

Follow-up and the new Environmental and Planning Act in the Netherlands

A practice-oriented research paper to follow-up in the Netherlands

Van der Gun, W., de Maat, S., van Leijenhorst, I.M.S., Vernij, S.M. & van Ravesteijn, M.P.

Introduction

Environmental assessment (EA) consists of several successive steps. This paper focuses on the final step: the follow-up. EA follow-up is used to determine whether predicted effects actually occur, mitigating measures are effective and goals are achieved. If not, adjusted measures and policy decisions can be taken. Although valuable, this step is currently not fully used in the Netherlands. This paper aims to explain how follow-up is currently embedded in the Dutch EIA and SEA system, and how it is being applied in practice. Through analyzing recent case studies useful insights about follow-up are identified. The Antea Group research¹ was carried out on behalf of Rijkswaterstaat, Dutch Ministry of Infrastructure and Water Management.

EA and follow-up

Follow-up is an umbrella term that consists of various activities. Follow-up usually consists of monitoring, evaluation, management, and communication.² Monitoring is the collection of data and comparison with standards, expectations or predictions³, that aims to provide information on the characteristics and/or functioning of (environmental) variables.⁴ Evaluation is the assessment of compliance with standards, expectations or predictions.⁵ Management refers to decision making and taking appropriate action in response to issues raised by the previous steps.⁶ Finally, communication concerns informing of stakeholders and the general public of the results of the follow-up activities.⁷ This paper and the Antea Group research⁸ mainly focuses on the first two steps of follow-up, monitoring and evaluation.

Legal framework

Follow-up relating to EIA and SEA forms part of the EU directives. The SEA Directive contains an obligation for EU Member States to monitor the implementation of plans and programs, including to identify unforeseen adverse effects on the environment at an early stage and subsequently assessing whether appropriate remedial measures are necessary.⁹ Pursuant to the EIA Directive, the competent authority must assess whether effects of the project need to be monitored.¹⁰ At the UN level, the Espoo Convention¹¹ and article twelve in the Kiev protocol¹² underline the importance of monitoring in a transboundary context, and the usefulness of carrying out monitoring jointly if it extends over more than one Party's territory.¹³

In The Netherlands, legislation on environmental impact assessment was recently (January 1st 2024) transferred into a new law called the Environmental and Planning Act¹⁴. Follow-up play an important role in this act, as it is explicitly part of the policy process. So follow-up in EA fits in perfectly.¹⁵ The legal obligations regarding follow-up do not change much under the new act, but a few changes have been introduced regarding the applicable procedures.¹⁶ For example, monitoring results now need to be digitally published.¹⁷

The research

Antea Group has conducted research consisting of a desk study and interviews with project managers and specialist in the field of EA. Interviewed parties are for example the Netherlands Commission for Environmental Assessment (NCEA), the University of Groningen (UG) and the Rhine estuary Central Environmental Management Service (DCMR).

In total twelve projects were examined. Three projects were selected for the interviews: Haven-Stad (Amsterdam), Maasvlakte 2 (part of Project Mainport development Rotterdam, PMR) and sand extraction in the North Sea (Coastline care).

Maasvlakte 2 (PMR)

The industrial development project Maasvlakte 2 concerns the construction, design and use of deep-sea related port industries, sea walls and rail- and road infrastructure. Before Maasvlakte 2 was built, local sea depth was approximately 17 meters. To create land up to 5 meters above sea level, 365 million m³ sand was needed. The majority of sand is extracted from selected locations in the North Sea. To compensate for the negative effects of Maasvlakte 2, a new nature and recreation area of 750 ha was also constructed as part of the Maasvlakte project. To assess if compensation is successful, follow-up measures were implemented. An extensive system of follow-up has been set up since 2006. This project can perhaps be seen as the “mother” of follow-up in the Netherlands. However, this project is so unique and extensive that it cannot be seen as the Dutch representative for follow-up. Nevertheless, lessons learned from this project can be very useful for other initiatives.

Haven-Stad (Port-City Amsterdam)

Haven-Stad is a large-scale long-term urban development project which will take a few decades to be completed. The Development Strategy Haven-Stad¹⁸ consists of four phases with the last phase starting in 2040. When completed Haven-Stad will equal Amsterdam city center with over 150.000 inhabitants and employees. During the long transformation period the project has to adapt to new insights, ambitions and objectives.

