

Practical advice on Strategic Environmental Assessment for local plans

Municipalities lay out the future spatial and economic development of their area in local plans. In the plan making process, Strategic Environmental Assessment (SEA) can help to identify environmental impacts of a plan before decision are made, and bring more sustainable planning options into focus. This factsheet brings together some practical advice and examples on SEA for municipal planning from the Netherlands and elsewhere.

In the Netherlands, on average, between 30 and 50 SEAs are undertaken every year. Some of these are SEAs for local level plans, prepared by municipalities. Similar to the Macedonian regulation, an SEA is required if a plan, or a change to a plan, has potential environmental impact.



SEA is a planning tool designed to ensure that environmental consequences of strategic decisions are identified and assessed during plan preparation and before plan adoption. SEA improves the information basis for planning, because it gives insight into possible consequences, as well as identifying alternative options and measures that can avoid negative impacts. SEA is not just about information, however, it also provides a framework for public debate on these consequences and options, and requirements to ensure that the outcomes of the assessment and the debate influence decision-making on the plan.



Why SEA?

When a municipality stimulates the development of one particular land use in their jurisdiction, it can limit the possibilities for other types of land uses. In the rural areas of the Netherlands, for example, increasing tourism



Case example: Intensifying agriculture in Ommen

The Municipality of Ommen lies within a rural area in the eastern part of the Netherlands. The population of the municipality is just under 20.000. Agriculture and recreation are the main economic activities, and the area is home to nature and landscape values that are nationally appreciated.

In 2008, the Municipality of Ommen formally announced their intent to prepare a spatial plan for the municipal area. The plan would only cover the rural area, and not the 5 main towns of the municipality, because these fall under separate urban plans. According to Dutch regulation, an SEA is required for this type of plan, and the SEA was integrated into the planning process.

One of the goals of the plan was to designate 4 areas for intensification of agricultural activities. In these designated areas, larger farms can be established, and more industrial farming practices, such as intensive pigfarming, can take place. However, in the course of the SEA it became clear that intensifying farming in two of the proposed areas would negatively impact a protected nature reserve, due to increased nitrogen deposition. In addition, the analysis of the traffic impacts in the SEA showed that it would be difficult to connect these two areas to infrastructure so as to make heavy vehicle transport to the farms possible. In the end, these two locations were dropped from the plan.

and recreation in a certain place, may restrict the growth potential for agriculture there. In the same way, a new settlement of houses can preclude the establishment of a golfcourse, or extensive cattle grazing may limit the options for intensive pigfarming.

For municipalities, SEA can be especially helpful in improve understanding of the environmental bottle-necks, opportunities and dilemmas that will determine the trade-offs that have to be made in the local plan. SEA can also test if any planned developments fit with the municipalities vision and ambitions for sustainability, nature, landscape, or quality of the living environment.

Integrating SEA into the planning process

SEA practice has shown SEA to be most effective if it is fully integrated into the plan-making process. SEA is also more efficient when integrated, since several of the planning process and SEA activities overlap and interact. Collecting baseline information, for example, informs both the SEA and plan development. Similarly, identification of relevant environmental effects is likely to influence the generation of plan alternatives in the planning process.

It is also important to bear in mind that there are certain procedural requirements for both planning and SEA that have to be met, according to Macedonian regulation. For instance, the Macedonian SEA regulation requires a formal screening decision to be made, on whether or not an SEA is required for a specific plan or programme. A screening form has been developed for this purpose. More information on the regulatory requirements can be found on the SEA portal (www.sea-info.mk) of the Ministry of Environment and Physical Planning (MoEPP).

Developing plan alternatives

The development and comparison of plan alternatives is central to SEA. For municipal plans the alternatives usually consist of different spatial designs for an area. In the Netherlands, we commonly see 2 to 3 alternatives in an SEA (in addition to the “business as usual” development!).

