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Forest and Nature Conservation Policy Group

MSc Thesis:

Implementation Practices of Nature Compensation in
the Netherlands; a Comparative Analysis



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Wageningen, May 2009

Wageningen Universiteit

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Preface

This thesis took some effort to finish and certain people played an important role in this. First of all I would like to thank Mariëlle van der Zouwen for her fantastic guidance. She was able to direct this thesis into a study that really takes my interest. It has been a very useful learning process, which can certainly be of value in the future. Next I would like to thank the Forest and Nature Conservation Policy Group for the gained insights during my education and other provided tools, which were of use during my thesis. I would also really like to thank the people who were close to me and supported me all through this thesis. Finally I want to dedicate this thesis to my grandmother, who always supported me in any way she could.

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Summary

This thesis is focused on the development of nature compensation policy. Nature compensation is a well known topic in the media nowadays. Briefly the concept of nature compensation includes mitigation- and compensation measures that are obligatory, if an intervention with negative effects is planned in protected nature areas. A certain degree of confusion surrounds the appliance of nature compensation. Several studies have already inspected the implementation of compensation policy and the problems connected to it. It appeared differences in implementation practices can possibly exist between the provinces, because they were given the opportunity to separately implement compensation policy into their provincial context. During this study it was of interest to acquire insight in the provincial implementation practices of the nature compensation policy, to detect similarities and/or differences in implementation of compensation between the provinces of the Netherlands. Three levels of conformity were used to answer questions like: how compensation was implemented into provincial policy documents, how behavior changed accordingly, and which end results are accomplished when taking the whole compensation process into account. This issue concerns actors from local to national level. Finally the goal was to increase knowledge about implementation practices of compensation in the Netherlands, by providing an overview that could be an addition to previously published reports on nature compensation. Especially now decentralization of tasks and responsibilities strengthens the position of the provinces and municipalities. The outcome can be of interest to both scientists and policy makers, since this study does not only involve compensation policy, but touches various policy areas.

Secondly attention was paid to the consequences for the actual compensator, when possibly different provincial implementation practices exist. An indication is given on how legitimate the policy implementation practices are for the nature compensators. Three levels of legitimacy have been used to study: how compensators were able to influence the compensation process and negotiations, how the compensation policy and procedures were experienced and which end results were achieved. The 'polluter pays principle' and the 'rule of equity' have been connected to this. Finally the first part of this research is focused on compensation policy at a provincial level, while the second part studies the implementation of compensation policy the other way around (i.e. from the perspective of a local level).

In the end the question remains if compensation is sufficiently realized in the field, accordingly to what has been registered in official legal documents. Compensation policy scores good on paper, but which results are booked in practice? This report gives insights into implementation practices of compensation on many levels. How compensation policy was implemented by the provinces was already largely known, but how behavior changed, and a look into how effective compensation policy is experienced, is a new addition. Besides, presumably new insights are gained by studying how the actual compensator experiences compensation policy, and the process surrounding it. Finally it is of interest to possibly connect results of both sections on provincial implementation practices, and legitimacy of compensation policy. Do higher levels of conformity actually lead to higher levels of legitimacy, and the other way around?

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1. Introduction

The introduction includes a background, problem statement & relevance, objectives, research questions and the outline of the coming chapters

1.1 Background

Space in the Netherlands is quite scarce, with its rather densely populated areas (i.e. more than 16 million Dutch inhabitants per 41,526 km² or in other words 16,033 miles²). This brings about competition between different interests and functions. For instance, population growth, urbanization, increasing mobility, development of nature and landscape features, all call upon space in the Netherlands (MNP, 2007). This research focuses on the nature function, and the protection of nature is determined by (inter)national regulations, legislation, and policies. Nationally the policy plans of the 'Nota Ruimte' and 'EHS-spelregels' for instance prescribe the conservation of nature areas. These policies describe that other functions in or near protected nature areas are not allowed, unless certain criteria are met (i.e. the 'no, unless' formula). Sometimes other developments in or near protected nature areas are inevitable, if there are no alternatives present and if it involves great social interests. Thus nature values can be damaged in certain circumstances, but then the damage needs to be mitigated and remaining damage needs to be compensated. There is even a compensation duty in force in the Netherlands. Information on compensation duties can be found in the Nota Ruimte, which is the national spatial policy. Additionally the rules of the game are registered in the 'EHS-spelregels', which involves a national nature policy. These policies are the two pillars that form the current foundation behind the compensation policy. It becomes clear compensation is not formulated in one single policy. It seems to be fragmented, since references to compensation are found in several different (inter)national policies that are connected to certain protected nature areas, which are all mentioned in the Nota Ruimte and 'EHS-spelregels'. Detailed information on compensation policy is given in chapter 2.

However the implementation of compensation has not always been clear and unambiguous. Implementation of compensation policy has been an issue for some time now. While compensation policy already originated from 1995, when the compensation principle was officially registered in a spatial policy plan, concerning the Structuurschema Groene Ruimte (Dutch acronym: SGR), for the first time. Ever since problems have arisen with the appliance of compensation. The media frequently mentioned the presence of obscurities connected to the implementation of compensation, and a lack of control (Holtjer, 2007). It frequently became clear that obtaining suitable compensation grounds, and the actual realization of compensation duties in the field, proved to be troublesome. Even now problems with compensation exist, while the SGR was replaced by the Nota Ruimte in 2006. Can the current compensation policy structure the implementation of compensation? The Nota Ruimte was created to decrease the overlap between different policy areas, which should offer more clarity and provide more coherence in this policy plan and the implementation of it (VROM, 2006:11,48). Additionally the 'EHS-spelregels' were designed to provide unambiguous compensation guidelines. The provinces have an important function in the implementation of these policies, since they had/have the opportunity to implement compensation policy into their provincial context. Due to decentralization provinces get more responsibilities and tasks. As the Nota Ruimte described:

"It was previously noted less rules from Den Hague were preferable and more room

for decentralized considerations was desired. The role provinces have of giving direction is strengthened" (VROM, 2006:24).

