

SEA Forum 2006



IEMA

SEA Report

Institute of Environmental Management and Assessment

Contents

Collection and Use of Baseline Information in SEA	5
Collecting Baseline Information	5
State of the Environment Reports.....	5
Local Co-operatives	6
Regional Information Centres/Databases	6
Boundaries for Baseline Data	7
Being Relevant and Avoiding Duplication	8
Plugging Gaps in Information.....	9
Scoping	10
Trends	10
Using Baseline Information	10
Presentation	11
Monitoring	11
Scoping, Setting Objectives and Consideration of Alternatives	13
Scoping	13
Can Scoping be a One Size fits all Exercise?	13
Setting Objectives	16
Consideration of Alternatives	18
Assessing Environmental Effects in SEA	20
Objectives or Effects Lead SEA?	20
Significance of Effects.....	21
Tiering SEAs and EIA	21
Assessing Significance	23
Who Should Assess Effects?.....	24
Tools Used for Assessing Effects	25
SEA of the Plan or for the Plan?	26
Assessing Cumulative Effects.....	26
Presentation of Effects Information.....	27
Stakeholder Involvement and Reporting	28
Engaging the Public	28
How Interesting is Strategic Decision Making?	28
Education for Strategic Participation.	29
Adapting Participation Programmes to Public Requirements.....	29
Where Engagement remains Difficult.	30
Engaging Statutory Consultees	30
Process Related Issues	31
Time Constraints.	31
Implementing Stakeholder Involvement.	32
Balancing Environmental, Social and Economic Concerns.	32
The Value of Responses to Stakeholder Involvement.	32
Reporting.....	33
Document Size.	33
Document 'Readability'.....	33
Sustainability of SEA Reports.....	34
The Effectiveness of 'Matrix' Approaches to SEA.	35

Foreword

Strategic Environmental Assessment (SEA) has a lot to live up to. With sustainable development being prominent on the political agenda, government bodies at all levels are looking towards SEA to help to ensure that we get the 'right development at the right time and in the right place'¹, not only for the benefit of the environment, but for that of society and the economy as well. The need for an SEA of plans, programmes and policies has been recognised by many for a long time, not least by practitioners in the Environmental Impact Assessment (EIA) field who have found that the degree to which environmental impacts can be mitigated is restricted by the strategic decisions that have led to the specific proposal. If environmental issues are not considered when plans are being developed then there has to be a limit to the effectiveness of EIA in adequately protecting the environment.

Since its formal introduction in 2004 Strategic Environmental Assessment practitioners have been on a steep learning curve. Existing environmental appraisal and environmental assessment practices have had to be adapted to make them suitable for strategic environmental assessment. Practitioners have had the added weight of trying to prevent SEA going the same way as EIA, with the threat of legal challenge leading to a focus on procedures as opposed to the outcome.

The SEA Practitioners Forum was designed to provide SEA practitioners with the opportunity to share their experiences and learning as well as discuss the problems and obstacles that they had come across whilst carrying out SEA's. The intention was that by giving practitioners the opportunity to talk, good practice and common obstacles would begin to emerge, enabling SEA practice to take further steps along the path towards maturity.

This report documents the discussions that took place at the SEA Practitioners Forum and attempts to pull out those lessons that have been learnt and good practice principles that are emerging from current practice. I hope that it will be of value to all who are involved in SEA practice, whether or not you were able to attend the forum.

The SEA Forum is anticipated to become a regular event in the IEMA calendar and I urge anyone involved in SEA who wants to learn more about current practice and contribute to the development of good practice to join us at future events. Keep an eye on our website for details of future events <http://www.iema.net/conferences>.

Claire Pettit

Technical Team Leader, IEMA

¹Department for Communities and Local Government, (2005) Planning Policy Statement 1: Delivering Sustainable Development.

Acknowledgements

The Institute of Environmental Management and Assessment (IEMA) gratefully acknowledges the knowledge and opinions contributed by all the delegates who participated in the workshop discussions at the 2006 SEA Forum. The IEMA would particularly like to thank the following delegates who facilitated the discussions and the IEMA staff who recorded the discussions to form the basis of this report.

Facilitators:

Professor Barbara Carroll MIEMA, CEnv - Enfusion Ltd.

Dr Alan Bond - School of Environmental Sciences (UEA).

Mr Josh Fothergill AIEMA - Environment Agency.

Ms Linda Brosnan - Islington Council.

IEMA Staff:

Karl Fuller

Claire Pettit

Andy Bailey AIEMA

Richard Meddings AIEMA

Acknowledgement must also be given to Amy Steer (Technical Adviser, IEMA) and the Marketing Team for editing and producing this report.

Collection and Use of Baseline Information in SEA

The collection of baseline information is an essential phase of any SEA. The quality of baseline information has implications for all subsequent stages of SEA including establishing the scope, setting objectives and assessing impacts. A good baseline can support impact predictions especially when they are based on professional judgement. There are a number of problems that SEA practitioners continue to face when collecting baseline information, irrespective of the plan or programme being assessed, these include:

- Finding appropriate information sources;
- Setting appropriate boundaries;
- Ensuring effective use of limited resources;
- Keeping information relevant;
- Avoiding duplication;
- Plugging identified gaps;
- Identifying Trends; and
- Presenting baseline information.

It has been well recognised in the run up to the implementation of the SEA Directive that initially the collection of baseline information was going to be problematic. In the past there have been few requirements for monitoring of the environment and the monitoring that has been taking place has been designed to collect information for a specific purpose and is unlikely to be suitable for SEA in its current form. Common problems include inappropriate spatial and temporal boundaries, inappropriate scale and units of measurement. Sometimes the information available is too detailed making it difficult to keep the baseline strategic. The implications of this for the inaugural round of SEAs include gaps in baseline information, insufficient information to identify trends and the inclusion of irrelevant baseline information. Some Environmental Reports have been described as document dumps, with information being included purely because it is available.

Collecting Baseline Information

The collection of baseline information begins with a desk based study of existing information sources. For social and economic information there are well known and easily accessible data sources. However for environmental information the sources are less well known and data is less freely available. There is also an issue surrounding the use of information collected from the local population. Many see environmental data as a tradable commodity with an economic value. This combined with the numerous sources of environmental data have ensured that the collection of baseline information is a resource intensive process. To try and overcome these issues a number of solutions have been developed including state of the environment reports, local co-operatives and regional information centres/databases.

The local community should also be seen as a source of information and citizens' panels, quality of life assessments etc, can be used both as a means of collecting baseline information and to inform the SEA. The limitations of these approaches must be recognised though. It must be recognised that it is purely opinion rather than measured data.

State of the Environment Reports

State of the Environment Reports are becoming more common place, and whilst the boundaries of these reports may not be appropriate for all plans and programmes, these reports are useful for identifying trends in the baseline and transboundary issues. However, there are recognisable limits to their use and they should be used as one data source of

many rather than as a sole source of information. The Anglian region of the Environment Agency have recently prepared a local state of the environment report containing all environment agency data but presented for regional and district boundaries. It is recognised that the increasing popularity and use of Geographic Information Systems (GIS) makes it much easier to break data sets down to the district boundaries which, in these first iterations of SEA, is the local authorities main interest.

Local Co-operatives

There are two types of Co-operatives that can be established, *intra authority* or *inter authority*. Intra authority co-operatives are established within individual authorities who are responsible for the SEA of more than one plan or programme. For example, a Local Authority may be responsible for a local development framework, a minerals plan or a local travel plan all of which require an SEA. Inter authority co-operatives are established between a number of authorities who are all responsible for the SEA of a plan or programme.

The key benefits associated with these co-operatives include increased resource efficiency and better value for money. Co-operatives reduce the amount of duplication in terms of time spent collecting data, for example, talking to the organisations that hold data, and also in terms of the information collected. Furthermore, co-operations between authorities make it easier to identify transboundary issues because the data collected is for a much wider area than any individual authority would collect.

Whilst establishing co-operatives has a number of benefits for the collection of baseline information, there are also a number of drawbacks associated with them. For example, each authority is likely to have different environmental issues and where the SEA is part of a Sustainability Appraisal (SA) each plan will certainly have different economic and social issues. As such the baseline information that each authority needs to collect is not necessarily compatible. This means the authorities that form a co-operative may have to make compromises.

Regional Information Centres/Databases

Central databases and information centres allow resources and information to be pooled. They have similar benefits to the co-operatives outlined above however their benefits are longer lasting as they can be tied in with monitoring and the information they contain can be kept up to date. There is a desire for the data contained in information centres and databases to be quality controlled however it was recognised that the practicalities of this would be difficult to implement.

