



# Flexibility in spatial plans requires modified environmental assessment

Marja van Eck and Corrie Smit



In the coming years, after the new Environment and Planning Act has come into force in the Netherlands, spatial plans will be more flexible. They will have to contain more leeway to accommodate an as yet unpredictable future. This new way of planning poses a challenge for environmental assessment. When plans are being prepared, an environmental assessment report must give the person in charge and stakeholders involved a sound insight into the environmental consequences of what the plans will make possible. How this can be done if plans are flexible and the future uncertain, is the subject of this article.

### Spatial planning in the Netherlands

There is a long and illustrious history of spatial planning in the Netherlands. As early as 1935, the municipal council of Amsterdam established a spatial development plan for the area it administered. In the decades that followed, the entire country was blanketed with plans: structure plans at national, provincial and local authority level, giving the main motives of the desired future developments, and more concrete plans: the so-called “land use plans”. Land use plans lay down exactly what is permitted and what is not for every square metre of land and water, in accordance with the provisions of the Spatial Planning Act.

However, the Spatial Planning Act no longer meets today’s requirements. It is particularly striking that the rules relating to spatial quality and environmental quality are laid down in separate acts, even though their interests are closely interwoven. The new Environment and Planning Act, due to come into force in 2018, integrates both policy areas and refers to “environmental quality”. Some 30 to 40 sectoral laws and rules have been sifted through. Also the economic crisis has made it painfully apparent how difficult it is in these uncertain times to make detailed plans with a long shelf life. The government is nowadays less an initiator of new developments and has had to step aside in favour of private initiatives. New spatial plans should therefore provide more leeway for coping with an unpredictable future and must tempt private investors to achieve new qualities. In the Netherlands this is called invitation planning.

### Useful environmental assessment information, in four steps

On the basis of past experience the NCEA has discussed with experts in the field of environmental assessment how environmental assessment can best contribute to the quality of the decision-making when there is more flexibility in planning. The discussions yielded a series of recommendations, which are presented below in the form of a stepwise plan.

1. Ambitions and potential;
2. Analysis of the living environment;
3. Exploration of options;
4. Finger on the pulse: monitoring and evaluation.

“In the current economic climate, the first item on the wish list of many administrators is economic growth.”

### Step 1 - Ambitions and potential

The first step is a general reconnaissance in order to clarify the ambitions for the area in question:

- What are the characteristics of the area for which a new plan has to be made?
- Which problems in the environment need to be solved?
- What is the potential for improvement, and in which direction should this improvement proceed?

These questions should be answered taking into consideration the government’s ambitions for the environment in the plan area and the targets to be achieved. The resulting information can e.g. be presented in a preliminary document (a preliminary memorandum in Dutch environmental assessment procedure).

### Step 2 - Analysis of the living environment

The second step is the more accurate visualisation of the quality of the living environment in and around the plan area, in order to ascertain the bottlenecks and barriers. In the current economic climate, the first item on the wish list of many administrators is economic growth. But the question is, whether this leads to an increase in the burden to the environment and would it therefore be desirable. The *available environmental space* is determined by policy and also by legislation. Nearly every level of government (from local authority to European Union) has established targets for sustainable development and so-called “Inclusive Green Growth”. And legislation and rules impose clear constraints on nature conservation, air quality, noise and safety, among others. Confront the ambitions with this information. To what extent are they compatible.

---

## Available environmental space as a precondition for economic growth

### Rotterdam

After the construction of the Maasvlakte 2 (an extension of Rotterdam harbour and industrial area), the municipality of Rotterdam wishes to transform the existing harbour area: economic activities and light industry will be situated nearer to the city, and heavier industry will be situated further from the city. The municipality’s ambitions are not to allow the burden on the environment to grow – even if there is economic growth – and to reduce the environmental burden wherever possible. When preparing the land use plan for the existing harbour area, the municipality used a *Havenvisie 2030* (Vision of the harbour in 2030) to investigate which types of business could fill the empty plots in the existing harbour area and which plots might be eligible for transformation that would fit in with the desired future scenario including residential areas.



In the strategic environmental assessment (SEA) report the available environmental space was analysed and described. Then it was discussed what impact the *Havenvisie 2030* would have on it. The result is that for each type of plot of land, there are now preconditions for emissions (noise, air quality) and safety. It was only possible to determine these preconditions after an intensive process involving very detailed information. As a result the businesses in the area have been given a clear framework: they know what they must comply with in order to be given permission for their activities. That is exactly the invitation they need in order to invest in sustainable economic growth in the harbour area.

### Step 3 - Exploration of options

Ambitions are sometimes very concrete: for example, the construction of 1000 new homes. In such cases, the environmental assessment can be “traditional”. Find out the possible locations for the build, compare them in terms of environmental consequences, work out possible options for the layout of the preferred location, and after weighing up the environmental and other pros and cons, specify the preferred layout in the plan. It goes without saying that this must be done carefully, in consultation with various parties and taking their advice on board.

But in the case of invitation planning, the ambitions of government are less concrete and it’s all about transformation or the prevention of impoverishment or a gradual change in functions. In this situation, translation into a concrete traditional plan is neither possible nor desirable. It is then advisable to follow a “reverse approach”, which involves considering what can and cannot be done, given the ambitions, the available environmental space and the preconditions. This can be done by comparing divergent possibilities (such as different spatial programmes or spatial zoning) in order to establish the room for manoeuvre: a bandwidth exploration. It is especially important to find out what must absolutely not be allowed. The exploration of alternative possibilities is what forms the core of every environmental assessment report.