Besides, decentralization works through to municipalities who will also get more responsibilities, regarding the implementation practices of compensation. Generally municipalities are closer to the compensators and the actual realization of compensation in the field. While the provinces mainly have a role in the initiate/planning phase and supervises the whole compensation process. Further decentralization of responsibilities to municipalities will mean more tasks related to the initiative/planning phase are handed over to them. How will municipalities deal with these extra responsibilities? The implementation of compensation can already be quite tricky on national and provincial level. It could lead to complex practices in the future. However the Nota Ruimte noted:

"The government is aware that decentralization could cause differences between provinces. These differences could become larger with the room provinces are given for decentralized considerations. But when at least the basic quality, mentioned in the Nota Ruimte, is guaranteed than these differences could be attractive for the Netherlands as a whole" (VROM, 2006:26).

This statement shows provinces can possibly differ in provincial compensation policies. Besides the provinces were also allowed, by the state, to separately implement the compensation policy into their provincial context, which can lead to differences. In 1999 an extensive research was carried out by Kuindersma *et al.*, in which patterns (i.e. differences and similarities) in implementation practices between all the Dutch provinces were studied. Kuindersma *et al.* indicated that certain provinces are well ahead of others, see table1 below. Since ten years have past, it should be interesting to study how similar and/or different implementation practices currently are between the provinces. An overview of implementation practices in all the Dutch provinces has not taken place since Kuindersma's research. Although many studies have been carried out that focused on certain provinces or certain compensation projects, but an current overview of all this information is not present. This research will not cover all the provinces either, but two provinces per category (i.e. forerunners, followers, laggards) of Kuindersma's research will be selected. In total six provinces will be selected of the twelve Dutch provinces, while covering the corners of the Netherlands (i.e. North, East, South, West and Centre). These provinces will be considered to be representative for all the Dutch provinces, in a research on implementation practices of compensation (see chapter 4 Methods, for more details connected to this selection). In the end the question remains how the provinces will score now, while ten years have past? And which province will be well ahead, while others might lack behind? Providing an overview of provincial implementation practices is especially of interest in this research.

Forerunners	Followers	Laggards
Gelderland	Overijssel	Groningen
Noord-Brabant	Zuid-Holland	Friesland
	Zeeland	Drenthe
	Limburg	Flevoland
		Utrecht
		Noord-Holland

Table 1. Clustering provinces into forerunners, followers& laggards (Kuindersma *et al.*,1999:21)

During the study on implementation practices it may appear that provinces differ. A question that arises from this involves: how legitimate different provincial compensation policies would be for the actual compensators? Which consequences are connected to the problems that are being experienced with the implementation practices of nature compensation? Ultimately this research focuses on the provincial implementation practices and attention is paid to how the actual compensators experience this policy.

1.2 Problem statement

Compensation has been registered in several policy documents over time. Different protected nature areas require different implementation practices, concerning nature compensation. This can be confusing, because sometimes nature areas belong to two sorts of nature protection regimes (e.g. areas belonging to the National Ecological Network, Birds and Habitat Directive and/or Nature Protection Act can partially coincide). The concept of nature compensation, and connected obscurities, have frequently been covered in studies and by the media. Ever since the 1990's the compensation principle received more and more attention. Eventually compensation became part of the Nota Ruimte and the 'EHS-spelregels'. These documents were designed to decrease the overlap between different policy areas and to increase the unequivocality, but confusion remains to exist. The provinces have an important function, since they implement the Nota Ruimte and 'EHS-spelregels' on a provincial level. The provinces have been given the freedom to implement nature compensation into their own regional plan and development plans. A presumption can involve the existence of twelve different implementation practices, regarding nature compensation, if all the provinces separately implemented compensation in their own province. Currently an overview of implementation practices of the Dutch provinces is not present. Many studies focused on implementation practices of compensation, but it is a pity that these reports are not collected at one central place in order to monitor how nature compensation is implemented in all the Dutch provinces. Generally certain provinces and separate compensation projects have been studied lately, but research regarding the patterns (differences & similarities) between all twelve provinces have not systematically been examined since Kuindersma *et al.* A descriptive research on how nature compensation is implemented in the provinces, since 1999, could be an addition to this research. In 10 years quite some changes were made. Decentralization of tasks and responsibilities, from national to provincial and local level, has increased lately. The position of provinces and municipalities is strengthened. In this light it is of interest to research which similarities and differences in implementation practices of nature compensation exist between the provinces.