The level at which central databases are established is an important consideration. A national database would be very resource intensive to manage and maintain. It would also be unlikely to contain locally relevant information as required in the large number of SEAs that are undertaken on local level plans and programmes. It was suggested that data should be treated like a valuable resource and that authorities should pay for access to it. This money could then be reinvested in keeping the information and data up to date. It is noted that in the marine environment, due to a lack of existing baseline data, the responsible authorities have to pay for the collection of any necessary data therefore this is a given. However, in the terrestrial environment, because there is more baseline data available authorities are less willing and less use to paying for its collection. Whilst practitioners agree that by spending money now they will be saving it in the future, it can often be more difficult to get the plan makers and authorities to agree.

There are a number of regions around the country where information centres are being established, for example, the south west regional observatory and the Lincolnshire Research

Observatory are both establishing record centres. North Ayrshire Council is also investigating whether a record centre would be viable. It was suggested that universities could be used to help set up and maintain regional information centres and databases. This would have the benefit of linking business, higher education establishments and students.

There is also a move towards a national web based information service named IGather. It is a collaboration between the South West e-Gov Group (SWeGG) and Scisys that is funded by ODPM (now Communities and Local Government). It was originally intended as an aid to compiling sustainability assessments but the project has now been expanded. IGather is a web-based information retrieval and visualisation tool that uses GIS to identify geographic areas. IGather contains a data catalogue that supports a number of key indicators and by interfacing with other web services it is able to point the user to existing trusted data sources. It allows users to search, display and download data therefore enabling them to generate boundary specific reports.

Given the problems that have been identified regarding the inclusion of irrelevant baseline information in many SEAs, there are concerns that a central database may exacerbate this problem. Further problems with this approach include potential incompatibility issues which occur because data is collected for a specific purpose and may not be compatible with the needs of every SEA. There are also issues with confidentiality of certain records. For example, in areas where badger baiting is a problem; information on the locations of badger sets does not want to be freely available. Whilst these problems are important there are ways that they can be overcome and providing the centres can be made cost effective the benefits of such systems can outweigh the problems they cause.

Lessons Learnt / Good Practice Points

Find synergies with other plans and programmes. This can be either inter-authority or intra-authority. Identification of these synergies allows common baseline information to be collected and shared with all relevant parties. This effectively reduces duplication and increases efficiency.

Two approaches are emerging as good practice for the collection of common baseline data:

- Local Co-operatives; and
- Regional Information Centres and Databases

Boundaries for Baseline Data

Practitioners have faced problems determining where to set the boundaries for an SEA. For example, should the plan, the district, the regional or the environmental boundary be used? These problems are especially true where transboundary (inter district and inter country) impacts are an issue.

At present it is not clear what boundaries are most appropriate for baseline data collection in SEA. Most practitioners appear to be working to the boundaries of the plan however with environmental media being so fluid there is a big risk with this approach that transboundary impacts and trends will not be identified. The Environment Agency is using GIS to present their environmental data making it very easy to cut the data to the required boundary.

The boundaries for certain environmental issues are especially difficult to set. For example, each county and region cannot possibly dispose of all their own waste, it isn't feasible for each region to have its own refrigerator recycling facility and as such there are a large

number of transboundary issues associated with certain plans especially those that deal with waste disposal making the baseline information very difficult to collect.

Being Relevant and Avoiding Duplication

Given the political nature of many plans that facilitate future development there will inevitably be a political influence on the environmental aspects that are included within SEA. Furthermore, the collection of baseline information is an exercise that has to be done to comply with the Directive. The Directive identifies specific areas, sectors and aspects that must be considered and baseline is generally collected around these issues rather than on issues of importance (see Box 1 below). This is resulting in baseline information being included that is not relevant; it is included primarily because it is available. Therefore it is important that the baseline information collected is constantly reviewed to make sure it remains relevant and necessary to the plan being assessed. Three questions should be asked to ensure that the information included within the SEA is relevant:

- 1). Why is this information here?
- 2). What value does it add? and
- 3). Is it at the appropriate level i.e. is it strategic?

Box 1

The Environmental Assessment of Plans and Programmes Regulations 2004 state that the Environment Report must contain information describing:

The likely significant effects on the environment, including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, on issues such as

- (a) biodiversity;
- (b) population;
- (c) human health;
- (d) fauna;
- (e) flora;
- (f) soil;
- (g) water;
- (h) air;
- (i) climatic factors;
- (j) material assets;
- (k) cultural heritage, including architectural and archaeological heritage;
- (l) landscape; and
- (m) the inter-relationship between the issues referred to in sub-paragraphs (a) to (l).

The most appropriate way of overcoming the problem of too much information appears to be to collect two different levels of baseline information. High level information is collected and used to help scope the SEA. This ensures that the SEA is linked to the established baseline environment and is not entirely objectives based. Once the important issues have been identified then it is necessary to probe deeper into the important aspects of the environment to ensure that enough is known about the baseline to enable accurate impact predictions to be made.

In addition to the above, practitioners are using a variety of methods to determine what baseline information is relevant to SEA, including:

- Identifying what information stakeholders think is relevant;
- Using other strategies and policies;
- Iteration between the scoping and baseline collection stages; and
- Identifying and focussing on the important issues.

It can be difficult deciding at what point enough information has been collected. At present the approach seems to be to stick with the initial scope and if during the impact assessment stage more information is needed then it can either be collected at that point or a requirement placed for monitoring to ensure the information is available for the next iteration of the plan. If a monitoring requirement is made then the limitations of this approach for the impact assessments must be recognised.

In future cycles of SEAs it should be possible to use previous SEAs as a template or basis for the baseline information that has to be collected. As the baseline will change over time it will be important to recognise that whilst this template can form a basis for baseline information collection it will still be necessary to identify any additional important issues that must be considered. For example, the Environment Agency have prepared such a large number of Flood Risk Management Plans that they can identify the majority of the necessary baseline information from previous experience. Any additional important issues that are specific to individual sites can then be identified.

To avoid duplication forward planning is very important. In some cases the EIA baseline information collection process can and has been adapted to allow the information to feed into future SEAs.

Lessons Learnt / Good Practice Points

A two staged approach to baseline information collection can be adopted.

- High level baseline information is collected and used to inform the scope of the assessment.
- Following Scoping more detailed baseline is collected for the important issues.

Plugging Gaps in Information

Currently the resources available to collect baseline information are limited. Therefore it is not possible to collect information on all aspects of the environment where impacts may occur and resources have to be targeted at those areas where significant impacts are thought to be more likely. The problem with environmental issues is that it is not possible to identify with any certainty whether an issue is important until a certain amount of baseline information has been collected and analysed. It is probable that in the first few cycles of SEA there will be gaps in the baseline information because no resources are available to allow baseline information to be collected and analysed. Consequently there may be environmental aspects that have the potential to be impacted upon by virtue of their sensitivity or current status that are not identified in the SEA. Furthermore, once an issue has been identified as being important the timescales for SEA are such that there is likely to be no time or resources available to allow supplementary information to be collected.

It is important that the baseline study be linked to the monitoring requirements. As SEA is an iterative process, the previous baseline information can be used to better target limited resources in future iterations of SEA. It is recognised that in these early SEAs limited

resources mean that not all gaps in baseline information are able to be covered by monitoring and that it is going to take a number of cycles of SEA before a complete baseline is available.

Lessons Learnt / Good Practice Points

- The baseline collection phase must be linked to monitoring requirements. Monitoring should be used to plug identified gaps in the baseline information.
- Resources must be targeted at the most important environmental issues.

Scoping

At the scoping stage it is very important that people from other SEA and Plan Making departments are involved. This will reduce the amount of duplication that occurs in the baseline information collection stage and can also streamline the collection of baseline information. SEA practitioners need to use the advice received from consultees in the scoping stage. At present once an issue is mentioned in the scoping report, practitioners and plan makers don't like to remove it because of the fear of legal challenge. This is resulting in the limited resources available to collect baseline information being spread too thinly across a large number of sometimes unnecessary issues.

It is important to recognise that scoping is never ending process and that SEA is an iterative process. This means that as the scope of the SEA changes so does the nature and scope of the baseline information that must be collected.

Trends

Information on trends is very important in SEA however practitioners are finding it difficult to drill down at a local level to identify trends. In some regions and districts a lot of environmental information has been collected over recent years but no analysis has taken place. This means that a substantial amount of time must be spent analysing the data to see if it identifies any trends. In other regions and districts not enough information has been collected in the past to allow environmental trends to be identified. In these areas there is likely to be a lack of trend information in the short to medium term whilst enough information is collected to allow trends to be identified.

Using Baseline Information

In addition to the documented problems with information collection there are also problems associated with using and interpreting the information that is collected. There needs to be a distinction between information collected on sustainability issues for SAs and environmental baseline data collected for SEAs. In Local Planning Authority Sustainability Assessments environmental issues can and are getting lost amongst the social and economic information.

Transparency is the key to successful SEA. Baseline information should be used to inform the development of objectives and also in the impact assessment stage.

