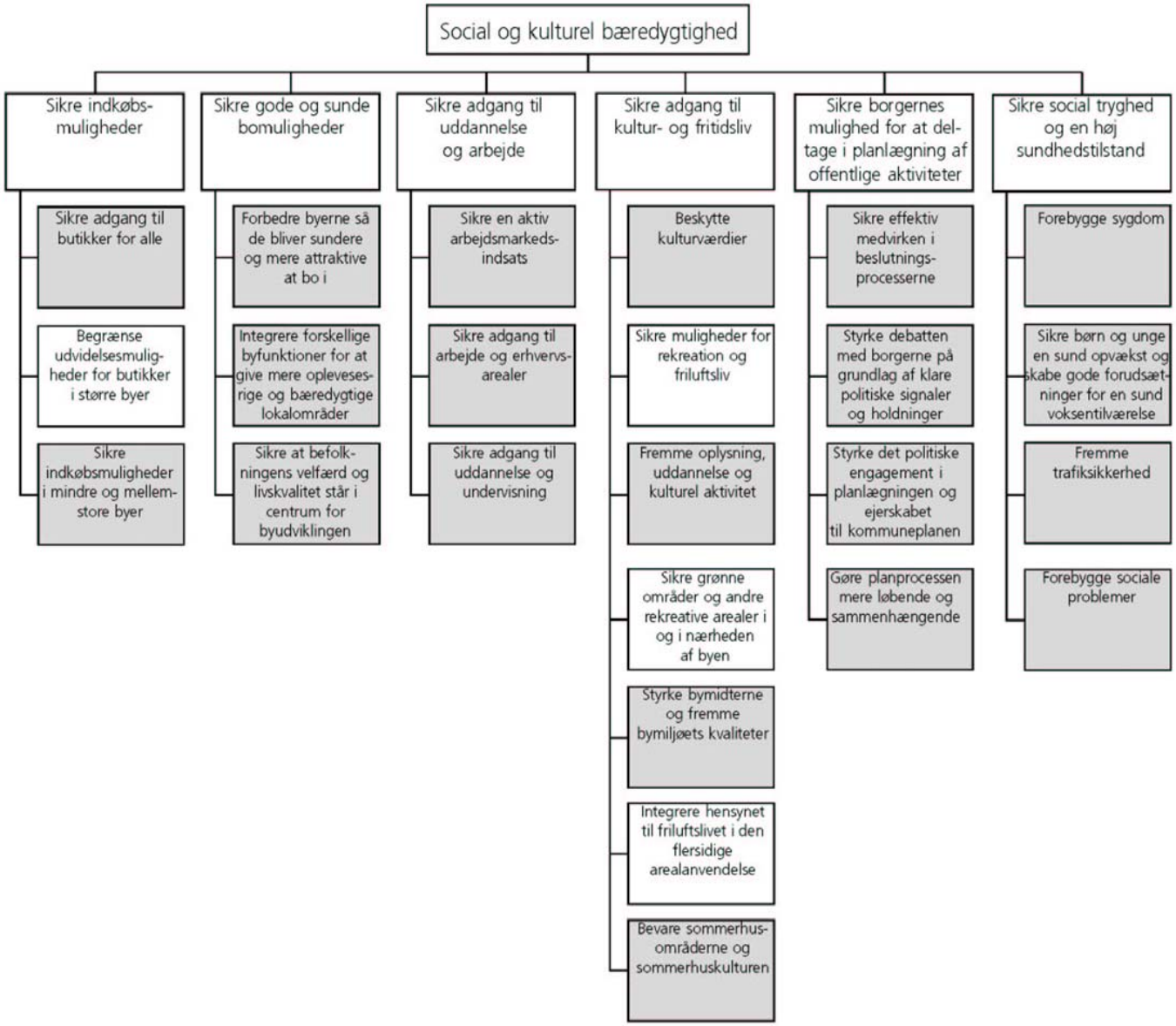
Social og kulturel bæredygtighed
Sikre indkøbs-muligheder
Sikre adgang til butikker for alle
Begrænse udvidelsesmulig-heder for butikker i større byer
Sikre indkøbsmuligheder i mindre og mellem-store byer
Sikre gode og sunde bomuligheder
Forbedre byerne så de bliver sundere og mere attraktive at bo i
Integrere forskellige byfunktioner for at give mere oplevesesrige og bæredygtige lokalområder
Sikre at befolk-ningens velfærd og livskvalitet står i centrum for byudviklingen
Sikre adgang til uddannelse og arbejde
Sikre en aktiv arbejdsmarkeds-indsats
Sikre adgang til arbejde og erhvervs-arealer
Sikre adgang til uddannelse og undervisning
Sikre adgang til kultur- og fritidsliv
Beskytte kulturværdier
Sikre muligheder for rekreation og friluftsliv
Fremme oplysning, uddannelse og kulturel aktivitet
Sikre grønne områder og andre rekreative arealer i og i nærheden af byen
Styrke bymidterne og fremme bymiljøets kvaliteter
Integrere hensynet til friluftslivet i den flersidige arealanvendelse
Bevare sommerhus-områderne og sommerhuskulturen
Sikre borgernes mulighed for at del-tage i planlægning af offentlige aktiviteter
Sikre effektiv medvirken i beslutnings-processerne
Styrke debatten med borgerne på grundlag af klare politiske signaler og holdninger
Styrke det politiske engagement i planlægningen og ejerskabet til kommuneplanen
Gøre planprocessen mere løbende og sammenhængende
Sikre social tryghed og en høj sundhedstilstand
Forebygge sygdom
Sikre børn og unge en sund opvækst og skabe gode forudsæt-ninger for en sund voksentilværelse
Fremme trafiksikkerhed
Forebygge sociale problemer