When differences in implementation practices between provinces exist, then one could wonder how legitimate it is that the actual compensators have to deal with a different situation in different provinces? Implementation of compensation could differ on many aspects between provinces (e.g. different forms of compensation). Is there a possibility that one compensator has higher costs for executing an intervention than another compensator in a different province, when initially the intervention and other requirements of compensation are nearly similar? Of course taking aside a comparing land value calculation and other factors of influence. Of interest is if compensators have equal costs, same duration of the compensation process and the same possibility to get involved in the process? Do nature compensators get a fair share of burdens? The different provinces have worked out the compensation principle into their regional plan and development plans. But do the actual implementation practices in a province correspond with the rules they have set in the regional plan and development plans, concerning nature compensation? In the end the questions remains: which way of handling nature compensation is correct and fair?

Objectives

1. Acquire insight in the provincial implementation practices of the nature compensation policy to detect similarities and/or differences in implementation of compensation between provinces in the Netherlands.

2. Indicate how legitimate the policy implementation practices, regarding nature compensation, are for the nature compensators.

Research questions

The following research questions were formulated in order to discover patterns in implementation practices of nature compensation between the Dutch provinces. This research involves how the nature compensation principle is implemented by the provinces in the Netherlands. Next to this a research question is dedicated to examine how legitimate the implementation practices are for the nature compensators. The research questions include:

1. What are the characteristics of national nature compensation policy that sets the context in which provinces implement compensation policy?
2. How is the nature compensation policy implemented at the provincial level and which implementation problems arise?
 - a. Which problems arised with implementation of compensation into policy plans?
 - b. Which problems arised that were connected to the behavior of involved parties towards compensation policy?
 - c. Which problems arised during the actual realization of compensation in the field?
3. Which differences and similarities exist, regarding the implementation practices of six provinces?
4. How can provinces be distinguished, in terms of forerunners, followers and laggards?
5. How legitimate are different provincial implementation practices for nature compensators?
6. How are the provincial implementation practices related to the legitimacy of compensation policy for nature compensators?

Relevance

It becomes clear that this research concerns a current subject. Nature compensation is a hot topic and much attention is paid to the implementation of compensation. In 1999 Kuindersma *et al.* published an overview, concerning the implementation practices of all the Dutch provinces. Currently such an overview, in which provinces are systematically studied, is not present. Many studies have been carried out that focused on certain provinces or separate compensation projects, but an current overview of all this information is not present. This research will not cover all the provinces either, but two provinces per category (i.e. forerunners, followers, laggards) of Kuindersma's research will be selected. The selected provinces will be representative for the Dutch provinces (more information about the careful selection of the provinces can be found in chapter 4 Methods). The results can be compared to the results of Kuindersma *et al.* from 1999, which can be an addition. Besides by providing an overview of the current situation, concerning implementation practices, a contribution can be made to former research. In the past studies mainly focused on how compensation was implemented into policy documents (i.e. regional plans or development plans). Also accomplished results were viewed from certain compensation cases. In addition this research will study the behavior towards compensation policy as well. Furthermore the provinces receive the opportunity to give an indication about the actual realization of compensation in practice. Finally the legitimacy of compensation policy is studied, and presumably this has not been inspected before. The question remains: how the actual compensators experience the compensation policy. Insights can be gained through the insider's point of view of

compensators. Ultimately this report will present information on the implementation practices of compensation on a national, provincial and local level.

1.3 Outline chapters

In chapter 2 the national compensation policy is described, involving the development of the compensation policy and an extensive description of the compensation procedures. Then chapter 3 includes the theoretical framework. The following concepts are discussed: subsequent decision-making (e.g. from national level to provincial level to local level), levels of conformity and the legitimacy of possibly different implementation practices. After this the methods are covered in chapter 4. Next the results are shown in chapters 5 and 6. First the patterns in implementation practices between provinces are presented, and this is followed by the results connected to fair treatment of compensators. To finally end with the conclusion and discussion in chapter 7.

2. National compensation policy

This section will first give a general overview of the compensation principle in subsection 2.1, including: a short history of implementing the compensation principle, general information on the compensation principle and the compensation principle through the years with bottlenecks & improvement possibilities. Then subsection 2.2 will give a detailed description of how compensation is currently implemented, which will be explained by using schemes that describe the procedures. Followed by subsection 2.3 about elaborations of compensation in specific policies and to end with subsection 2.4 on who is responsible for what. This chapter has an essential function, since elements of it can be found back all through this report. The knowledge behind the compensation policy and the procedures were crucial for the further research, because it structured how results were gathered and the processing of results. Additionally the knowledge of this chapter was of value during the final process of bringing together the most important consequences of this research (i.e. conclusion/discussion). For the reader this chapter will give insights about the compensation policy and the surrounding procedures.

2.1 Developments of the national compensation policy

The national compensation principle was introduced in a structure for green space called the 'Structuurschema Groene Ruimte' with the Dutch acronym: SGR. (LNV, 1995a). Additionally an elaboration on the compensation principle was worked out, which was called 'Uitwerking compensatiebeginsel SGR' (LNV, 1995b). The process that leads up to the compensation principle is described next.

"Vast significance is attached to sustainable preservation and recovery of nature, forest and recreation values, and in certain areas these functions have a severe planning management, as described in the SGR. This concerns that in certain areas principally no spatial interventions are allowed to take place (no, unless principle). This involves new interventions, which have not been considered or established in planning. These interventions are only permitted when the initiative taker can prove that considerable social interests are involved. Besides it needs to be grounded that there are no alternative available for the intervention (prove intervention is tied to a location). So the initiative taker has a serious duty of describing their motivations and needs to show social necessity in order to prove that a certain activity/intervention actually needs to take place at the concerning location. Activities that can equally well or better be executed outside this location need to be avoided (translocation principle). It is not the case that when the social importance is only large enough an intervention can take place right away. Per case it needs to be examined if the social interest evens out the social importance of the protected values. Only if this consideration for the intended spatial intervention is allowed, the compensation principle sets in." (LNV, 1995b:1,2) It becomes visible that the compensation principle has a double function including "the function of both the consideration between alternatives as the recovery of the occurring damage" (LNV, 1995b: 5).