There are differing opinions on whether the baseline should be led by the objectives or the objectives led by the baseline. The majority of practitioners agree however, that ideally an iterative but parallel approach should be adopted which allows the objectives to influence the baseline and the baseline to influence the objectives. At present given the identified inadequacy of the available baseline information and the large number of gaps that are present it is generally the case that the objectives are leading the baseline however over time, as the quality of the baseline information improves, this dynamic should begin to change.

Lessons Learnt / Good Practice Points

- Baseline information should inform the development of objectives.
- Baseline information should be used in the assessment of impacts.

Presentation

Different elements of the baseline information lend themselves to different presentation techniques. One presentation method is not appropriate for all environmental aspects.

There are a number of techniques that are especially useful for presenting baseline data in SEA, including GIS, mapping and tables. Gaps in baseline data can prove to be a particular presentational problem for a number of reasons. For example, when using GIS a blank area on the map does not necessarily mean that there is nothing of importance present it could just mean that no data is available for that area. The same applies for the use of tables. The use of tables is very common in most Environmental Reports however an empty box in a table doesn't necessarily mean there is nothing there, it may just mean that there is no data available. To avoid confusion it is important that all uncertainties and gaps in data are clearly identified. It is important that the sources of all data are provided within the report.

Monitoring

Should monitoring be aspirational or realistic? Should the focus be on the information that is readily available or on collecting information that is difficult to collect? Are we going for the easy options in terms of monitoring and data collection? These are questions that SEA Practitioners are asking. There is not one single correct answer to these questions. Monitoring and data collection must be tailored to the local environment and to those areas and indicators that are likely to be significantly affected by the implementation of the plan or programme. Legally there is a requirement to monitor those environmental aspects and indicators where significant impacts are likely.

It may be possible to tie monitoring of the plan or programme implementation with the Local Authorities Annual Monitoring Report. However, to ensure compliance with legal requirements great care is needed with this approach. This is because the number of indicators that authorities are allowed to monitor and report on is limited.

Monitoring of the plan and the SEA should be tied in together. This will increase the efficiency of monitoring. The amount of monitoring that is proposed will depend on the amount of resources available to the plan/programme maker. As such it is important to identify the key issues and indicators and monitor them. This may mean that all the indicators used within the SEA can not be monitored. If this is the case then the purpose of an indicator should be questioned.

A major barrier that is being faced by practitioners is that responsible bodies are not making the resources available to pay for monitoring. A second barrier being faced is the anticipated lack of value that information collected through monitoring will add to future SEAs. This problem could arise because monitoring can be carried out in different ways. This often results in the data collected being inconsistent and incompatible making transboundary trends and issues difficult to identify. To overcome this barrier it is important that the proposed monitoring links to the baseline information needs as well as the likely significant effects of the plan or programme implementation.

Lessons Learnt / Good Practice Points

Monitoring must be linked to the baseline information needs as well as the likely significant effects of the plan. This helps to justify the resources being spent on monitoring as it will form the baseline for future SEAs.

Scoping, Setting Objectives and Consideration of Alternatives

Scoping

All those involved with environmental assessment agree that scoping is a key stage in the assessment process and that it is important to get it right at an early stage. However, it is also an iterative process that adapts to new information as it is received.

In these early days of formal SEA/SA in the UK, experience of what is likely to be significantly effected by which types of plans and programmes is just developing. Therefore decisions on which issues to scope in and scope out do not have the level of supporting case studies as EIA does.

The SEA Directive (2001/42/EC), the Environmental Assessment of Plans and Programmes Regulations 2004, and the Planning and Compulsory Purchase Act 2004 have introduced the requirement for the environmental and sustainability appraisal of a large number of plans and programmes. A large number of documents need to be produced from the inception of the plan or programme through to its adoption. These documents reflect the many iterative stages of SEA/SA and the requirement for ongoing consultation.

In many cases these plans/programmes are related. Plans and programmes are often tiered, for example the Core Strategy provides the framework for Area Action Plans.

Can Scoping be a One Size fits all Exercise?

A key question is whether each plan/programme necessarily requires its own, stand alone scoping exercise, or whether one over arching scoping exercise is sufficient. This latter approach has been adopted by some practitioners and is being advocated by some Local Planning Authorities and Regional Assemblies. For example the South West Regional Assembly has produced a scoping framework and is encouraging the authorities in their regions to use it. Experience has found this to be a useful starting point but that there are practical difficulties. For example, in order to make the issues relevant they need refining for the individual Local Development Framework (LDF).

There is a distinction between plans and programmes that relate to one LDF (Core Strategy, Housing Strategy, Area Action Plan) or a Catchment Management Plan for example, and those which are separate, such as for individual authorities covered by one Regional Assembly. Where large areas are involved the issues of concern could vary. Conversely as the area to which the plan/programme applies becomes more specific and geographically smaller then some issues become more specific and less generic. Area Action Plans (AAP) are one example. The process can be viewed as somewhere between an EIA masterplan and SEA. The scope can be set with the higher level objectives as a framework but many may be too generic for the AAP on its own without further sub-objectives that are site/location specific.

A tiered approach to scoping is a good idea that has worked well where it has been tried. This involves broader, more generic issues at the higher, more strategic plan levels such as the core strategy or transport strategy. The scope produced at this stage sets a good starting point for scoping the subsequent lower level plans/programmes. The benefits are that it can:

- save on economic and time resources by utilising work already undertaken;

- reduce demands on statutory consultees; and
- help ensure that lower level plans support their higher level drivers.

However, it is not always as simple as it may seem as at this time in the implementation of the requirement for SEA/SA those sectors to which it applies could be at any stage in their development of long term strategies. As such it is not necessarily just a simple case of following a tiered approach commencing with the high level plan/document. The relevant local plans may have been recently adopted and therefore have avoided the requirement for SEA/SA. Where this is the case Area Action Plans may be being prepared without a Core Strategy to guide them. Consequently an earlier more strategic scoping exercise may not have occurred and the scoping process needs to start in the absence of this framework. This problem will be addressed over time as the planning cycle comes full circle.

In many instances it is felt that a core set of generic sustainability objectives could be developed to fit the plan/programme to be assessed. One set would not fit all as certain issues would not be relevant to all plans. For example whilst there are definite links between transport, housing and waste strategies not all sustainability issues will be relevant. South Tyneside has developed a set of objectives that is to be applied to all Local Development Documents and certain Area Action Plans. 'Mini scoping' has then occurred at the more specific stages – this provides an opportunity to revisit the applicability of the more generic scope. Consultation is undertaken to inform the process and maintain transparency and objectivity.

Whilst a Local Authority will need to place their own plans/programmes into the context of the relevant Regional Spatial Strategy they may have their own specific issues. For example, rural and urban authorities face different challenges and need to respond to them in different ways. The scope set at a regional level can form a good starting point for setting the scope for the lower level plans. However they should not just be accepted as a matter of course. Professional judgement should be applied and the scope refined to fit the plan or programme to which it will be applied.

As with any scoping exercise, existing information should be considered. It should not however be used as a substitute for professional judgement. Careful consideration should be given to the reasons why each issue is scoped in, and where relevant, why issues are scoped out. If a previous scoping report has been used to set the scope for a further plan/programme this should be dialogued along with the rationale behind the decision.

Irrespective of what information is used to set the scope, the process should continue to be iterative and adaptability should be maintained. Wherever a new plan or programme is assessed (irrespective of its relationship to other plans or programmes) there is still a need for consultation. This is important not only as it is a legal requirement but also because it provides the relevant bodies (including the public) with the opportunity to influence the scope and ultimately the plan or programme itself.

A highlighted problem that will take time and experience to solve is how to deal with uncertainties and avoid legal challenge in relation to these uncertainties. Local Planning Authorities often adopt a large scope in order to ensure a comprehensive coverage in order to avoid legal challenge. As with EIA the inclusion of a scope that considers issues that could be scoped out as they are unlikely to be significant can result in an overly lengthy process and large reports. This has disadvantages – operational, for the final plan, and the corresponding aim of delivering sustainability. A more focused scope frees up resources that can be concentrated upon the key issues and a focused process and report provides the key information to decision makers and stakeholders. Focused reports are more likely to engage the public – a key facet of delivering sustainability.

A perceived difficulty in setting a realistic scope that involves scoping issues out was the demands from consultees. It is often felt that it is easier to comply with the statutory consultees' requests as this avoids potential objections later on. A common experience seems to be that the list of issues increase with feedback from consultees and that even where reasons are provided for scoping issues out the statutory consultees often disagree. The same issue applies to non-statutory consultees, especially the public, as politics plays a role.

