IAIA 2022 Annual conference

Discussion paper

Scoping in a complex world: an appeal for a broad focus? Lessons learned from the Netherlands

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ABSTRACT

In the Netherlands there is, in practice, a narrow focus on themes in IA (EIA and SEA). Often, themes such as health and social and economic impacts are not included in SEA and EIA reports. However, new developments like the Dutch Environment and Planning Act and the National Strategy on Spatial Planning and the Environment, both favouring integration, question this narrow focus. Recently, an explorative research started to research the possible benefits, disadvantages and obstacles in executing broad IA, with a wide range of themes in the assessment framework, for plans and projects. Central themes in the research were sustainability, circular economy, climate, liveability, health and social impacts. Another topic of research is what themes to include for different types of plans and projects.

In this paper we zoom in on how the aforementioned developments affect the scoping process. How does scoping work out in tiering? Special attention is given to how the scoping of themes and operationalization of effects, in the assessment framework, works out from a higher level of abstraction (SEA) to lower level SEA and EIA, based on the experience of practitioners.

INTRODUCTION

During the last decade, the Dutch government has worked towards a transition in environmental act and regulations. The proposed Dutch Environmental and Planning Act (expected in 2023) combines all separate environmental acts and regulations into one act. This would favour the decision-making process compared to current separate acts and trigger integration. This also questions the, often, narrow focus of Dutch IAs in the selection of themes and aspects, towards a broader perspective on IA.

In 2021, Rijkswaterstaat (executive organisation of the Dutch Ministry of Infrastructure and Water management) started an explorative research to acquire knowledge on the possible benefits, disadvantages and obstacles of a broad IA for plans and projects that traditionally have a narrow focus. A broad focus in this research is defined as plans and projects that include topics such as health, sustainability, and economics beside the traditional environmental themes such as air quality, noise pollution and nature.

Governments on different levels are preparing for this new Act as they are obliged to make a broad SEA. In the last couple of years, governments on different levels created such a broad SEA. This paper zooms in on the experiences of implementing a broad assessment framework and scoping in these plans. The central question is:

Does tiering on different governmental/geographic levels work? Does it work through as expected, especially considering scoping? 1

¹ An advantage of tiering is the 'funnelling effect', it refines the scope of impacts and alternatives. It could also reduce the time and costs of lower tiers (Coutinho et al., 2019), in this instance: regional level SEA and EIA level. We expect that the higher-level SEAs inform and influence the lower level SEAs and EIAs, especially in the assessment framework.

Definitions used in this paper:

- **Tiering**: "the deliberate, organized transfer of information and issues from one level of planning to another... supported by [environmental assessments]" (Arts et al., 2011, p.417). Typically, this takes place in the Netherlands top-down from different governmental levels SEAs to more specific project level EIAs.
- **Scoping**: consideration of aspects that are included in the assessment framework and that are relevant for decision-making
- **Themes**: group of aspects with a similar topic, such as health
- **Aspects**: specific subjects, such as air quality of soil quality
- Criteria: specific research subjects as part of an aspect. Criteria define what exactly is researched.

In practice, we see a broadening of the 'traditional' narrow focus of SEA and EIA in the Netherlands. This led to the introduction of a new term for this type of broad SEAs.

'Traditional' EIA and SEA with narrow focus	SEA with broad focus (Broad SEA)	
(Traditional IA)	(Bload SLA)	
Classic and legally required themes with a narrow focus on the environment such as: soil, archaeology, surface- and groundwater, noise, vibrations, air quality, nature and biodiversity, landscape, climate change, health protection etc., in some cases with additional themes such as climate adaptation, sustainable land-use and energy transition.	A mix of themes following from the definition of sustainable development (people, planet, profit) including social and economic themes such as: social effects, prosperity, inclusiveness, circular economy, employment.	

WHAT DOES EARLIER RESEARCH CONCLUDE?

The Rijkswaterstaat research on possibilities for implementation of broad IA² focussed on both (international scientific) theory and practice. Methods of research were literature research, case study and interviews.

In general, we see that the introduction of the Environment and Planning Act leads to a broadening of the scope of impact assessments in the Netherlands. This is especially visible in plans in which economic, health and sustainability themes are included besides the traditional environmental themes. This is specifically the case for (legally required) environmental strategies. However, is it always a good idea to broaden the scope? Does it favour decision-making more compared to the traditional way of scoping in IA? And if so, for what kind of plans and projects does it work?