Back in 1995 the SGR described the following protected area categories, in which the compensation principle is in force:

- Core areas of the National Ecological Network (NEN)
- Realized nature development areas;

- Smaller nature areas outside the NEN that are indicated as such in the regional plan and falling under the nature protection policy or are registered in a development plan;
- Biotopes of benchmark species recorded on the indication of species protection plans of the state and/or development plans.
- Forests and vegetation in landscapes that fall under the forest policy;
- Comprehensive public recreation facilities. (LNV, 1995b: 4)

Different types of mitigation and compensation exist, which will briefly be mentioned next. When damage occurs that is inevitable than in first instance integration operations of landscapes and mitigation takes place. If damage still occurs then physical compensation becomes a possibility. At last financial compensation could possibly take place as a final option. The next subsection describes these types of compensation more extensively and which steps are taken during the process.

Ultimately the basic assumption of compensation policy involves:

“The existence of no net-loss of values. Per compensation project no net-loss of values, concerning acreage, quality, and cohesion may occur. This is applicable for projects in every area category. This assumption involves cases in which a balance of positive and negative effects can be applied, regarding the benefits and losses. If the area category is the same, it contributes on a similar manner and to a similar extent to (bio)diversity and natural quality. It should contribute to the recreational user as well and the perception values.” (LNV, 1995b: 10)

Since the compensation principle was introduced in 1995 various studies have been conducted. Years after the implementation of the compensation principle, research showed that still a lot of confusion exists, concerning this policy. Also the actual rules of the game were not clear to everyone. The SGR and the elaboration on the compensation principle that were presented in 1995 apparently do not seem to provide enough guidelines to sufficiently apply the compensation principle. Further elaborations on the compensation principle was necessary and recommended by numerous researches. For instance Kuindersma *et al.* showed the implementation of the compensation principle was not up to standards yet in 1999. Differences in the implementation of compensation between provinces could exist, due to the possibility that provinces could separately implement the compensation principle into their regional plan. The research of Kuindersma *et al.* described how several provinces had not completely implemented the compensation policy. How do the implementation practices look now in 2009? Would the provinces still be categorized in the same clusters currently, including: forerunners, followers and laggards? More information on the categories of Kuindersma *et al.* can be found in table 1, chapter 1.1 Background.

Other studies on the implementation of compensation policy, for instance include: Van Barneveld *et al.* in 2000, Gijsen *et al.* in 2003, Working party of the Birds and Habitat Directive in 2003, the Algemene Rekenkamer in 2006, the inspection of the Ministry of Housing, Spatial Planning & the Environment (Dutch acronym: VROM) in 2006 and Vader *et al.* in 2007. They all showed problems, concerning the implementation of the compensation principle, and generally it was noted that elaborations on this policy are desirable. The need for clarification was also confirmed by Cees Veerman, the Minister of Agriculture, Nature and Food Quality (Dutch acronym: LNV). In 2006 this minister mentioned the state and the provinces would work together on a policy framework that can be applied on spatial interventions in the National Ecological Network (acronym: NEN) (LNV, 2007). By the way in 2006 the SGR was replaced by the Nota Ruimte as well. Thus the state and provinces discussed the concepts of nature compensation more extensively, and translated it into one document that includes the rules of the game for

spatial interventions in the NEN. These rules of the game were described in the 'EHS-spelregels' at length, and replaced the 'Uitwerking compensatiebeginsel SGR' in 2007. The title of this document might be misleading, because the 'EHS-spelregels' does not only mention the compensation principle that is connected to NEN areas. Information is also given about other protected areas in which the compensation principle is in force. Finally the 'EHS-spelregels' has a double function. It has the purpose to make a development focused approach possible in NEN areas while also reaching a better spatial protection of NEN areas (LNV, 2007:3).

To recapitulate the compensation principle was introduced in 1995 and in the following years it became obvious that these documents did not provide enough guidelines to properly implement the compensation policy. In 2006 the SGR was replaced by the Nota Ruimte and in 2007 the 'EHS-spelregels' replaced the 'Uitwerking compensatiebeginsel SGR'. It took quite some time to develop new policy documents, with updated and improved compensation guidelines. The state worked together with the provinces and other involved parties in order to make the 'EHS-spelregels' more suitable for implementation. It still needs to be examined if the 'EHS-spelregels' is successful (or not) in improving the implementation of compensation. The 'EHS-spelregels' noted:

"In 2008/2009 the state and the provinces, in consult with the municipalities, shall evaluate the policy framework according to the attained results. It will be examined: if a more development focused approach could take place, how custom made measures were stimulated in the NEN, and if compensation seemed to be secured." (LNV, 2007:41).