Diagram 4

Litteratur

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Reflections on comparative studies within a Nordic programme for ”planning as an instrument for sustainable development”

Lars Emmelin, Department of spatial planning, Blekinge Institute of Technology, Karlskrona, Sweden

The object of this contribution is to make an input into the planning of a project or programme of comparative research on SEA[1] not to make a scientific contribution to the research that is to be carried out. This contribution is therefore organised as a loose collection of points for discussion.

Studying systems or implementation

Systems studies abound internationally. In order to understand the function of a tool such as SEA, systems studies are necessary but certainly not sufficient. One way of looking at such different types of studies is illustrated in figure 1. One issue for discussion may thus be, to what extent we need to, or indeed to what extent we can, cover all four types of studies.

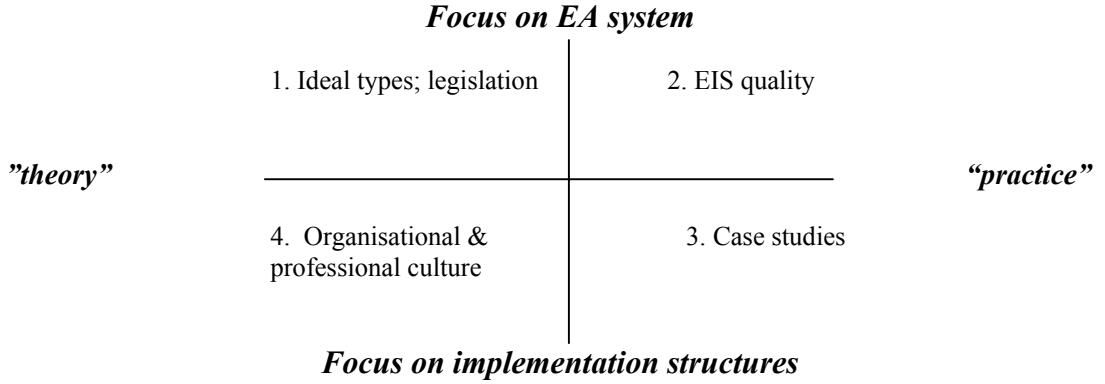

Figure 1. Dimensions of the study of impact assessment, and some examples of studies in the different categories.

Nordregio has already contributed to the general debate with a useful comparison of Nordic EIA systems. With regard to SEA systems studies however we need to address the legal and administrative framework for implementation of the SEA directive. A comparative study of SEA in the Nordic countries does not have the same body of “best practice” and experience as a base-line as would be the case for EIA. This

[1] A note on terminology: I will use the terms EIA for project assessment and SEA for assessment of policy, programme and plan. At this stage I see no need for other terms beside the more all-encompassing “EA”. Much of the proliferation of terms and acronyms has little to do with intellectual or methodological development but is more a function of a desire to gloss over a lack of content and to mark out new bureaucratic or academic territories. I will loosely use “the EIA-directive” to denote both 85/337/EEC and the 97 amendment and “the SEA-directive” to denote 2001/42/EC.

suggests to me that we need a study on how key practical and theoretical issues are handled. This can be done at several levels from that of systems to that of the experiences in handling them within the present structures and systems pertaining to the Nordic countries.