---

## Economic growth possible only if the environmental space is enlarged

### Zeeland

The problems in Zeeland province are very different to those in Rotterdam. In this province on the periphery of the Netherlands the population is declining, as are economic activity and employment. But, as was the case in Rotterdam, when Zeeland was preparing the provincial structure plan, in its SEA report the province also investigated the environmental space in the area. This was done on a higher level of abstraction than was the case in Rotterdam, by testing the provincial environmental targets by means of a “traffic light method”:

- **Red:** in no way does the particular environmental aspect of the present situation meet the provincial environmental targets.
- **Amber:** in the present situation, less than 50 percent of the area meets the province’s environmental targets.
- **Pale green:** the present situation largely meets the province’s environmental targets and measures are being taken to improve the situation.
- **Dark green:** the environmental quality is sufficiently good to allow the desired economic growth, even if this were to lead to some additional degradation.

The SEA report included clear messages for the provincial administration:

- The quality of the nature reserves in the province is moderate to poor. As further deterioration is not permitted under European and Dutch nature conservation legislation, it is vitally important to invest in improving quality. In this way, not only will environmental space for the desired economic growth and increased employment be created, but tourists will also be attracted and this will generate jobs in this sector.
- Various businesses in the existing industrial areas have a “noise buffer” in their permits, which they are not using. Retrieving this unused buffer will free up land for new businesses.

## Bandwidth explorations

### Amsterdam

The municipality of Amsterdam wishes to transform the Overamstel area, which is currently an outdated and run-down industrial area. As the area has excellent connections with public transport (train, tram, bus and metro) and is relatively near the city centre, the municipality wishes to transform it into a “high-value urban area”, with homes, offices, facilities and businesses that do not cause nuisance.

In the SEA report the municipality has done a bandwidth exploration. A distinction has been made between definite and uncertain developments. It was, for example, uncertain how many homes could finally be fitted in, how quickly the transformation could occur, when the large prison complex would vanish from the area, whether it would be possible to convert the motorway next to the area into a city thoroughfare and integrate it as such into the plan. For the uncertain developments, a maximum scenario and a minimum scenario were elaborated.

The SEA report describes how the development in both scenarios can be incorporated within the prescribed environmental preconditions and fits in with the municipality’s ambitions for the area. However, converting the motorway to an urban thoroughfare went too far.

On the basis of this information, the municipality established a land use plan for those subareas which will be the first to become available for the transformation once the businesses have been bought out. The remainder of the plans will follow later.

“Particularly useful and necessary in the case of uncertain transformation processes is evaluation and monitoring, with remedial measures held in reserve.”

### Step 4 - Monitoring and evaluation ‘Finger on the pulse’

What is particularly useful and necessary in the case of uncertain transformation processes is evaluation and monitoring, with remedial measures held in reserve. Regular checks made at preordained times to see whether the development is still on course to meet the previously established ambitions, enable the environmental quality to be kept under control. Although evaluation is a mandatory step under current Dutch environmental assessment legislation, in practice it is rarely carried out because of the absence of sanctions. But when there is uncertainty about transformation processes and spatial plans contain more flexibility for coping with an unpredictable future, evaluation can provide a useful extra guarantee.

It also offers the option of postponing research until later. Dutch (and European) legislation on nature conservation requires that when plans are being established there is “certainty” that the consequences for protected habitats and species will not be significantly negative. If the guarantee cannot be made beforehand because the government insists that plans include some leeway to accommodate still uncertain future developments, then two options remain:

- either assume the only conceivable development that the plan theoretically makes possible, and demonstrate that even this meets the preconditions imposed by the legislation, rules and policy;
- or
- ensure that the requirements in the plan are such that it will be regularly investigated whether developments still meet the preconditions, and also that should it be necessary to intervene, there are measures or budgets on hand.

## Evaluation and monitoring as preconditions in the plan

### Lelystad

The SEA report for a new residential area in Lelystad revealed that strictly protected bird species in the adjacent Oostvaardersplassen nature reserve foraged in the area where the residential area was planned. The first phase of development could be given the go-ahead, but because of the legislation on nature conservation, the second phase could proceed only if a new foraging area was created for the birds and found to be functioning effectively. The municipality incorporated this precondition in the plan requirements. When the evaluation research was done several years later, it was decided that the second phase could be given the green light.



---

### In conclusion

The desire to make plans more flexible means that difficult choices must be made, balancing the leeway in policy against compliance with legislation and providing legal certainty for citizens and businesses alike. The challenge for environmental assessment is to support decision-making based on flexibility with a sound risk analysis combined with monitoring and evaluation to modify developments when needed. It is an inspiring challenge, and so far, we have been tackling it with the greatest of confidence, based on our experience. Our recommendations:

- Take as a starting point a clear administrative vision on the desired general direction of the environment (ambitions).
- Provide a good elucidation of the qualities (both positive and negative) and possibilities of the plan area, i.e. the “environmental space”, taking account of the preconditions emanating from legislation and rules and ambitions.
- Organise a creative process of brainstorming to ascertain which developments are possible and promising, and which would be undesirable (bandwidth exploration).
- In the decision about the plan, specify a monitoring and evaluation programme that must be used as the basis for testing the actual developments against the ambitions and for making any necessary corrections. These could be supplementary measures or modified ambitions.
- In each step, ask which information is essential and which points could be investigated later without incurring unduly large environmental risks.

---

**Marja van Eck**

Technical Secretary, NCEA  
meck@eia.nl

**Corrie Smit**

Technical Secretary, NCEA  
csmit@eia.nl