Besides the Rekenkamer came with interesting results, regarding compensation plans and mitigative measures in 2007. Next the results from this report are literally presented:

"The province generally tests compensation plans, from initiative takers. to the provincial policy on nature compensation. This occurs when spatial plans are tested to the regional plan. During this the province is advised by the provincial planning commissions. Then there needs to be a compensation plan added to the development plan. Research turned out that the province does not examine on cohesion or quality of the proposed compensation in the compensation plan. Provinces, who cooperated in this research, tested compensation plans on size and not on quality or spatial connection. Another result of this research involves mitigation, which means that damaging effects of the intervention must be prevented or reduced. In none of the inspected local projects mitigative measures have been worked out or executed. This research from the Rekenkamer concludes that supervision is needed on the correct way of implementing spatial policy by provinces & municipalities and that nature conservation deserves more attention in this case. (Algemene Rekenkamer, 2007)

It becomes clear that nature compensation is a well discussed topic but the realization of compensation remains difficult and the actual implementation of compensation is still an ongoing process. In the next paragraph the details of the compensation process are extensively covered.

2.2 Procedures national compensation policy

This section will give an extensive look on how compensation is supposed to be implemented, according to national guidelines. Most of the following text is literally translated from the document 'EHS-spelregels' and parts of the Nota Ruimte. All the steps taken in the compensation process will be explained next on basis of two schemes

from the 'EHS-spelregels'. Diagram 1. shows the whole compensation process, which also could be of use for the compensation process of other protected areas. While diagram 2. shows more detail on the compensation process, specifically in the NEN.

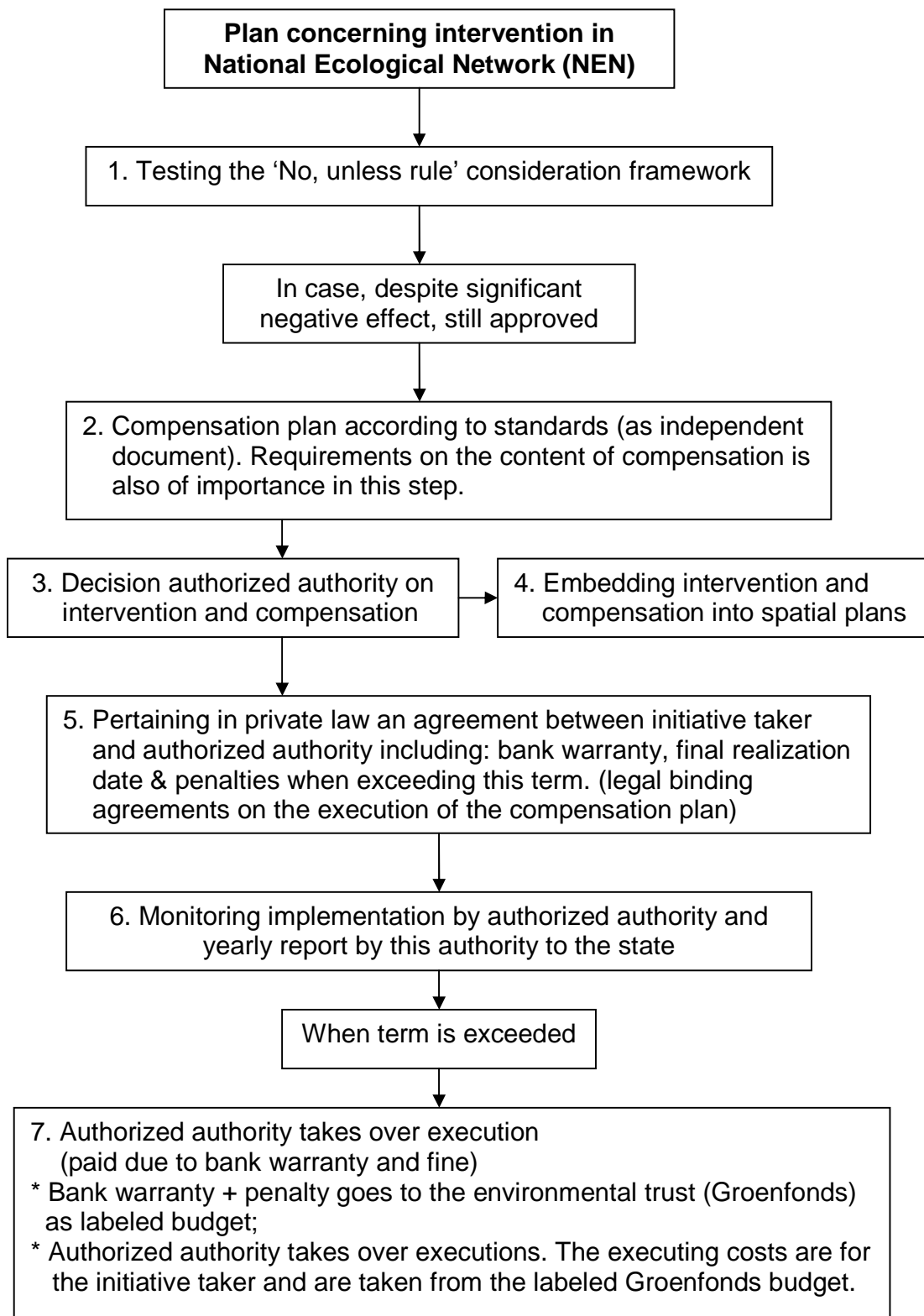
First a short description of how the compensation principle is outlined in the Nota Ruimte is given before further explanations of these diagrams from the 'EHS-spelregels' are showed.