Alternative development in SEA can start from very specific ambitions or goals that the municipality has. The SEA can then further detail these ambitions into spatial options, and show the feasibility of the ambitions, and the trade-offs or mitigation that might be needed.

Alternatively, design of alternatives can also start from an inventory of the potential for development in the municipal area, given the existing environmental problems and the already adopted policies and preconditions in place. The SEA shows where urgent problems need to be addressed and what planning options the current situation can accommodate. The plan alternatives can then be developed from there.

To help clarify the options available, it is a good idea to develop alternatives along extremes. For example: an alternative based on optimal recreation and landscape enhancement vs. an alternative that maximizes agricultural development.



Case example: Conflict between boating and birds?

The town of Herkingen (population 1300) lies on the Dutch coast. It has an attractive yachting harbour, which is an important basis for the town tourism revenue. The harbour is situated next to a protected nature area, well known for its bird populations. The nature area is designated Natura 2000, which means it enjoys the highest protection regime in the Netherlands. In 2007, the Municipality initiated an extension of the harbour. This development required a plan change, and an SEA was part of the planning process. The SEA focused specifically on the effects on the protected nature area.

The SEA team went to work as follows:

- First they inventoried which protected species were present in the area, what the size of their populations was, and the trends in their numbers.
- Then the team explored which effects the harbour would have on those species. Both the impacts as a result of the construction of the harbour, as well as the effect that would follow from the harbours' use. To be able to do this with sufficient certainty, the intensity and timing of recreational yachting activities had to be carefully studied.
- Next, the team inventoried ongoing developments in the areas which could also affect the populations of protected species. Various projects which were not yet in place, but planned for the near future, were included in the business-as-usual scenario. Such as projects for wind turbines and a plan for a tourism resort, both of which had already acquired permits.
- On the basis of this inventory, the cumulative (combined) effects of both the harbour extension and the ongoing development on the species populations could be assessed.
- Finally, the SEA team developed a series of measures possible to mitigate any adverse effects which were brought into view.

The SEA showed that the extension of the yachting harbour would not impact the bird populations negatively. Many of the important bird species reside in the area in winter, when the recreational yachting season is already over. In addition, measures to keep recreational boats out of the more sensitive shallow areas, which the SEA helped to pinpoint, will prevent further disturbance.

Lessons from Dutch practice

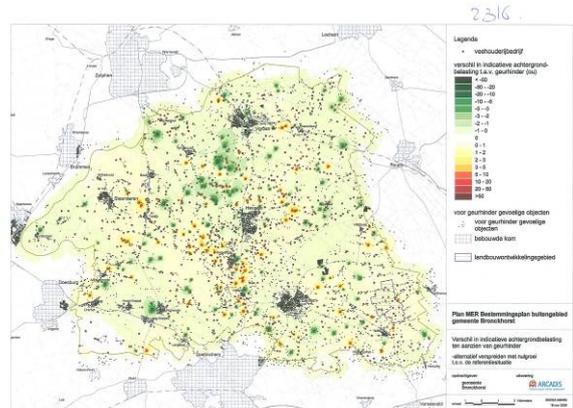
The Netherlands Commission on Environmental Assessment has documented lessons learned from Dutch experience with SEA for local rural plans. These lessons can also be relevant for Macedonian practice.

- **Start early** : Start the SEA early in the planning process, before key choices have been made. This way the SEA can inform all stages of plan development. It is a good idea to sit down with the planners and environmental experts at the beginning to map out the steps in the planning and SEA processes, and agree on how to optimize integration.
- **Make the most of participation**: At the local level, political and public involvement is usually higher than at national level. The SEA process brings the relevant stakeholders to the table. Wide consultation is a legal requirement on the draft plan and SEA in both the Netherlands and Macedonia, but it is also useful to involve stakeholders much earlier, to inventory their interests, key problems and ideas for possible solutions. Their involvement adds to the quality of the SEA, because stakeholders often have relevant information and can help find win-win planning solutions. Also, practice has shown that stakeholder involvement can increase support for a plan. Separate guidance on developing an effective participation approach for a plan/SEA is available at the SEA portal of the Ministry for Environmental and Physical Planning (www.sea-info.mk)