The reasoning behind applying follow-up in this project is to see whether ambitions and objectives remain feasible or need adjusting during this longterm development. Follow-up is also used to check if the underlying environmental information in the EA remains valid. Follow-up for Haven-Stad Amsterdam is carried out by a small project team which operates separately from the main project group.

Sand extraction North Sea (Coastline care)

Coastline care provides sand supplementation to reinforce the ever eroding Dutch coast, which is vital to prevent the country from flooding. Sand is also extracted from the North Sea for commercial use in (infrastructure) construction. Follow-up is applied specifically for the ecological effects of these activities in the North Sea. Because Coastline care is an ongoing project, the follow-up is organized differently, research continues for longer than the timeframe the monitoring and evaluation plans (MEP's) describe. During the monitoring, the focus may also shift to other indicators, due to new insights or at the request of the competent authority.

Experiences

Using the project case studies described above, the Antea research provides an overview of the experiences that were encountered with follow-up.

The competent authority has a determining role

The main reasons for the projects to implement follow-up are the legal obligation or specific requirements by the competent authority. Legal obligations can also arise from permit requirements. In the case of Maasvlakte 2 legal obligations prescribed monitoring of effectiveness of requested nature compensation measures. Another reason for projects to carry out follow-up is to increase the trust of stakeholders through relevant communication, this also applies to Maasvlakte 2.

Added value is seen

The projects that applied follow-up, all saw added value in doing so. Added value was seen in the use of follow-up as a forward-looking tool. In Haven-Stad Amsterdam follow-up was used to continually monitor environmental impact as the project progressed. Follow-up also has added

value in providing useful knowledge, especially about unclear cause-and-effect relationships. In case of Maasvlakte 2 and Coastline care new insights in ecological effects were gained.

Used sparingly and implementation not properly arranged

The general conclusion to be drawn from this Antea study, is that so far relatively little follow-up has been used in the Netherlands. Mainly government-run projects have used it. EA follow-up seems to have remained relatively unknown, compared to other steps of the EA instrument. It suffers from a negative image. Another possible cause for neglecting follow-up is the focus turning to a new project after completion of an EIA report (and the project itself). Project managers and EA specialists that wrote the EIA move on and there seems to be no department or person responsible for initiating follow-up.

More attention to follow-up though a different approach

Under certain conditions, parts of the research obligations can be executed at a later stage of the project or plan. This is the case for long-term urban development projects in former industrial areas like Haven-Stad Amsterdam, Binckhorst in The Hague and more recently Merwe-Vierhavens in Rotterdam. These projects benefitted from this approach, as the final image of these projects is often unknown. Follow-up can therefore contribute to adjust goals and ambitions and help to timely identify measures for prevention of considerable environmental effects.

A MEP and a pragmatic data approach

The projects examined in this study also show a monitoring and evaluation plan (MEP) is paramount for implementation of effective follow-up. The MEP is preferably already drawn up in the project phase. A pragmatic approach to data collection increases the likelihood of success, as does examining usability of existing databases and monitoring systems. For example, the highway project A1 Apeldoorn-Azelo only used pre-existing monitoring programs for follow-up.

The duration of the project influences the approach to follow-up

For short-term projects, follow-up can focus on the policy framework, the reference framework and models examined in the EIA. For long-term projects in a complex environment, it is not feasible to completely determine follow-up in advance. A rigid approach to follow-up does not fit the changeable nature of the environment and policymaking.

Conclusions and reflection

This research shows that follow-up is a valuable tool when used right. It enhances decision-making by addressing uncertainties arising in assessment processes, and in guiding choices in a progressive decision making process.

The more changeable the environment, the more value follow-up can have

The case studies show that follow-up is received positively when it also fulfills a steering function, instead of just a controlling and testing one.

Follow-up appears to be particularly relevant for plans and projects in which long-term ambitions and objectives are pursued, especially when projects take place in complex environments, such as inner-city urban developments (Haven-Stad), projects on the North Sea (Coastline care) and industrial projects with significant environmental effects.

In less changeable environments follow-up has a more limited impact on subsequent decisions. A more pragmatic approach may therefore prove more successful for these types of plans and projects. Making effective use of pre-existing monitoring programs and data may be a key factor for successful implementation of follow-up in these types of projects.