One method of scoping is to start with those issues mentioned in the SEA Directive and apply professional judgement. This list should not be seen as a list of what must be included, but as issues that should be considered. The Scottish Executive advocates such an approach and has produced a series of SEA templates including one for scoping (<http://www.scotland.gov.uk/Publications/2005/10/0794744/47477>).

Consultation can help develop the scope of an SEA/SA from the bottom up and is important in delivering sustainability. Experience suggests that whilst the public have yet to engage with SEA/SA at a meaningful level where they do provide an input it is often not at a strategic level, instead focusing on personal/individual issues. The Environment Agency have adopted the approach of setting aspirational and operational objectives – this focuses the higher level plans on strategic issues. The more aspirational targets are carried forward for consideration at the appropriate level. The Agency does however have the advantage of not being an electable body, and therefore has different political pressures. This approach has the advantage of focusing on key strategic issues at the relevant stage as well as involving stakeholders and considering their issues at the relevant stage.

Another approach to scoping involves examining the baseline information. The problem here is the availability of baseline data that matches the objectives, indicators and targets. This is addressed elsewhere in this report. In Suffolk a book of baseline data is being collated that will be used for scoping. This centralised collection of baseline data within regional/area boundaries will certainly aid the scoping process in the future and, once the first round of plans and programmes has been adopted, the level of baseline data available should have increased significantly (see Report #1 on the collection and use of baseline information). This will of course be driven by the requirement for monitoring. It seems likely that the results of the monitoring will raise new issues resulting in the scoping of further objectives and identifying new gaps in the baseline data. This process does however reflect the iterative nature of environmental assessment.

As more experience is developed in the practical implementation of SEA/SA the scoping process should become more straightforward and accurate. As plans and programmes move through their natural renewal periods it will become more practical to have common scoping frameworks that support wider areas/regions. This makes sense as the purpose of SEA/SA sustainability relates to all levels of strategic planning and the planning hierarchy, as it exists, follows a tiered approach. The assessment should therefore be able to follow a tiered approach.

Lessons Learnt / Good Practice Points:

- A more focused scope frees up resources that can be concentrated upon the key issues.
- Careful consideration should be given to the reasons why each issue is scoped in and, where relevant, where issues are scoped out.
- Existing relevant scoping reports should be considered. They should not however be used as a substitute for professional judgement.
- The scope set at a regional level can form a good starting point for setting the scope for the lower level plans. However, they should not just be accepted as a matter of course. Professional judgement should be applied and the scope refined to fit the plan or programme to which it will be applied.
- Consultation can help develop the scope of an SEA/SA from the bottom up and is important in delivering sustainability.

Setting Objectives

It appears that currently too many objectives are being set. A common problem seems to be that certain objectives are not strategic and that political issues are a factor in their setting. Many objectives also seem to repeat themselves, or to be a variation on a theme. Careful wording of the objectives can help to reduce the overall number of objectives.

The danger of setting too many objectives is that the purpose of SEA/SA could be lost. It is also more difficult to engage in meaningful partnerships with consultees where there is too much information and the level of detail could be questionable. Consultation fatigue is now a recognised problem – the increased requirement for consultation under SEA/SA should not add to this problem by asking consultees to respond to a lengthy set of unnecessary or irrelevant objectives. This will result in a lack of focus from the consultees.

This problem has been highlighted specifically in relation to statutory consultees who have been criticised for a poor response rate. This is a real problem which cannot be solved just by expecting statutory consultees to adjust to the increased requests. Those requesting the information should consider how they can help solve this problem. One suggestion is that statutory consultees could be approached for their comments on the relevant scope of a suite of LDFs at once to make the process more efficient.

Objectives need to be focused at the relevant level of the plan or programme being assessed as well as the area to which they will apply. The objectives selected also need to form a manageable framework, with the outcome of the process being practicable and usable. A good question to ask when considering setting objectives is whether they add to the strategy or not.

In certain situations, SEA is being undertaken for developing plans and/or programmes where there is a high level of uncertainty regarding the scale of future development, the technologies that will be available and the potential effects on the baseline environment. A good example is within the marine environment where marine renewable energy devices (i.e. wave and tidal devices) are in the early stages of development, and there are gaps in baseline data with regards to certain aspects of the environment.

Consultation is currently underway on the scope and content of a Marine Bill. The potential marine spatial planning strand of the Marine Bill may offer some solutions with regards to baseline data issues, but this legislation is currently in very early stages and there are a number of issues to be resolved including the involvement of devolved administrations. As with other plans and programmes, time and process will provide a lot of the answers and

the next round of plans will have more detailed information from the offset. This should result in more robust and sustainable plans in the long term. However, there is a lot of work to be done before this stage is reached.

Marine Case Study

The Scottish Executive has commissioned Metoc and Faber Maunsell to undertake a Strategic Environmental Assessment (SEA) to assess the potential effects from development of marine renewables (wave and tidal energy devices) off the west and north coasts of Scotland. The objectives of the SEA are to:

- assess, at a strategic level, the potential effects on the environment of meeting the Marine Energy Group's 2020 target for establishing 1,300 MW of marine renewable energy capacity;
- advise and support the Scottish Executive in the development and implementation of its marine renewable energy strategy and planning guidance for marine energy development;
- inform the project-level decision-making process for all stakeholders (to include regulator and developer); and
- facilitate focussed investment into the marine renewable energy sector in Scotland.

The above objectives reflect the fact that the marine renewable energy sector is currently in the early stages of development with only a hand-full of pre-commercial scale devices currently deployed in UK waters and many devices still in the prototype stages. The objectives also recognise that the marine renewables industry is currently developing rapidly and that SEA will help ensure environmentally sensitive progression of marine renewable energy development in Scotland.

The scoping exercise for this project has now been completed and indicated that although there is a large volume of existing high-level data available for the study area, there are data deficiencies for certain baseline aspects. These include marine mammal distribution and migration routes as well as a number of gaps in understanding with regards to the effects that wave or tidal device arrays may have on the marine environment. The study area for the SEA is very large and, as such, comprehensive marine mammal surveys etc have been deemed unrealistic as detailed data can be collected as necessary at individual project EIA stages. However, the scoping study did highlight the need for specific studies into the potential environmental effects of device arrays - currently there are a very limited number of single devices deployed in UK waters, but as yet there are no device arrays which can be used to provide an indication of the effects. These specific specialist studies will make use of available information from single devices currently in deployment and parallels with other marine developments in order to help predict the nature and scale of effects associated with device arrays.

One method of keeping the list of objectives to a manageable level, that still reflects the key sustainability or environmental issues, is to keep the objectives generic and to select indicators that reflect a greater level of detail.

The Scottish Executive SEA templates suggest considering at the scoping stage whether the plan or programme being assessed is likely to affect the listed objective or not. This seems a

reasonable starting point and supports the conclusion that each objective should be examined carefully to determine its relevance to the actual plan or programme being assessed.

Lessons Learnt / Good Practice Points:

- Currently there appears to be too many objectives being set, certain objectives are not strategic, and many seem to repeat themselves, or to be a variation on a theme.
- There is a danger that in setting too many objectives that the Strategic in SEA could be lost.
- Objectives need to be focused at the relevant level of the plan or programme being assessed as well as the area to which they will apply objectives selected.
- Keep the objectives generic and factor greater level of detail into the indicators.
- Careful wording of the objectives can help to reduce the overall number of objectives.
- The selection of objectives should result in a manageable and practicable framework.

Consideration of Alternatives

One approach to the initial selection of alternatives within local authorities is to hold internal workshops and brainstorming exercises. This is a good starting point but does have problems, including how willing and able local planning authorities are to suggest alternatives. The amount of guidance available and the number of policies that must be addressed can be seen as restricting the number and type of alternatives that can be suggested.

As other consultees, especially the public, are not as aware of guidance or other policy requirements/objectives their imaginations are less restricted and their contributions can be more creative. Experience has shown that consultees are very prolific at suggesting alternatives. However, the alternatives suggested are not always realistic or strategic enough for the plan or programme being assessed. It is also questionable as to whether they are involved early enough in the process to be effective. This creativity is something that should be harnessed.

For sectoral SEAs the EA's experience is that design engineers often suggest what they see as the solution to the identified problem and no real alternatives.

The experience of many consultants is that the alternatives that should be considered are dictated to them. Some consultancies challenge this by posing difficult questions to clients in an attempt to generate other alternatives and provide reasons for their selection. It would be useful for consultants to be involved in the selection of alternatives as often the political motivations and agendas become more apparent. If these motivations and agendas are known and understood, attempts can be made to ensure that they do not influence the assessment process.

Generally alternatives tend to be spatial, i.e. housing must be built, the question being- *where* will it be built? Other alternatives should be considered, for example what type of housing, and will refurbishment of existing, run down properties deliver the need?