"Planning for sustainable development"

If the goal of a research programme is to develop methods of "planning for sustainability" we must then take a stand on how we relate to both the concept of sustainability and to the assumption that planning can be, or in fact is, geared towards this. The approach taken to the concept of "sustainability" in different systems is in itself an interesting issue: How is it made operational, in what ways has it replaced other sectoral or overriding goals of planning etc. This is clearly researchable in an empirical sense. The normative issue which the Nordic planning ministers would probably like to have an answer to may however be "how does one best do it?" or "what systems and methods are needed to best achieve it?" Attempting to answer such questions would make it necessary to define the concept in such operational terms as to make it at once highly political and highly controversial.

Some aspects of the Swedish system

EA was introduced at a comparatively late stage in Sweden, particularly considering the interest in environmental issues, the initial successes in combating point source pollution, the relatively comprehensive legislation and the build up of a comparatively large environmental administration and the reasonably well developed planning system. Implementation of EA has followed two main lines of approach: an EIA inspired model, and the "planning/integration" line. The institutional, methodological and professional differences however seem to have been either blurred or glossed over, or perhaps simply not quite realised in terms of the legislation.

The currently prevailing ideology is one of "management by goals and objectives" with relatively little regard for the difference between the typical management situations where such methods have been developed, and the diffuse and multiple goal situations of public policy and administration. The handling of this by the introduction of 15 national environmental goals is an interesting aspect of Swedish sustainability work, for example with regard to the operationalization of goals, and the relationship between "ecological", "social" and "economic" sustainability. "Integration" is a key concept that is however neither well defined or explored with regard to e.g. the conflict between overriding environmental goals and sectoral goals and rationalities, or professional norms etc.

The framework of the planning system, and in particular, comprehensive planning and the present attempts at regional development planning would seem fruitful Swedish objects of study provided they can be made to fit into a common comparative framework.

Availability of studies and evaluation

The situation with regard to material would seem to be less favourable in Sweden as compared to the other Nordic countries. Much effort has already been spent on the normatively based development of method. Some spectacular cases have been researched or at least systematically explored, or are the objects of ongoing studies

such as the "Hallandsås" case, the Øresund Bridge or the "Poland-cable". There are older studies of e.g. EA in planning, wind power development, an evaluation of EIA in the road and hydro-power sectors etc. Without prejudice much of the work can be characterised as of varying empirical depth but generally – with some notable exceptions – relatively *a*-theoretical.

Because of the peculiarities of the Swedish EA-system there is no central source of material on which to base a systematic study.

Relating to the SEA-directive

As noted above, relating to the directive will have to be on a principal or conceptual level. The criterion that programmes and plans should "set the framework" for project consent can be seen either as a strictly formal one, or as something that essentially opens up a number of interesting research questions. The hierarchical notion that setting the framework in fact sets a strict context for project decisions by precluding or excluding policy considerations from project consent is in itself researchable.[2] One of the many problems – practical and theoretical – of "tiering" is the question of the degree of stability and operationalization that policy in fact has, relative to lower levels: Does policy in fact form the stable, transparent and relatively uncontroversial framework for decisions at lower levels which "tiering" to a varying degree, explicitly or implicitly assumes?

Swedish comprehensive planning[3] may be a good field for a contribution to a comparative study. Comprehensive planning is aimed at setting a policy framework in physical terms for decisions at lower levels. It has also been argued that comprehensive planning can set a framework for EA of permits at lower levels. The UMTS or 3d generation mobile phone systems are one such example. Some municipalities have tried to draw up strategies for how applications for building permits for individual masts will be handled in different areas. In theory this should be a policy signal to operators to use in their planning; in practice it is probably poorly matched to both the technical requirements of the system and the planning approaches actually used by operators. No SEA was carried out to elucidate the environmental problems and planning conflicts of the systems. This may be an example where a case can be made for an approach to tiering.

Because of some interesting differences in the Nordic land use systems a comparative approach to the "framework" and "tiering" issues is probably possible.

[2] I have elsewhere termed this the "hierarchy fallacy" on the grounds that excluding policy issues from the agenda both neglects how public interest is generated and focused, and because it seems to be an expression of the "democratic deficit" of policy-making and planning which is in conflict with the participatory ambitions of planning and many EA-systems. This is one way of pointing to an interesting conflict within the systems worth following into the empirical/implementation area.