The Nota Ruimte states that: when an intervention seems to be inevitable, then the initiative taker of the plan, project or action is responsible for the realization of the mitigative measures to diminish the negative effects, and if negative effects remain it needs to be compensated. The authorized authority is responsible for enforcing the compensation obligations and sees to it that the initiative takers actually compensate. The Nota Ruimte states the following requirements regarding compensation in Birds and Habitat Directive (BHD) areas, Nature protection policy areas and National Ecological Network (NEN) areas:

- No net-loss of values concerning acreage, quality and cohesion;
- Compensation next to or nearby the area of the intervention, including the condition that a sustainable situation comes into existence. Physical compensation disownment can take place;
- Compensation next to or nearby the area of the intervention, including the condition that a sustainable situation comes into existence; if physical compensation is impossible next to or nearby the area, through compensation concerning the realization of qualitative equal values, then physical compensation further away from the damaged area is allowed;
- When both physical compensation as compensation through qualitative equal values are impossible, then financial compensation is allowed (not with BHD-areas). The financial compensation is deposited in the national environmental trust (Groendfonds) managed by the state and provinces. The money remains labeled to the intervention;
- The date of the decision, concerning the intervention, is also the date when the following is decided: the nature, method and moment of mitigation and compensation;
- Stricter requirements are in place for areas in or outside the NEN, which are assigned as BHD areas. When an intervention has a significant effect on the BHD areas, then one is obliged to arrange replacing nature in advance and it should be arranged in such a manner that the cohesion is not compromised of the Natura 2000, which is an European Ecological Network. (VROM, 2006:116)

On the next page the outline of compensation procedures is given in diagram 1. Afterwards the steps given in this diagram will be explained one by one.

Diagram 1. Outline compensation process (LNV, 2007)



Step 1: No, unless formula

Generally spatial policy for the BHD areas, nature protection act areas and NEN areas are focused on conservation, recovery and development of the actual characteristics and values of an area. The protection of these actual characteristics and values takes place by using a specific consideration framework named the 'No, unless'-regime. (VROM, 2006:114)

Inside the areas in which the 'no, unless'-regime is in place new plans, projects or actions are not permitted when these significantly damage the actual characteristics or values of the area, unless there are no realistic alternatives and it is a case in which great social interests are involved. Interventions that proved to suffice these criteria are obliged to limit the damage as much as possible with mitigative measures. Remaining damage needs to be compensated. The authorized authority needs to supervise, while initiative takers perform research, from which it can be decided if the actual characteristics and values of an area are significantly being damaged. The characteristics and values of an area, which is to be protected, needs to be specified in order to be able to make a careful consideration. The actual characteristics and values involve the current and potential values based on the nature goals for the area. This includes: nature goals and quality of the concerning area, geomorphologic and geographic values & processes, water balance, quality of: soil, water & air, tranquility, silence, darkness & openness, the landscape structure and the perception value. (VROM, 2006:114)

Step 2: Conditions of compensation

This step explains the requirements set for a compensation plan and the requirements on the content of compensation, both according to the 'EHS-spelregels'. First to start with what is expected from a compensation plan as a independent document:

- The time of the decision, concerning a project, is also the date on which decisions are made on the nature, method and date of mitigation and (physical and/or financial) compensation.
- The necessary compensation measures and the management of the compensation area needs to be recorded in a compensation plan in which the following details must be processed: nature goals, fencing, measures, development management, regular management, terms, timeline for realization and an evaluation moment concerning the quality of the realized compensation nature.

Which requirements are connected to the content of compensation? Compensation can exist of firstly physical compensation and possibly as a last option financial compensation. Physical compensation can either exist of compensation, concerning the surface with direct effects or quality addition. The following aspects are applied with physical compensation:

- In the replacing acreage a basic design needs to be realized in which the lost values can be developed.
- It can be necessary that the lost acreage is compensated with a larger acreage to secure the cohesion in the NEN and realize the same ecological quality.
- In case of quality loss of existing nature values, during the development stage of the replacing area, an extra charge on the physical compensation is calculated. This involves both the surface as the extra budget to cover the extra costs during the early years of the reforming management. Four categories can be distinguished, including to which degree an area is replaceable and the additional charge, see table 2.

Category	Time	Charge
Very quickly replaceable	Development time < 5 years	No charge
Quickly replaceable	Development time 5 – 25 years	Addition of 1/3 in surface & the capitalized costs of the development management
Replaceable	Development time 25 –100 years	Addition of 2/3 in surface & the capitalized costs of the development management
Difficult or not replaceable	Development time > 100 years, respectively no suitable locations outside NEN	Depends on the circumstances

Table 2. Quality addition (LNV, 2007:18)

- In special cases deviations can take place regarding the above mentioned guideline of quality addition.
- When the lost qualities cannot be developed (for example due to a very long development duration, or because suitable circumstance outside the NEN are missing), then equal qualitative values need to be realized.
- If it is impossible to realize the physical compensation entirely in the set time period, then research takes place to discover if a part of the physical compensation can still be realized. Financial compensation is offered as an option to compensate for the remaining damage.
- When physical compensation (replacement of acreage) is not possible in water areas, then the preference goes to upgrading nature quality of the ecological cohesion in the rest of the water area.
- If mitigative measures are possible (for example placement of sound barriers) but seriously collide with other policy (for instance the view of landscapes or cultural history), it can be considered if compensation deserves the preference above mitigation.