Possible advantages and opportunities

- A broad assessment of themes results in a complete picture of impacts of a plan/project which could improve decision-making.
- A broad IA could give more insight concerning these different claims on space and impacts and this way benefit society.

Disadvantages/obstacles

- A broad assessment of themes does not automatically lead to higher quality of decisionmaking. A broad assessment framework with a lot of themes and aspects included could in practice often lead to a lower level of detail and more complexity, often this complicates the decision-making for SEA
- There is a tendency for the assessment framework to become more and more broad. In practice, those themes that are considered to be most important get the most attention and are researched more elaborately and with a higher level of detail. While at the same it is

² Van de Laak (2022). *Verkennend onderzoek brede milieueffectrapportage MIRT-projecten.* Rijkswaterstaat. Results in this paragraph are based on the research. The report (in Dutch) is available upon request.

- hard to leave out certain themes from the assessment framework because of external influences from a.o. stakeholders.
- A broad assessment framework, or higher level of detail, requires more specific knowledge.
 Specialists are not always available or the budget is not sufficient. It is often hard to get all the required information on specific aspects and criteria.

Recommendations

- Improve the scoping practice. Often, the assessment framework becomes too broad with little focus. It is important to have a clear demarcation of themes, also with regard to sustainable development (thus: a good scoping). A good scoping process and definition of the aspects and assessment criteria per theme helps to focus the assessment framework.
- The IA has to fit the ambitions, goals, and the decision to be made on a plan or project.
- It is important to have experienced IA advisors and process managers that keep an eye on the integration of different themes and areas of expertise.
- The analysis of the existing situation should be focused on identifying the most urgent themes.

A broad IA seems to be mainly beneficial for plans/programmes on a high(er) level of abstraction with a clear scope. On the project level, a broad IA is mainly beneficial for area-oriented developments in early project stages.

WHAT ARE THE EXPERIENCES FROM PRACTICE

As the above shows, a broad assessment framework is not always the silver bullet for better decision-making in broad IA. However, it can create meaningful input for decision-making and help balance different interests and spatial claims on higher levels of abstraction. However, with the condition that scope and alternatives are clearly demarcated and IA fits the ambitions, goals and decision. We see that for environmental strategies scopes of IA are broadened by including more themes and aspects as a result of the introduction of the Environment and Planning Act and National Strategy on Spatial Planning and the Environment (both national Strategy on Spatial Planning and the Environment (both national level) come back in the ambitions and SEA of environmental strategies on the provincial and municipal level. Still, EIA for projects has a traditionally small focus with limited number of themes. Do the themes of the SEA of National Strategy on Spatial Planning and the Environment come back in the SEAs on the provincial and municipal level? For this instance, we would also expect to see more 'operationalized' criteria and themes on a municipal level. Or in other words: does tiering in SEA on a certain level of abstraction on different governmental/geographic levels work? Does it work through as expected, especially concerning the assessment framework?

We reflect on the outcomes of the explorative research from SEA practice on different abstraction levels (national, provincial, and municipal) by conducting case study research.

CONCEPTUAL MODEL

To hypothesise and structure our way of reasoning on the appliance of tiering on scoping on an SEA level, we use a model.



1 Conceptual model tiering

The figure shows the conceptual model on tiering of IA for environmental strategies. This model provides us with a few assumptions. First, it shows that the National Strategy on Spatial Planning and the Environment and the Environment and Planning Act are the framework that all other SEAs and EIAs cover. SEA happens on a higher level of abstraction on a national level than on a municipal level. When geographical scale decreases, also the level of detail decreases. On a local level, the level of detail of IA is less abstract and more specific, and when the scale increases (to regional or national level) the assessment framework becomes broader and more abstract. As well the criteria become more specific. At the same time, the scope of SEA on the national level 'works through' to the municipal level and finally EIAs. What does this mean for scoping?