The different alternatives considered often have conflicting impacts upon the different objectives of the plan or programme. A question exists as to whether it is the role of the SEA/SA, or the consultant undertaking it, to determine which the preferred or most sustainable option is. Consultants should make recommendations based upon the findings of the assessment. However the actual decision should be made by the plan maker and not consultants. The purpose of the SEA/SA is to provide the relevant information in order to inform the decision making process. The process of resolving these conflicts and balancing

the advantages/disadvantages of each alternative against the set objectives should be transparent and the dialogue documented.

Lessons Learnt / Good Practice Points:

- Internal workshops and brainstorming exercises are good starting points for developing a list of alternatives.
- The amount of guidance available and the number of policies that must be addressed can be seen as restricting the number and type of alternatives that can be suggested.
- Experience has shown that consultees are very prolific at suggesting alternatives. However, the alternatives suggested are not always realistic or strategic enough for the plan or programme being assessed.
- The experience of many consultants is that they are dictated the alternatives that should be considered.
- Alternatives should not only be spatial.

ACKNOWLEDGEMENTS:

- Miss Rachel Donnelly, Metoc plc for the contribution of the Marine Case Study; and
- Dr Alan Bond.

Assessing Environmental Effects in SEA

The assessment of effects in SEA continues to be a problematic issue. Common problems include:

- Describing effects relating to the achievement of objectives, rather than identifying the effect on the baseline environment;
- Identifying and evaluating significance; and
- Presenting environmental effects information.

Considerable work is required before good practice in each of these areas is well defined, but the experience of practitioners is beginning to identify some key lessons.

Objectives or Effects Lead SEA?

Government guidance has a significant influence on how SEA is conducted. Whilst collectively Local Authorities are producing the greatest numbers of SEAs, individually the experience and knowledge within each authority is at a relatively low level. This coupled with the prospect of legal challenges (given the experience with Environmental Impact Assessment), means that most local authorities are closely adhering to government guidance. In line with the guidance, the assessment of the effects of a plan is primarily focused on the effect on the objectives of the SEA. This presents few difficulties if the objectives are derived from and closely reflect the baseline situation (including trends in environmental conditions). However, where the objective is not oriented to reflect the baseline situation it is possible for the assessment to omit a consideration of the actual environmental effect. Where this occurs there is the potential that an SEA would not fulfil the requirements of the SEA Directive (to assess the environmental effects²) and therefore could be open to legal challenge.

A good practice approach is to ensure that the objectives for an SEA and the associated indicators are derived from the baseline information. This requires consideration being given to how the objective and the indicator should be tailored to fit with the specific context of the plan and the area covered by it.

Notwithstanding the need for objectives and indicators to reflect the baseline, the assessment of effects should include an assessment against the baseline as well as the objectives. This should take into account any trends in environmental conditions and whether the baseline conditions are likely to change in the future. Such an assessment will often provide the rationale for assessment.

Lessons Learnt / Good Practice Points

- Care should be taken to ensure that the SEA objectives, targets and indicators are derived from and reflect the baseline conditions – this reduces the risk of the assessment failing to consider the environmental effects of the plan.
- Effects should be assessed against the baseline conditions as well as the objectives of the SEA. Any trends or likely changes in the baseline should be taken into account.
- The assessment of effects should describe how the plan would influence the baseline, if the option were to be implemented. Examples of three different approaches to describing a strategic effect:

² Article 5 (1) and Annex I, Directive 2001/42/EC of the European Parliament and of the Council of 27 June, 2001 on the assessment of the effects of certain plans and programmes on the environment.

- Ineffective Practice – Positive – this option will promote the achievement of the objective “To enhance and maintain the water environment”.
- Better Practice (qualitative) – Positive – this option is likely to reduce water demands in the west of the plan area, reducing demand on the vulnerable aquifer.
- Better Practice (quantitative) – Positive – this option is likely to reduce water demand in the west of the plan area by 10% (50,000 litres / day) within five years of the plans implementation, thus reducing demand on the vulnerable aquifer.

Significance of Effects

The predominant method used to predict effects is professional judgement. Given the strategic nature of the exercise most practitioners consider this to be appropriate. Nevertheless, there is potential for this to cause difficulties and disagreements on the significance of effects. Furthermore, where there are very few practitioners that are responsible for undertaking the assessment they feel constrained in their freedom to dismiss some issues and / or effects from a detailed assessment, conscious that other stakeholders may have a different opinion to them. There should be a clear distinction between the prediction of effects and the assessment of significance. Whilst the former can be based to some degree on objective evidence, the latter can be regarded as a political process for which the judgements are likely to alter depending on who is involved. In an ideal situation, a range of stakeholders, including statutory consultees, should be involved in the assessment process. In practice this will often not be feasible and therefore the importance of describing the underlying rationale for the assessment of effects is critical.

The assessment of all policies or aspects of a plan against all objectives, or baseline information, can give the impression that all of the effects are significant to some degree. This approach can be unwieldy and reduce the influence the SEA has on decision making. Scoping out issues against which a policy is to be assessed can be politically difficult, particularly in the context of a Local Authority. Nevertheless, some approaches that have been successful in streamlining the assessment are:

- Agreeing significance criteria at an early stage to provide an objective basis for scoping out some issues at the assessment stage;
- Undertaking a two stage assessment to first determine if an effect is likely to occur and then evaluate whether the effect is significant, in relation to the agreed criteria;
- Assessing broad policy themes against all of the issues (effects / objectives), but considering the relevance of an issue to more specific policies before following through with the assessment, thus some issues are scoped out at the assessment stage;
- Maintaining some form of dialogue with consultees and stakeholders to agree to the scoping out of some issues; and
- Making a distinction between issues that are significant at the plan level, rather than other levels, e.g. project level. This can be achieved by focusing on those issues that are likely to affect the decisions relating to the plan (see SEA of Humber Estuary Flood Defence Strategy).

Tiering SEAs and EIA

If some effects are considered to be more appropriately addressed at another level of SEA or EIA, this requires an effective tiering structure for the various assessments. This has the benefit of making each SEA more manageable and able to focus on its own significant effects.

For local authorities the different local development documents can have different impacts and should be scoped separately. A core strategy can be of such a strategic nature that it is impractical to assess some of the impacts with any certainty at this stage and they are better 'passed down' to the SEA of other Development Plan Documents or Supplementary Planning Documents.

Tiering SEAs and EIAs does include risks. Some issues may be passed to a lower level SEA or EIA based on the assumption that mitigation or enhancements can be delivered to address them. In the absence of these assumptions being realised, it may be necessary to push the issue back up the decision making hierarchy as a different strategic decision may have been taken under these circumstances. However, the timing of SEA/EIA and the process of strategic decision making may not always allow for this.

A second, more significant, risk concerns the ownership of the assessment. So long as the lower level assessments are in the same ownership as the higher level SEA, it is relatively easy to ensure that issues that are 'passed down' are picked up by the lower level SEAs or EIA. Where the ownership of the assessment changes there can be no guarantee that the issues will be picked up, or will be addressed in the way assumed by those responsible for the SEA, at the time the issue was 'passed down'. For example, for the Environment Agency, passing issues down from an SEA of a flood management strategy to an EIA for a project that is a component of that strategy is straight forward as the Agency retains the ownership of the project EIA. In contrast, for a local planning authority the EIA is likely to be in the ownership of the private developer and the issues may not be addressed in the way desired by the authority. While they would have some influence on the way the issues are addressed, they do not have control.

Even where control of the lower level assessment is retained, other external factors can influence the way the components of the strategy are delivered, including adequately addressing the issues that have been 'passed down'.

Lessons Learnt / Good Practice Points

- Utilising SEA mitigation within the Environmental Report to promote additional policies within the Final Plan that set out a requirement that the mitigation is undertaken.
- Ensuring SEA monitoring activities include the monitoring of mitigation set out in the Environmental Report. Where mitigation is not being undertaken this should be highlighted through annual monitoring activities to allow decision makers the opportunity to enhance the requirements set out in the plan.

SEA of the Humber Estuary Flood Defence Strategy

The Humber Estuary has a catchment area equivalent to 20% of the land area of England. 300,000 people reside in the flood plain and major industry and ports are present in the area. The Estuary is designated as Special Protection Area under the Birds Directive, a possible Special Area of Conservation under the Habitats Directive and a Ramsar Site.

An SEA was undertaken for the flood defence strategy for the Estuary. A list of nineteen environmental and social objectives were developed, but during the SEA process these were reduced to seven objectives on the basis that “they were not all significant at the strategic level in the sense that some were not critical to option/strategy appraisal.” The likely effects of the strategic options were identified and some had a level of uncertainty associated with the predictions. The SEA report acknowledged the uncertainties and identified the information requirements to address them. Where the effect was not considered to be of strategic importance, i.e. it was unlikely to significantly influence the selection of the preferred option compared to other factors, the environmental risk was passed down to the project level EIA. The result was an SEA tightly focused on just a few issues that were considered to be important in the context of the strategic decision to be taken.