The study also suggests that follow-up has more added value if it serves multiple purposes. Follow-up yields information about more than validity of the predicted EA effects and can eliminate or reduce knowledge gaps. Insight in actually occurring environmental effects can re-assure concerned stakeholders, which can create stakeholder support. This has been the case in projects

like Maasvlakte 2 and Kraaijenbergse Plassen. It can also contribute to better insights in the functioning of ecological systems. Multi-usability of follow-up can contribute to its acceptance.

An early MEP

Projects with successful follow-up have one thing in common: a careful start phase with a plan of action, recorded in a monitoring and evaluation plan (MEP). Making a MEP part of the contractor's contract or assigning it to the internal project group helps to ensure that follow-up is conducted.

Check the usability of existing data at an early stage

It is worthwhile to investigate if existing data can be used. Experiences from all three case studies show that existing data is not always (immediately) usable for the plan or project. Therefore, it is necessary to check in the preparation phase to avoid setbacks during monitoring. Besides quantitative data, citizen science can be used in follow-up. For example surveys on the perception of noise disturbance can become part of follow-up.

Ensure that EA follow-up is embedded in the organization

It is recommended to assign follow-up to a specific dedicated project team to prevent a loss of focus when the construction phase is over. It should be noted that probably only larger (combined) competent authorities of big cities and industrial agglomerations can afford to form and sustain separate follow-up teams. Smaller authorities probably lack (human) resources. Structural embedding of follow-up in the organization for smaller competent authorities is therefore very difficult and calls for different ambitions with regard to follow-up.

Present follow-up more separately from EA

The desk study and interviews mainly examined EA follow-up. One of the identified barriers to application of the instrument is its image, which is also related to the negative image of EA. However, follow-up is slowly expanding from an EA obligation to a vital tool for achieving ambitions in an ever changing environment. Presenting follow-up more separately from EA can help to break down barriers that relate to the image of the instrument.

¹ Antea Group (2024), *Onderzoek monitoring en evaluatie mer*

² Morrison-Saunders, A. & J. Arts (eds.) (2004), *Assessing Impact, Handbook of EIA and SEA Follow-up*, Earthscan, London, 338pp.

³ Ibid.

⁴ Arts, J. & Caldwell, P. & Morrison-Saunders, A. (2001) Environmental impact assessment follow-up: good practice and future directions — findings from a workshop at the IAIA 2000 conference, *Impact Assessment and Project Appraisal*, 19(3), pp. 175-185.

⁵ Morrison-Saunders, A. & J. Arts (eds.) (2004), *Assessing Impact, Handbook of EIA and SEA Follow-up*, Earthscan, London, 338pp.

⁶ van der Zee E. (2023) Strengthening Environmental Decision Making through Legislation: Insights from Cognitive Science and Behavioural Economics. *Transnational Environmental Law*. 12(2), pp. 295-317.

⁷ Morrison-Saunders, A. & J. Arts (eds.) (2004), *Assessing Impact, Handbook of EIA and SEA Follow-up*, Earthscan, London, 338pp.

⁸ Antea Group (2024), *Onderzoek monitoring en evaluatie mer*

⁹ Art. 10 SEA Directive.

¹⁰ Art. 8a(4) EIA Directive.

¹¹ The Convention on Environmental Impact Assessment in a Transboundary context (The Espoo Convention), 1991.

¹² Protocol inzake strategische milieubeoordeling bij het Verdrag inzake milieu-effectrapportage in grensoverschrijdend verband, Kiev, 21-05-2003

¹³ Guidance on the Practical Application of The Espoo Convention, p. 29.

¹⁴ Environmental and Planning Act (2024).

¹⁵ Explanatory Memorandum of the Environmental and Planning Act.

¹⁶ 'Dit verandert er in de milieueffectrapportage (mer)', available at: [Dit verandert er in de milieueffectrapportage \(mer\) | Informatiepunt Leefomgeving \(iplo.nl\)](#) (accessed on 15-2-2024).

¹⁷ Omgevingsbesluit art. 11.5 (3) for plans and programs and art. 11.20 (2) for projects.

¹⁸ Gemeente Amsterdam (2017) *Haven-Stad Transformatie van 12 deelgebieden Ontwikkelstrategie*