CASE STUDY

In this case study, a small number of (app. 15 cases) broad SEAs on three governmental levels have been studied. These different levels are:

- National government: National Strategy on Spatial Planning and the Environment
- Regional government: Provincial Strategy on Spatial Planning and the Environment
- Local government: Municipal Strategy on Spatial Planning and the Environment

RESEARCH QUESTIONS

In order to compare scoping on these three governmental levels of in The Netherlands, we came up with the following five research questions:

- 1. How has the assessment framework been derived?
- 2. How has the level of detail in the assessment framework been specified?
- 3. People-Planet-Profit: On which P is the focus per governmental level? How can you deduct this from the assessment framework? And what is the difference per governmental level?
- 4. Which impediments and limitations are there per governmental level?
- 5. How do the governmental levels affect each other? Do findings from the one level affect the other level? How does this affect the assessment framework?

The five research questions are presented to two specialists who have worked on several broad SEAs on the three different governmental levels. Their experiences form the input for the case study in this paper. The findings were derived during an interactive interview in which they firstly separated answered the questions and then started a discussion about the answers.

FINDINGS CASE STUDY

The findings per governmental level and question are presented in the subsequent table.

Re	search question	National	Regional	Local	
1	How has the assessment	General themes	General themes	General topics	
	framework been derived?	In line with	Input from local	Input from local	
		ambitions and goals	authorities,	authorities,	
			politicians, or	politicians, or	
			stakeholders on	stakeholders on	
			aspect- and criteria-	aspect- and criteria-	
			level	level	
			Area-specific	Area-specific	
			developments	developments	
			In line with ambitions and goals	Profiling aspects by local authorities	
			Available data for	In line with	
			the determination of	ambitions and goals	
			criteria	Available data for	
				the determination of	
				criteria	
2	How has the level of detail in the	Broad aspects due	Availability of	Availability of	
	assessment framework been	to broad context of	information for the	information for the	
	specified?	SEA	determination of	determination of	
		General information	criteria	criteria	
		used for the	Tightening by	Tightening by	
		determination of	advice NCEA	advice NCEA	
		criteria		Traceable	
		Tightening by		information	
		advice NCEA		Level of detail of the	
3	People-Planet-Profit: On which P	No specific 'P' per gov	No coocific N/ por governmental level		
5	is the focus per governmental		No specific 'P' per governmental level All three P's in SEA Interpretation of aspects is different per governmental level, due to more		
	level? How can you deduct this				
	from the assessment framework?		specific information on the lower level		
	And what is the difference per	Scoping of themes an	Scoping of themes and aspects is difficult due to variety of developments that		
	governmental level?	are related to differer	are related to different aspects		
4	Which impediments and	Availability and traceability of information for the interpretation of the criteria			
	limitations are there per	Information for subjections	Information for subjective aspects which focus on experiences rather than		
	governmental level?	facts	In some cases there is a lack of specific ambitions which makes scoping of aspects more difficult		
		•			
		· ·			
5	How do the governmental levels	Expectation vs. reality is different. The idea that policy on the national level is			
	affect each other? Do findings	also implemented on the provincial and municipal level does not work out in			
	from the one level affect the other	The state of the s	practice in the studied cases		
	level? How does this affect the	Little attention for SEA and policy of neighbouring municipalities of the second			
assessment framework? • In the studied cases there is no chronic		there is no chronical order of s	SEAs from a national to a		
		local level, this way ti	local level, this way tiering is more difficult.		
6	Additional experiences	Lack of best practice	results in different assessmen	nt-approaches per	
		consultancy agency	consultancy agency		
			Consultancy agencies approached in a late stadium, steering less possible		
		•	than earlier in the process		
		· ·	Experience to reality to american coney becomes more opening at		
		governmental level whereas the way to assess the information does not		information does not	
		become more specific			

SYNTHESIS

Earlier research concludes that there are opportunities and disadvantages for implementing a broad assessment framework in broad SEA.

The main opportunities are the way in which a complete picture (with a lot of themes and aspects) could improve decision making. Practice shows that this is partly true but that there are many disadvantages due to the lack of information for the interpretation of criteria, especially for the social and economic themes. This results in different levels of detail which makes it sometimes difficult to compare or conclude. A broad assessment framework does give more insight in different claims on space but also differs per level of government. As policy is more detailed in lower levels of government, the way it impacts on society is being clearer.