The use of tiering can imply that local issues should not be addressed by an SEA. This may be appropriate where the issue is genuinely localised. However, often a local issue will be a symptom of a wider environmental problem and it can be appropriate to address the local problem at a strategic level. For example, a number of localised air quality problems may be addressed by an SEA for a transport plan.

In some circumstances, a failure to consider local issues at the strategic level can lead to later difficulties with lower level assessments. For example, the siting of controversial projects is likely to be more successful if a rational approach to the locational decisions can be demonstrated at both the strategic and the local level.

Assessing Significance

The experience of some statutory consultees and practitioners is that the significance of effects is not adequately addressed within SEAs under current practice. All effects are being reported on and those that are significant are not being adequately differentiated. There is also a perception that the significance of effects is often overly influenced by particular interests involved in the assessment process or can be a product of issues that happen to be topical at the time.

A more structured means of assessing significance is often lacking, but two proposed approaches have proved to be helpful. Significant (positive or negative) effects can be considered to be:

- An effect that can influence the decision – thus effects of the plan that are not likely to alter the decision should be passed down to a lower level of assessment. This definition might be considered to be in line with fulfilling the requirements of the regulations.
- An effect that requires action – and therefore would result in a change to the plan and / or the implementation of mitigation and monitoring measures. This definition might be considered to be more consistent with SEA as a tool for environmental protection.

Some authorities, when assessing the significance of effects, attempt to come up with an overall assessment of the significance of the impact of the plan. Most practitioners strongly oppose this approach. Such an assessment involves a trade off between positive and negative effects and can be used to ‘gloss over’ the negative effects of the plan. This

approach is particularly problematical when social and economic positives are traded off against environmental negatives. In addition to being methodologically unsound, this approach could be regarded as undermining the purpose of the SEA Directive; to ensure that environmental effects are taken into account in decision making. Some practitioners take the view that an SEA should remain separate from SA to maintain transparency regarding the environmental effects of the plan. Others point to the fact that the effects that are required to be considered by the SEA Directive are not all environmental (population, human health, material assets) and therefore the SA approach has the advantage of giving due consideration to these.

One approach that has been used to assessing the significance of the effect of the plan as a whole is to apply *ecological foot printing* to assess the overall effect of the plan. This may not eliminate all of the disadvantages referred to above, but does focus more on the environmental sustainability of the plan as opposed to trading off environmental, social and economic effects. Conversely, others may argue that, in the context of an SA, these over emphasise the role of environment over social and economic factors.

Who Should Assess Effects?

In an ideal situation, a range of stakeholders, including consultees, should be involved in the assessment process. In practice this will often not be feasible and therefore the importance of describing the underlying rationale for the assessment of effects is critical. In these circumstances, gaining agreement of stakeholders on the approach to be used for the assessment of effects at an early stage has distinct advantages and reduces the perception of any partiality in the conduct of the assessment. Nevertheless, where practitioners have attempted to engage stakeholders in the assessment process, the experience does appear to have been positive. There can be difficulties in getting the stakeholders to remain focused on the strategic nature of the assessment and getting them to agree on a judgement, but there is considered to be an overall benefit in gaining a wider range of views.

The requirements of the SEA Directive have placed overwhelming demands on the statutory consultees. Many have very few resources to address the range of SEAs for which they receive requests and therefore they have to be selective in the ones that they respond to. Some practitioners report that they receive text book responses from the statutory agencies and they are not confident that they have read and understood the environmental implications of the plan or the SEA/SA report. This is a concern where the judgements contained within the report may have been made by an individual or small group of people and the statutory agencies are being relied upon to identify any obvious mistakes or misunderstandings.

One approach to mitigating this problem is to arrange meetings with the statutory consultees. At these meetings the authority/consultants can explain the plan, the assessment of effects, and invite a verbal response at the meeting. These meetings can also be used to invite the consultees to identify the main opportunities or enhancements that they believe the plan should include.

The involvement of stakeholders at the assessment stage will not usually involve the public. This is mainly a result of a reluctance of the public to become involved in strategic decision making.

Stakeholder involvement in appraising options

Two workshops were held in February 2006, for different plans in similar geographical areas. The first, held in the morning, addressed policies whereas the afternoon meeting focused on the strategy (programme level). Both were at the options appraisal stage and delegates were asked to participate in the options appraisal by workshop-style activities. Two follow up meetings were held in May 2006, again in the morning and afternoon, to present the results of the options appraisal. Although the processes were similar, the feedback was very different.

Policy level - attendees felt the two stage process was an effective way of conducting a fully participative consultation exercise where stakeholder views transparently influenced the outcome.

Plan - delegates at the first workshop felt that there was insufficient detail on the proposals and asked the plan makers to come back when more details and decisions on preferred suggested options were available.

These two case studies demonstrate that

- No one procedure satisfies all personal preferences - the methodology of consultation for that particular plan and those particular consultees should be agreed at the start of the process; and
- the level of the plan in the hierarchy could influence the consultation process (e.g. the programme level is getting close to projects and the temptation is to wait a little longer so that fully detailed comments can be made, i.e. project level consultation is easier than strategic. Whereas policy is sufficiently distant from project proposals for stakeholders to be able to think more strategically).

Lessons Learnt / Good Practice Points:

- Think about the assessment of effects at an early stage. This will influence the nature of baseline information that is gathered and can provide an agreed basis for scoping out some issues at the assessment stage.
- Keep the SEA relevant to the strategic level and do not attempt to address issues that are best dealt with at the project level, but do identify a mechanism for ensuring that these issues are picked up by the EIA.
- Scoping is not an isolated activity, but continues into the assessment process. Practitioners should consider scoping out issues at the assessment stage whilst being transparent about the reasons for doing so.
- Tiering can be used as a means of keeping an SEA focused on the important strategic issues and is most effective where the authority has control of the different levels of assessment
- The SEA should not include an overall assessment of the significance of the effect of the plan as a whole.
- Positive social and economic effects should not be traded off against negative environmental effects.

Tools Used for Assessing Effects

Information on the use of tools for assessing environmental effects in SEA is sparse. Professional judgement is by far the predominant method and most practitioners do not perceive this to be a problem, provided that those making the judgement have the

appropriate experience and that a range of interests are taken into account. In line with Government guidance, matrices are the primary method used for administering and presenting the assessment of effects. These can be complex and the sheer size of them can make the information on environmental effects difficult to assimilate.

Practitioners do recognise that the use of professional judgement, in isolation, can tend to hide or gloss over negative effects and there is still a role for more quantitative methods. These can, however, be misleading as they often include a significant element of professional judgement that is hidden within the quantitative approach.

Reasons cited for the lack of use of more sophisticated tools are:

- Lack of experience;
- Lack of resources;
- Lack of time;
- Limited information on techniques available, the context in which they should be used and on what works well and what doesn't; and
- SEAs tend to be undertaken by generalists who are less likely to have detailed knowledge of any impact specific tools that might be applied to SEA.

Sources of information:

- www.sea-info.net
- www.environment-agency.gov.uk

SEA of the Plan or for the Plan?

SEA is regarded as a positive development in improving the environmental performance of plans. However there is some concern that it is not being effective in influencing plans to the degree that it should be. An iterative relationship between the plan and the SEA should exist, but the experience of practitioners is that this is, at best, limited. Rather, the SEA is tending to respond to the plan, but there is less evidence of plans responding to the findings of the SEA. Time and money are regarded as being significant constraints. This is coupled with the fact that many practitioners are still gaining an understanding of how the process works, while making sure that they comply with the Regulations and guidance and minimise the risk of legal challenge.

A clear challenge for 'second generation' SEA is to be more effective in altering the plan and for plans to be more effective in addressing the environmental problems that exist in a location.

Assessing Cumulative Effects

One of the often quoted benefits of SEA is the ability to identify and address potential cumulative effects. Whilst this is theoretically true, the experience of many practitioners is that SEA is falling short of delivering on this benefit. When dealing with local development documents, the sheer number of policies that are assessed against a range of objectives results in the volume of information being too great to effectively identify and assess the cumulative effects.

Some authorities attempt to sum the range of positive and negative effects of a plan to determine the overall effect of the plan, but most practitioners consider this to be inappropriate.

Geographical Information Systems (GIS) can be a useful tool to assess spatial aspects of cumulative effects. This is used as a technique for marine based SEAs, but there are few examples of it being used by a local planning authority. Time and resource issues are the major constraint on more widespread use.

In the absence of wide spread guidance on assessing cumulative effects authorities should take a systematic and transparent approach to this aspect of the assessment.

Lessons Learnt / Good Practice Points:

Cumulative effects are inadequately addressed at present within most SEAs. There is an urgent need for practical advice on how cumulative effects can be addressed within SEA.