[3] There is no ideal English term for "översiktsplan"

Some issues and concepts for possible study

One useful approach to comparative study is to explore how a number of key issues, concepts or problems are handled in different systems. Such an exploration can be done in all four squares of figure 1 which essentially functions as an approach to the methodological problems of drawing the appropriate and allowable conclusions of a comparative study. Apart from the "framework setting" and "tiering" issues central to SEA, exploring the possibilities of some or all of the following concepts would seem to be worthwhile. Others, should they see fit, may want to either add to, or subtract from, this listing.

Integration **–** As noted above, the concept is central but not very explicit. The distinctions between an integrative, evolutionary approach which is typical of planning and the "EIA-approach" characteristic of permit procedures where alternatives can be examined, seems not to have been fully realised. The inherent conflict between integration and sectoral rationality is interesting in terms of boundary setting for the effectiveness of integration. There may now be a sufficient empirical material emerging for at least an exploratory study of the integration of environmental concerns in the regional development work in Sweden.

Alternatives – The generation and handling of alternatives, what may be meaningfully considered as alternatives in physical planning, attitudes and approaches to "no-action" alternatives – etc.

*"**Effects and impacts of a plan"*** – What in fact should be meant by this concept that is central to how an SEA is carried out. Exploring the alternative outcomes of a plan such as "worst case", contextual variations, robustness etc seems not to be fully understood as a way of handling the problem of meaningful alternatives, and the problems of making predictions from plan to impact. (The approach using "plan indicators" argued for in the SAMS-project could thus be further explored in this regard.) The problem here may simply be a lack of empirical material.

Participation – There are many aspects of this worth exploring in empirical studies; much of what is written seems to be either highly normative or based on the assumption that systems function in practice the way they are designed or intended. Comparative studies of participation are methodologically fraught with problems and should be approached with considerable care and critical attitudes.

A reflection on the classifications of Sheate *et al*

A good classification should be based on *a priori* dimensions with some theoretical foundation, or at a minimum, a constant set of criteria applied in a uniform way. Sheate *et al* seem to have a jumble of factors – institutional setting, disciplinary background, objective etc. The problem with such a system in a comparative study is that it has a low degree of reliability and classificatory power, i.e. the reasons for a given object being found in a class may be a function of who does the classification making comparison more or less an illusion.[4] The classification does however provide

[4] The classic literary example which illustrates the problem is Borges classification of animals into a large number of more or less fanciful and unconnected classes; among them are "large

an interesting guide to a number of different dimensions, problems, approaches etc to EA. Furthermore, a classification also entails the considerable risk of circular reasoning. (e.g. a Swedish comprehensive plan may seem like a bad plan if you put it in a class of plans defined by criteria for regulatory planning but a good policy document if viewed as a "vision" or "intentional statement".)

In our case any classification system used will have to meet two criteria: It must be relevant to the actual comparison we want to make, and it must have an *a priori* or theoretical basis rather than being an attempt at simply being the "least common denominator." Furthermore, a classification must have explicit assumptions concerning use and explanatory power. (A legally binding regional plan will seem a better instrument of implementing national policy if viewed as an instrument of breaking down national policy into a hierarchy of both goals and geographic and administrative levels in a consistent manner – i.e. the "tiering" assumption in its strictest form – but may be seen as problematic in situations where national policy implementation requires considerable local adaptation and knowledge.)

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animals", "small animals", "animals belonging to the Emperor of China", "animals painted with a fine brush" etc.

Conclusions – identification of research issues

Tuija Hilding-Rydevik, Nordregio, Stockholm, Sweden

The workshop contributions presented here and the discussions held during the two-day Nordic SEA workshop, 11-12 February 2002 provided valuable contributions to the formulation of some important issues that need further study. The R& D issues put forward reflect both the perspective of national officials and researchers on the need for FoU in the field of Strategic Environmental Assessment and also in relation to implementation of EU directive 2001/42/EC: *On the assessment of the effects of certain plans and programmes on the environment*.

The aim of the workshop was to gain an overview of SEA's current status at the national, regional and local levels as regards its legal status, research and development and voluntary efforts in each of the Nordic countries. The aim was also to attain an overview of the status of national government work aiming at the implementation of the EU directive. The various overviews as such provided the background to further discussion on future R&D needs in the area.