The main disadvantages are also experienced in practice. A broad assessment framework does not automatically lead to a higher quality of decision-making This relates to a lack of specific ambitions or goals as being specific can harm the integral character of the plan. The lack of information for the interpretation of criteria also is an important disadvantage. A government could wish for a transition towards other topics, but an assessment framework in most cases builds on existing frameworks and policies. As some aimed new information has not been part of monitoring yet or monitoring is lacking at all, it becomes difficult to research them in-depth.

Additionally, the results of the case-study research suggest that lack of concrete choices leads to difficulties with scoping of themes and aspects. Furthermore, the integral character in which a higher-level plan lands into lower-level plans is not being experienced in practice. In the studied cases it comes forward that every government creates its own plan without looking across boundaries.

Relating these outcomes to the first conceptual model shows that broad SEA does not 'work through' as expected. In the case study, on the provincial and municipal level the broad SEAs act as silos and barely look at broad SEAs on higher abstraction levels or neighbouring policies. This is the case for both ambitions and goals of the proposed plan and the themes in the assessment framework. Although the Environment and Planning Act offers a legal framework and the spirit of the law can be seen in broad scoping of plans, the case study shows that the NOVI does not work that much as a framework as expected. On top of that, scope of broad SEA does not become smaller on a lower geographical scale, however the way aspects and criteria are considered could differ. Additionally, the expectations on the conceptual model do not work out in practice as expected. Scope of broad SEA does not become more specific when geographic scale decreases, although the plan itself could be more concrete. But the criteria used are becoming more specific, as information is more detailed on lower levels of governments.

Last, related to this case study research shows that the broad SEAs that are being examined by the NCEA hasn't hardly been provided with a positive advice ever since broad SEA started. Central in many advices of NCEA is the aim for more in-depth area-specific information and ambitions. Sometimes conflicting with the aimed level of detail of the plan. The lack of positive advice results in a lack of best practices. There isn't a specific way of doing a SEA which makes multi-interpretable how to conduct a broad SEA. Besides, when a consultancy firm is asked to make a broad SEA late in the process steering is hardly possible.

CONCLUSIONS & RECOMMENDATIONS

The central question in this paper was: Does tiering on different governmental/geographic levels work? Does it work through as expected, especially considering scoping?

The case study into the broad SEA on different governmental levels in the Netherlands show that tiering in broad SEA does, in practice, not work out as expected. Our hypotheses on scoping of themes and aspects and levels of abstraction in the conceptual model wasn't confirmed. Scoping is complex on all levels of government. Where on a national level it is complex to become specific in criteria due to the general character of the SEA it makes it difficult to scope, whereas on a municipal level this is due to the lack of available information for the determination of criteria. All together: the broad character of the plan, the lack of available information, specific ambitions and goals, best practices and an across-boarder view makes it complicated to make a detailed broad SEA in which

scoping has been applied in line with the expectations. Conducting SEA late on in a process doesn't help either.

Additional to the above, the lack of guidelines on how to execute a broad SEA makes it difficult for consultants. As a recommendation we suggest to come up with some guidelines on the execution of broad SEA in combination with a best practice example to give broad SEA-makers some grip to make a good start and apply scoping in a way that it provides the relevant information for decision making. We therefore recommend (based on the case study results) to start broad SEA early in the process and involve stakeholders and decision-makers in the scoping process to avoid the scope from becoming broader and broader. On top of that, the execution of broad SEAs from national to local is not always applied in that order. This could prevent useful application of tiering. However, it may be hard to implement a top-down tiering as planning processes at different governmental layers are complicated to steer by. We suggest researching how the sequence and chronical order of plans on different governmental levels impacts tiering as a follow-up.

LITERATURE

Arts, J., Tomlinson, P., & Voogd, H. (2011). Planning in tiers? Tiering as a way of linking SEA and EIA. *Handbook of strategic environmental assessment*, 415-436.

Coutinho, M., Bynoe, M., Pires, S. M., Leão, F., Bento, S., & Borrego, C. (2019). Impact assessment: tiering approaches for sustainable development planning and decision-making of a large infrastructure project. *Impact Assessment and Project Appraisal*, *37*(6), 460-470.

Van de Laak (2022). *Verkennend onderzoek brede milieueffectrapportage MIRT-projecten.* Rijkswaterstaat. (Available upon request).