Presentation of Effects Information

SEA reports are considered to be dry documents that are often difficult to read. Practitioners consider that there is scope for considerable improvement in the presentation of environmental effects information. Wider use could be made of mapping information on effects. Comparisons were made with the mapped information relating to climate change scenarios. A similar approach could be applied to some environmental effects to map various effect scenarios (best, medium and worst case). Some environmental effect information is less appropriate for mapping and this would result in an inconsistency in the way information was presented to the public.

There are inconsistencies in whether environmental effects information is presented with the mitigation measures taken into account. While assuming the mitigation measures are in place can be reasonable there are a number of reasons as to why it is often more appropriate to present the effect information, mitigation and residual effect separately:

- SEAs, by their nature, have more uncertainty associated with them and consequently with the degree of success of any mitigation measures.
- Transparency on the thought process the practitioner has gone through to identify the appropriate mitigation is important.
- Mitigation needs to be widely understood, accepted and practical. If any of these criteria cannot be met then it is better that effects without mitigation are presented.

Effects that are predicted at the strategic level are likely to have a degree of uncertainty associated with them. However, this uncertainty is infrequently communicated within SEA reports. There is a need for practitioners to be more transparent about uncertainty within the assessment, whether related to predictions or the effectiveness of mitigation measures.

Stakeholder Involvement and Reporting

Communication issues in SEA centre on the involvement of stakeholders in the process and the reporting of the information on the likely effects of the plan. Both are requirements of the SEA Directive. The experience of practitioners indicates that this is one of the most challenging aspects of undertaking SEA. Many have experienced problems in engaging stakeholders or implementing effective communication through the environmental report. Issues considered important by practitioners fall into the following categories:

- Engaging the public;
- Engaging statutory consultees;
- Process related issues;
- The value of the response from stakeholders; and
- Reporting on the SEA.

Engaging the Public

How Interesting is Strategic Decision Making?

One of the key difficulties experienced by practitioners is engaging stakeholders, particularly the public, in strategic decision making. In contrast to an EIA for a specific project in a specific location, the public are perceived to find it difficult to relate to strategic issues, understand how it affects them personally and consequently understand why they should become engaged in the process.

Exceptions to this general experience are issue specific policies or plans that include components that address a controversial issue. Issues of waste management, particularly incineration, and controversial transport plans are prime examples. Therefore, even where there has been more success in engaging the public, their response may be concentrated on relatively few aspects of the plan and may not explicitly consider the environmental effects addressed by the SEA.

When considering the approach to stakeholder involvement, it is important to define what constitutes success for a public engagement programme. The number of 'flyers' produced or distributed may constitute statistical evidence of a wide ranging public involvement programme, but may have resulted in a relatively small number of people being actively engaged in the process (how many read the leaflet? How many made subsequent enquiries? How many threw the flyer in the bin (or preferably the recycling)?). Similarly, the number of comments or objections received may not be an adequate measure, but simply a reflection of the controversy of the plan or a component of it. A more meaningful measure of success of a public involvement programme is likely to be the number of people actively engaged in the process.

Whilst engagement is an ongoing problem, practitioners have proposed and attempted a range of initiatives designed to address it. These comprise:

- education for strategic participation;
- adapting participation programmes to public requirements; and
- measures to adopt where the difficulties in engagement cannot be overcome.

Education for Strategic Participation.

Many public consultation programmes related to SEA are 'dumped' on the public. In a culture with relatively little experience of involvement in strategic decision making processes it is perhaps unsurprising that they find it difficult or alien to adapt to its demands. Some practitioners suggest that there is a need for the public to be educated on how and why they should be involved in the process. There is little doubt that this is required on a generic basis to assist the public in being more receptive to such programmes, but could also form the initial phase of a programme related to a specific SEA. Education of the public should focus on raising awareness and public understanding of the process and the importance of the plan. One method of achieving this might be by painting scenarios of how the area related to the plan could appear in 50 years time depending on the decisions taken. This approach will require the investment of time and effort at the early stages of the plan, but it will help the public to understand where they fit into the process and how they might affect it. This investment in time in involving the public early could result in savings in time at later stages as those involved will understand the process. Early engagement should also result in a wider acceptance of the process and the decisions that result from it.

Adapting Participation Programmes to Public Requirements.

Much of the consultation related to SEA is undertaken at a time and in a form that is convenient to those responsible for the SEA. More success appears to be achieved where practitioners take some time to communicate information in a form that is convenient and understandable to the public. Examples include:

- Presenting information in a format that is palatable to the public;
- Consulting on single issues rather than all issues at the same time;
- Mapping different audiences to the issues covered in the plan and focusing consultation on those groups that are most likely to be interested in any particular issue; and
- Linking consultation to other events or groups which the public are already interested in.

Online consultation may also offer significant opportunities, though care must be taken to ensure that this is presented in an accessible format. Online consultation is unlikely to be successful in isolation. The public is unlikely to know that they are being asked to engage in the process unless they are being made aware of the opportunity via some other medium. A focus on online consultation is also open to the charge of being unrepresentative as it is targeting the literate and, particularly, the computer literate section of the community. The use of non traditional media for consultation can include the radio, posters, bus and bus stop advertisements and the like.

Other techniques to make it easy for stakeholders to participate can be employed. For example, where representatives of stakeholders are invited to participate it may be appropriate to offer to pay for expenses to attend the meeting. Those responsible for the development of the plan or undertaking the SEA may not be the ideal people to be responsible for conducting the stakeholder involvement programme. A greater level of response may be achieved by organisations that are considered to be independent of an authority and perceived to be less part of the establishment and have fewer fixed ideas as to the content of the plan.

Maintaining engagement is as important as achieving it in the first place. Feedback is critical to demonstrate that participation is valued and is having an effect on the content of the plan. Even where it is not possible to respond positively to inputs to participation it is better to explain why than to be silent on the matter. Maintaining contact with participants on the conduct of the process will encourage participation in later stages or future SEA processes.

Where Engagement remains Difficult.

There is no one recipe for success in engaging the public and despite the best efforts wide ranging or in depth participation may be difficult to achieve. For any participation programme it is good practice to maintain an audit trail of the steps taken to achieve involvement and the levels of participation achieved. Copies or records of organisations consulted, receipt acknowledgements for email campaigns, statistics for web site hits can all contribute to this.

Organisations can be easier to engage than individuals and it may be appropriate to use these as proxies for groups within a community. However, care should be taken to ensure that the organisations are representative and that elements of the community have not been marginalised by this approach.

Nevertheless, significant progress can be achieved by the identification of organisations that represent particular interests relevant to the plan. For example, wildlife groups are likely to have an interest and can make a valuable contribution on the effects of the plan on flora and fauna.

Lessons Learnt / Good Practice Points:

- Define how success for your stakeholder involvement programme should be defined.
- Consider how to educate the public of the importance of becoming involved in the plan making and SEA process.
- To better engage the public, identify a form of communication that is more convenient and understandable to them.
- Ensure that your stakeholder involvement programme provides for feedback to those involved so that they can understand the results that their input has had, or understand why their suggestions have not been taken forward.
- Where engagement of stakeholders remains difficult, make sure that there is an audit trail of your efforts and consider which organisations can act as proxies for particular stakeholder groups.

Engaging Statutory Consultees

The engagement of statutory consultees can also be a problem. Resources for most consultees are limited and their ability to respond to all consultations subsequently constrained. To address this, the statutory agencies in England and Wales have developed a document that sets out the standards of service that can be expected from consultation bodies³. This emphasises a risk based approach to consultations to focus resources on those plans that present a greater risk to the environmental resources with which the statutory agency is concerned.

There are other initiatives that those responsible for consultation can take to assist the statutory consultees in undertaking their duties:

- Only seek responses from statutory consultees within the scope of the type of response they are committed to providing (set out in the 'Standards of Service' document).

³ English Nature, the Environment Agency, the Countryside Agency, English Heritage (August 2004), Strategic Environmental Assessment Consultation Bodies' Services and Standards for Responsible Authorities

- Highlight key issues to enable the consultee to focus on them efficiently.
- Consider whether a presentation, meeting or workshop will be a more efficient way for the consultee to respond.

Lessons Learnt / Good Practice Points:

- Be aware of the statutory agencies' Standards of Service document to anticipate the type of response that you should expect.
- Highlight key issues on which you would particularly like to hear from them.
- Discuss with them whether there are more efficient ways for them to comment on the SEA.

Process Related Issues

Issues concerned with the conduct of the stakeholder involvement process primarily focus on:

- time constraints;
- finding appropriate people to implement the stakeholder involvement programme; and
- balancing environmental, social and economic concerns.

Time Constraints.

Issues relating to time constraints primarily focus on the role of statutory consultees. In particular:

- The time taken by statutory consultees to respond; and
- The difficulty in providing appropriate periods for consultation given the wider timetable for the development of the plan.