Next information is provided about the compensation of quality loss:

- A loss of nature quality occurs during the development period of replacing an area. Aimed development management is necessary to restore the replacement of an area as quickly as possible. The extra management costs during this period of the development management are capitalized by the initiative taker.
- Reimbursement for the extra costs, concerning development management, includes custom made measures and is established in consult with the intended area manager. A general rough-and-ready rule holds that extra management costs include a minimal of 1 á 2 times the standard costs for the concerning nature goal type during the first five years after the design of the ground. During the development of forest types the costs run over a longer period and it can be presumed that extra management costs involve a minimal of 1 time the standard costs for the first ten years after design of the ground.
- The initiative taker also needs to take in mind the regular management costs, which should be secured for a period of 25 years. For instance by making sure that the compensation area qualifies for a management grant.
- The 'EHS-spelregels' shows examples of possible calculations, regarding the estimated costs. It should provide a view on the costs related to reforming management for different types of nature. The costs of acquiring and designing are included in these calculation to give an indication of the link between the costs of development management and the total costs per hectare.

When physical compensation is not possible financial compensation can become an option. The following details can be given about this type of compensation:

- Financial compensation is possible, but a severe burden of proof is connected to it. The initiative taker needs to clearly prove, in the compensation plan, why physical compensation is impossible. For instance if the preconditions are missing for replacing nature of equal quality in good cohesion.
- The amount of financial compensation is determined, according to the following costs elements:
 - Costs of acquiring replacing ground at the same place;
 - Costs of the basic design (including for instance: soil activities, adjustment of the water balance and the planting of young trees in case of a forest);
 - Costs for development management during the development period.
- The financial is determined, while keeping the inflation and interest into account. In the shape of a bank warranty or labeled trust it is secured in the national environmental trust (Groenfonds)
- The authorized authority needs to secure the compensation of regular management costs, while setting in the budget for the realization of new nature. For instance by making sure that the compensation area qualifies for a management grant.

Step 3: Decision authorized authority on intervention and compensation

Decision awaits from the authorized authority.

Step 4: Subsequent decision-making of spatial policy & nature policy

Which role subsequent decision-making has, according to the 'EHS-spelregels', is covered next:

- The authorized authority, who is responsible for the enforcement of the compensation duties, also needs to make sure the initiative taker actually compensates, and that the compensation is properly registered in spatial plans.
- A new spatial development (intervention) in the NEN is recorded in a development plan, which needs to be established by the local council and needs to be approved by the Provincial Executive. This situation is according to the former policy on spatial arrangement (Wet ruimtelijke ordening, Dutch acronym: Wro). Currently the new Wro does not require the approval of development plans by the Provincial Executive. In the end not only the intervention, but also the location related to the compensation (often requiring a change in destination) should simultaneously with the decision on the intervention be established in the same development plan, or if applicable, in a different development plan.
- The compensation plan is an integral part of the explanation on the development plan, which is translated into the map of the development plan and is established in the accompanying regulation.
- The province, state and other interested parties can indicate, in a preliminary consultation on the development plan (art. 10 Decision on spatial arrangement, Besluit op de ruimtelijke ordening, in the current situation), if they agree with the compensation plan. This is a part of the development plan procedure as clarification. Herewith agreements are made on the way in which the Provincial Executive will inform about the progress and on which moments.
- Advise is given by the Provincial Planning Commission for the approval of a development plan by the Provincial Executive. The state is represented in the Provincial Planning Commission and gives it's vision on the development plan in this way. Within the framework of the preliminary consultation (art. 10 Bro) the state can give a reaction. Besides the state has the possibility to: give a view on

- the design of the development plan, to have reservations on the established plan and possibly appeal after approval.
- The extent of the area, for which the development plan is designed, is determined not only by spatial issues and the intervention, but also by the intended ecological goals. Moreover it is relevant that the ecological aspects of an area represent one coherent entity. The requirements, which the present and potential nature values demand of their environment, are mainly viewed.

Step 5: Private law arrangement between initiative taker & authorized authority

The 'EHS-spelregels' describes the following on securing compensation:

- Agreements, between the initiative taker and the authorized authority, on the execution of the compensation plan should be recorded in a (legal) private law arrangement.
- The roles and responsibilities of the involved party are registered in this document. Also the financial foundations (such as a bank warranty) should be added. This should secure the compensation measures, including the financing and development management.
- The compensation should be realized by the initiative taker, as quickly as possible. The final realization date is recorded in an agreement, with an penalty clause if the compensation is not accomplished in time.
- In 'simple projects' compensation needs to be fulfilled within two years after signing the private law arrangement. In 'major projects' there is a term of five years with a maximum extension of ten years. When a motivation is in place in the compensation agreement, then it is possible to differ from these terms of two, five and ten years.
- Only after the determined term of the compensation agreement is elapsed, the given bank warranty is deposited in the environmental trust (Groenfonds), regarding the remaining physical compensation and the amount of the penalty.
- The settlement indicates that the authorized authority is responsible for the monitoring and the implementation in accordance with the agreement.

Step 6: Monitoring & reporting the implementation of compensation by authorized authority

The key factors of monitoring compensation and reporting it, as mentioned in the 'EHS-spelregels', are given next:

- Reporting is compulsory in order to have a clear overview of the compensation duties and the progress of these duties. Yearly, involved municipalities report to the provinces on the progress of compensation duties. Municipalities are responsible for the implementation of the NEN-policy in practice.
- The province verifies these reportages (like for instance comparing it with own registration lists) and collects the inspected reports. These reports ought to be transparent, and should provide clarity on the implementation of the NEN compensation principle from the 'EHS-spelregels', and possibly give an overview of custom made solutions that have been applied on a regional level.
- The reports can be included as an appendix, added to the regular provincial reporting. This could give the state a view on how compensation is applied.