In summary the workshop revealed that national SEA experiences were difficult to easily summarize and thus it was difficult to use them as a basis for understanding the implications of implementing the directive. Experiences were not that extensive and they often covered only certain sectors, thus they did not always cover the assumed range of the directive. National overviews of SEA experiences also seemed to be lacking, and there were also difficulties in discussing experiences in relation to the directive, and also with regard to the vagueness of the directive's range in respect of what will actually be included in each national context. Another problematic area contributing to the difficulty of such discussions was the perceived relation between Sustainable Development and the EU directive. It was therefore not possible to come to grips with the issue of the EU directive's contribution in this respect. In Finland for example it was felt that national legislative SEA demands, already in place, were wider in range when compared to the directive. Thus the question being discussed in Finland relates to whether they should adopt the narrower EU directive approach or keep their own SEA legislation. From a Swedish point of view it was argued that many municipalities now undertake a very modern and innovative environmental planning approach in respect of the desire to contribute to sustainable development and in this light, that implementation of the directive may actually be a step backwards.

The written and oral contributions and the workshop discussions made a substantial contribution to highlighting a number of important issues for further SEA R&D. The complexity and range of issues that need to be highlighted as part of the EU directive's implementation were thus usefully identified. The workshop also highlighted that the SEA research in many respects seems thus far, in spite of all international R&D material produced, in need of development. The need for empirical studies and theoretical development was thus strongly stated.

It also became evident from the workshop that the research field of SEA and the national administration and government would benefit from the compilation of a

systematic overview of existing national SEA experiences. Moreover, the need for an increase in the number of empirical studies was also highlighted. All this needs to be done in relation to wider considerations of what constitutes a planning practice that promotes Sustainable Development, what changes does this imply compared to the current situation, and what implications does this have for the implementation of the EU directive. Another conclusion from the workshop was that SEA research has thus far contributed primarily to the attainment of a rather general understanding of SEA. More research is needed, at least in the Nordic countries that enhances the understanding of national contexts and in particular is focussing on what kinds of inherent prerequisites follow from these in relation to implementing SEA and in particular, to implementation of the SEA directive. The special features of, and differences between the Nordic countries were easily detectable during the workshop presentations and discussions. In spite of such differences however, mutual issues in need of further study, and interesting discussion points were raised. Some of the issues put forward were as follows:

- *Defining contexts and SEA*

Internationally, there seems to be no ambiguity concerning the need to adapt SEA implementation to national, regional and local contexts. This implies that it is not meaningful to develop global general and particularly detailed demands on the SEA process and documents such as have been done in relation to EIA. Does this then have implications for the Nordic countries? The very broad existing context for implementation of the SEA directive relates to the political goal of achieving Sustainable Development, and changing planning practices in different fields and sectors in order to further promote SD. The other time-sensitive context is that the EU directive must be implemented before a certain date. The Nordic countries need to consider if and how these goals can be united in order to support policy in different fields. In order to make the coming SEA processes "added value"' rather than merely making them an administrative burden, it is of huge importance to enhance national understandings of national legal and administrative cultures and institutional peculiarities etc as a basis for designing legislation and connected guides. Considering the recurring experiences, already documented, of ineffective implementation with regard to EIA, the need to better understand the contexts for the effective implementation of SEA are thus crucial. This knowledge is still however to be systematized in the Nordic countries in relation to SEA. Understanding of ones own system is thus also enhanced by the mirroring of those national systemic characteristics in descriptions and discussions of other systems and experiences.

- *Issues directly relating to the EU directive*

A basic understanding of the implications of the directive is still not well developed. Moreover, the Nordic countries have not yet come to grips with the range of the directive in respect of which plans and programmes will actually be encompassed. In Iceland for example it seems that the directive will not affect agriculture and fisheries at all, and the energy sector will only be affected to a small degree. Plans and programmes in land use planning and transport will however be included in the implementation of the directive.

The EU guide on the implementation of the directive will however undoubtedly help to clear up some of these outstanding issues. Finally, from a Nordic perspective it was

suggested that the issues of screening and of significant environmental impacts would be important issues to focus on in a mutual Nordic context.