Delays experienced as a result of awaiting a response from statutory bodies may be due in part to the novelty of the procedure and as a result statutory bodies trying to work how to respond. For example, some local authorities have noted how some of the statutory bodies have difficulty keeping their comments to a strategic level. Delays of this nature are likely to reduce in future as the statutory bodies gain more experience.

Some local authorities perceive that responses to SEA/SA consultation are low down the priority list for some statutory consultees and this is another reason for delay. There is insufficient evidence at present to determine whether this is a significant problem or whether local authorities are not aware of the risk based approach to consultation adopted by the statutory authorities in England.

A third cause for delay is thought to be the need for the responsible party in the statutory agency to consult with colleagues with the appropriate level of expertise. Even where an SEA/SA response is a priority for those allocated the responsibility, it may be a lower priority for those colleagues that have to be consulted.

Whilst not directly contributing to reducing the time required for consultation, validating verbal contributions to ensure that there have not been any misunderstandings can contribute to reducing delays at a later stage.

Implementing Stakeholder Involvement.

Planners and others involved in agencies required to undertake SEA are tasked with the responsibility for undertaking consultation. However, it is likely that they may not be the most appropriate to implement a programme. Where resources allow, using professional facilitators can result in:

- Documents, web sites, etc communicating more effectively;
- Improved stakeholder perception of the independence of those implementing the involvement programme;
- Use of more effective techniques to understand stakeholders' views; and
- Improved record keeping of stakeholder opinions.

Balancing Environmental, Social and Economic Concerns.

The SEA Directive identifies environmental authorities as those that must be consulted. These are identified more specifically by the Regulations that implement the Directive. There are some concerns that all of the statutory consultees only have environmental responsibilities. In the context of a sustainability appraisal, their focus on environmental concerns could be argued to swing the balance of decision making in favour of these concerns to the detriment of social and economic factors.

Contrary to this it can be argued that these agencies only have an advisory role and that SEA was developed as a result of environmental concerns not receiving adequate attention in most public decision making contexts. Their focus on environmental issues redresses the balance to the 'default' emphasis of decision making on economic and social issues.

The Value of Responses to Stakeholder Involvement.

A significant difficulty with stakeholder involvement during SEA/SA is trying to affect a valuable response. Problems with maintaining the strategic nature of responses from statutory consultees has been referred to earlier. This is also true for other stakeholders. Other issues encountered by practitioners relating to the value of the response include:

- The problem of separating comments on the plan from comments relating to the SEA;
- Related to the above is the difficulty of filtering the comments as it is likely that a significant proportion is not relevant to the SEA / SA; and
- Reporting on the results of consultation can result in a sizeable document that can be counterproductive for decision making or later stages of the SEA where involvement is stakeholders is required.

Practitioners have not identified any simple solutions to these issues. There is little doubt that as experience of stakeholder involvement in SEA increases, then all parties will participate in the process more effectively. In addition, steps taken to make other aspects of the process more effective than this is likely to have a beneficial effect on the value of responses provided by stakeholders.

Lessons Learnt / Good Practice Points:

- Validate verbal contributions made by stakeholders to avoid misunderstandings.
- Consider the use of professional facilitator or public involvement specialists to implement the programme.

Reporting

Reporting of the SEA is a key concern of practitioners, primarily because there is a perception, based on poor responses to consultation, that the documents are not read and stakeholders are not engaging with the issues addressed by the SEA. Key concerns are:

- The size of documents;
- The extent to which they are readable;
- Ethical issues relating to the volume of printing; and
- The effectiveness of the 'matrix approach' as an assessment method.

Document Size.

The size of SEA reports is dictated to some extent by the process to which they relate. For example, reports produced within the Town and Country Planning system are obliged to comply with guidance issued by the Department for Local Government and Communities. Nevertheless, approaches to reducing the size that have been adopted include:

- Eliminating or reducing to a minimum discussion on issues of low priority and the SEA procedure;
- Writing a concise report with much of the detail confined to an annex; and
- Adopting two tier reporting comprising a concise, 'punchy' report for public consumption and a detailed report for 'expert' stakeholders or those that wish to examine the detail of the assessment.

Document 'Readability'.

Proposals to improve the readability of SEA Reports focus on the style and content of writing and the visual appearance of the report.

Steps taken to reduce the size of a document (referred to above) are likely to contribute to improving the readability of the text. Further improvements can be made by focusing less on the SEA process and giving greater consideration to the experience of the readers. Eliminating jargon and adopting a more engaging, story telling approach to the text will contribute to improving the extent to which the document successfully communicates its content.

Matrices, given their size in most SEAs, are considered to pose a particular problem with regard to successfully communicating information, though they can demonstrate a comprehensive approach to the SEA. Providing some interpretation of the matrix to save

the reader the task of reading each line can assist. The text might state that 'from the matrix it can be seen that policy x is likely to have the adverse effects on y and z'.

The role of the non-technical summary is also considered to be important. More successful examples focus on the key strategic issues rather than slavishly attempting to produce a shortened version of the main document.

There are concerns that some of the more innovative approaches to presentation may be out of step with Government guidance on SEA for Regional Spatial Strategies (RSSs) and Local Development Frameworks (LDFs). Whilst this guidance has no regulatory force some authorities report that they have been warned to follow the guidance and that there may be repercussions of not doing so.

Improving the visual appearance of the report is considered to be an important tool to improve the communication of SEA based information. Techniques include:

- Making good use of colour in the document, including colour coding matrices (traffic light system) as opposed to using a tick system;
- Map information where possible. This can include historical data to demonstrate how the environment has changed (e.g. the growth of a town). Baseline information can also lend itself to mapping to identify where key biodiversity sites are located or other sensitive environmental features;
- An extension to mapping the baseline would be to make use of geographical information systems to overlay the effects on aspects of the environment in relation to various development scenarios. This could be extended (at exhibitions, workshops, etc), to enable users to define their own scenarios to give them some ownership of the issue and understanding of the difficulties encountered in trying to identify a preferred option. Similarly, 3D models could be used to demonstrate the effects of scenarios, such as the extent of flooding in a town; and
- Other visual material can be used within a report, such as annotated aerial photographs.

However, readable the document, it is only likely to be read if those stakeholders that have an interest are aware of its existence and of where to access a copy. Making the document available in locations that are convenient for communities' lifestyles and marketing the document are important factors.

Sustainability of SEA Reports.

There is an ethical tension between the need to assess the environmental effects of plans in a transparent fashion and the associated need to print copies of extensive reports that are read by relatively few people. Many of the techniques for enhancing the readability of the documents referred to above will further increase the size and the cost of printing them. Electronic publication of the document can mitigate this to some extent, but there will remain a need to print copies so as not to exclude particular groups within a community. Use of recycled paper or paper from sustainable sources together with environmentally friendly printing processes will further mitigate the effect. Developing an understanding of the likely audience for the report should also help to ensure that an appropriate number of copies are printed.

Whilst the production of the report will have an environmental impact, this should not be significant when compared to the environmental benefits of assessing the effects of a plan and identifying more sustainable courses of action.

The Effectiveness of 'Matrix' Approaches to SEA.

Guidance on undertaking SEA for RSSs and LDFs advocates presenting the information in matrices and using a simple rating system to indicate the significance of the effects of the individual land use policies contained within the plan. Practitioners have raised concerns about how well these matrices communicate information to the reader. Others have concerns regarding the extent to which the rating system can be challenged, particularly within a legal context. For most SEAs, rating the significance of an effect is a subjective judgement of those that have been responsible for the SEA and as a result the judgement of an individual (or individuals) with different values may be equally as valid.

There is no definitive case study material to indicate how such a judgement will be treated in the courts. However, lessons from EIA cases indicate that the courts have been reluctant to 'second guess' the judgement of an authority unless it can be demonstrated to have been unreasonable.

Providing transparency to the SEA will help to support the assessment of effects that is contained in the report. Therefore, any rating of an effect should always be supported by a narrative on the assumptions that underpin the assessment and potentially reasons why other effects are not considered to be significant. Challenges to the assessment can also be resisted by being able to demonstrate that the SEA has been through an effective stakeholder involvement process and the assessment not only represents the views of the practitioners have been tested in a wider process.

Lessons Learnt / Good Practice Points:

- Consider how to reduce the size of the report or restructure it to ensure it is not overwhelming for the reader.
- Eliminate jargon and adapt the writing style with the purpose of engaging the reader rather than writing a report.
- Consider how the use of colour and illustrations, particularly maps, can aid the understanding of the content of the document.
- Consider how to market the document and make it available to key stakeholders.
- Transparency and effective stakeholder involvement should help to mitigate against possible challenges to the assessment of effects provided in the matrix in an SEA Report.