- **Good scoping**: Ensure that the SEA has the right scope, it should address only those issues that are important for the plan, not all possible environmental issues. It is important to “scope out” those effects that will not make a difference to the plan choices. Be sure to consult with relevant stakeholders on what these issues are, so that there is agreement on what can be “scoped out”.
- **Address uncertainty**: Uncertainty in the prediction of effects can be dealt with in the SEA by developing scenarios or showing different bandwidths of effects.

- **Use the right reference situation**: In the SEA the alternative planning options are compared against each other, and against the reference situation. Develop a “business-as-usual” scenario or alternative in the SEA that shows how the area will develop if current trends continue and planned policies are implemented.



Map showing farms emitting odour, taken from SEA for municipality Bronckhorst

- **Use SEA to future-proof plans**: Ensure that the SEA describes the impacts if the development opportunities that the municipal plan offers were maximized. This will help bring into view what the “worst case” impacts are that the plan could give rise to. For example, a Dutch municipal plan designates 100 locations for intensive agriculture. This will give farmers different locations to choose from, and the municipality only expects about 30 of those locations to be utilized. But changing economic conditions in the next few years could increase investment in intensive agriculture. So the SEA should also bring into view what the effect would be of developing *all* the designated locations. This way the municipality can better decide how they could manage the effects if agriculture intensification is higher than expected.



Making SEA and EIA work for viticulture planning

In different places around the world grapegrowing and wine production is on the rise. Local governments in countries such as New Zealand utilise land use planning to steer the development of viticulture, and to manage the adverse effects. SEA can support planning by bringing into view what the impacts of viticulture will be in an specific area. For example, if erosion, or water shortage, are key issues, the SEA should look into how viticulture can be increased without making these problems worse, or even better, how viticulture development can contribute to reducing these problem. SEA can also identify where viticulture development may conflict with other land uses, and clarify where choices between different land uses have to be made, or where different land uses may be compatible.

For a plan that involves viticulture development, an SEA could cover:

- Impact on infrastructure in the region, on waste management (collection and facilities), on energy demand
- Changes in landscape and biodiversity
- Potential for erosion
- Impact on water management (particularly possible increase in demand for water)
- Impact of increase of viticulture associated activity, such as grape processing facilities and tourism.

At a more local level, potential effects include:

- air, soil and water pollution (pesticides as well as nutrients)
- local nuisance/health impacts: noise (from machinery but also bird deterrents), fumes, spray, odour, dust, glare
- safety: transport and storage of hazardous substances
- traffic increase

An SEA for a local plan should certainly address the more local impacts, but not at the level of location-specific detail that is needed in an EIA. The SEA should give insight into the cumulative effects of all the new vineyards combined (for example: what might a limited amount of water pollution from each vineyard do to the water quality over-all?). Also, SEA can be the basis for adoption of operational standards that are applied at the project level (for example, vineyard-level EIA should demonstrate that the vineyard operation will not cause water pollution).



More information

This guidance has been developed in the course of a co-operation project on Strategic Environmental Assessment between the Macedonian Ministry for Environmental protection and Physical Planning and the Netherlands Commission for Environmental Assessment. The co-operation was funded by the Dutch Ministry for Infrastructure and Environment, and administered by Agentschap NL, the Agency for the Dutch Ministry of Economic Affairs, Agriculture and Innovation.

This document intends to provide practical advise on SEA for local planning. The guidance cannot be taken as legal advice nor should it substitute case specific advice by the relevant Macedonian authorities.

For more information, check:

- SEA portal of the Ministry of Environment and Physical Planning (MoEPP): www.sea-info.mk
- NCEA, Netherlands Commission for Environmental Assessment: www.eia.nl.