- *Issues related to the SEA process*

As regards the SEA process, its possible parts, the analysis of impacts etc a number of issues were raised: integration or not of the SEA process in connecting planning and programming processes, screening (the assessment of whether a plan or programme needs to go through an SEA process), scoping (the process of deciding on the range of issues to be covered in the SEA process), producing and assessing alternatives, the role of environmental indicators, how meaningful and/or useful impact assessments can be designed and conducted, which methods are useful, which impacts are useful to analyse in different planning and programming contexts and which are not, which professionals are best suited to work with the impact assessment, public participation issues, how does one monitor the impacts of plans and programmes and for how many years, what is to be monitored, how to deal with the idea of tiering (if and how different planning and programming levels and the connected SEA work can be connected in order to minimize double work) and what are the needs with regard to education and training as part of the implementation of the directive.

Each of the issues above contains its own set of complex of issues and problems and as such, each issue contains important elements of the jigsaw of SEA implementation. Each of these were discussed to some extent at the workshop but given space and time constraints they will not be further elaborated upon here. Each of these elements though can provide the basis for the formulation of future R&D projects. Issues that are important to highlight in this context are those concerning integration, scoping and the actual assessment work.

The EU directive leaves open the possibility of SEA being fully integrated with the planning- and programming processes that will be encompassed by the directive, or letting it remain as a separate process. Moreover, it was also stated at the workshop that projects dealing with the integration question would benefit from exposure to research for example concerning policy analysis, planning, organizational learning and discourse analysis.

Another issue that was discussed at the workshop was the role of separate or integrated documents in the process. What are the impacts on for example effectiveness (for example impacts with regard to decision-making) of choosing either one or the other? And what are the impacts on the planning- and decisionmaking process that can be expected from different implementation models of SEA as a whole? Indeed, is SEA now expected to fit into existing planning practice or should its implementation also contribute to changing practice and planning discourse, and if so, then how?

What is the relevant content for an SEA process and document in different planning and programming contexts? Moreover, how do we design useful scoping methods, and what methods of impact analysis are useful? These are important issues to highlight in concrete case studies where different methods and approaches can be tested and evaluated. The aim of finding alternatives in plan- and programme making is also important. The uncertainties inherent in plans and programmes are often huge and the range of possible alternatives is often, at least theoretically, numerous. How

then does one go about implementing the alternative demand with an "added value" to the plan- and programme work?

- *Standardization, obstacles and professionalism*

The issue of standardization was also discussed. As stated above the importance of context in the implementation of SEA makes it difficult to standardize the SEA procedure. The difficulty of standardisation also relates to the fact that the planning and programming processes are often not easily predicted in relation to content, actors, and the sequence of events etc. The possibility of standardising not the procedure but the actual goals of SEA implementation was also discussed at the workshop. The utility of such an approach was however questioned in the discussions. The workshop discussion concluded that what can be standardized is in all probably only the SEA document. While it was noted finally that the EU directive outlines, in broad terms, the contents of the SEA document.

The potential difficulties that the implementation of SEA can run into were also fully elaborated on. In this regard, the issue of SEA and quality was much discussed. Is it possible to define, in a non-trivial manner, the elements of a successful SEA implementation? And will it be possible in a non-trivial manner, also to define what constitutes a good quality implementation? This of course relates to the issue of defining effectiveness criteria for the functioning of SEA documents, processes and systems. This is an issue that is not satisfactorily resolved in the implementation of EIA. In relation to SEA, effectiveness and quality, the issue of what constitutes a good level of SEA professionalism was also discussed. This of course must be related to different elements of the SEA implementation process, namely, legislation, administration, leading the process, making the assessments etc.

- *Some final issues*

Several of the Nordic countries put forward the regional economic development context as an interesting focus for SEA implementation particularly as environmental issues are new to these arenas, at least in the Nordic countries. The Danish experience of conducting SEA on the national budget proposals was put forward as an interesting SEA implementation case that would be useful to highlight in SEA studies, particularly as stipulation of the need to conduct such an SEA has now been rescinded.

Moreover, it appears that there continue to be significant differences in the Nordic countries as regards the division of responsibilities in the existing national SEA processes. This was consistently put forward as an interesting focus for future Nordic studies.

Continuation

The workshop discussions resulted in a decision to go ahead with more detailed studies on the implications of the EU directive 2001/42/EC: *On the assessment of the effects of certain plans and programmes on the environment* in the Nordic countries. It was expected that this would be done through national written contributions and several workshops during 2002. The results of these will be documented in a Nordregio report to be published in the spring of 2003.