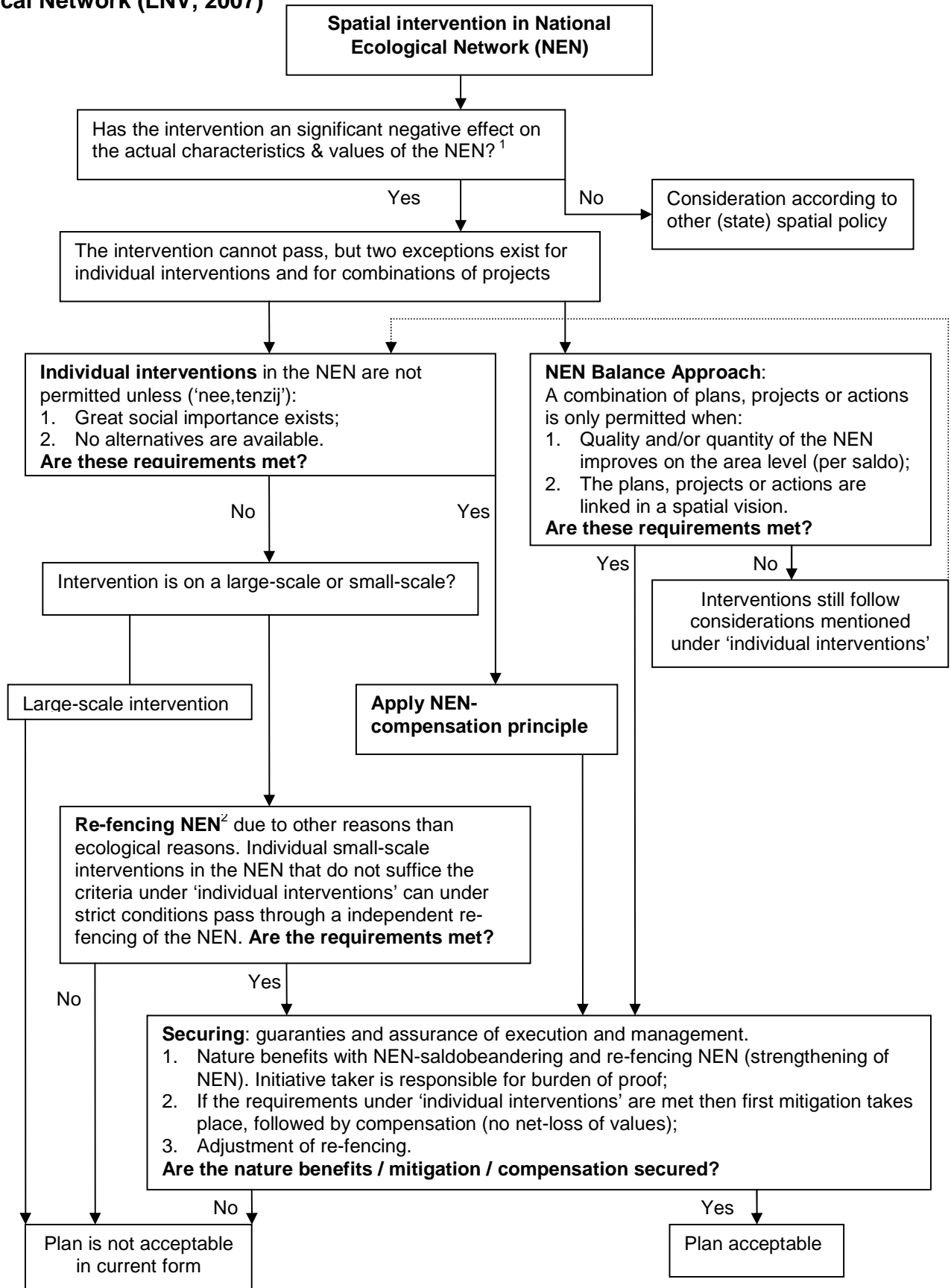
- The following data is needed to secure compensation in an ideal way, given in succeeding phases:
 - Governmental → Preparatory phase, including: the establishment of the development plan, the compensation plan and other official documents, like for instance the private law arrangement. The authorized authority is responsible for this;
 - Administrative → Implementation phase: hectares of compensation ground that is: fenced, bought, arranged, assigned to a manager and properly taken over. The initiative taker and manager are responsible for this;
 - Physical → Evaluation phase: the extent, cohesion and abiotic/ecological quality of the compensation grounds and of the protected area in which the intervention and the compensation takes place;
- The authorized authority inspects if the compensation is actually realized in the field.

Step 7: Authorized authority takes over execution

The 'EHS-spelregels' explains that if the initiative taker remains negligent in realizing the compensation, then the authorized authority can take over. This authority could apply coercion by implementing the compensation, while the initiative taker is still required to pay for the costs. The bank warranty and penalty can be used in this case.

On the next page diagram 2., concerning the compensation process of specifically NEN areas, is showed and afterwards clarification is provided.

Diagram 2. Compensation process, specifically focused on the National Ecological Network (LNV, 2007)



¹ This is about the effect of the intervention itself, and not the net or already balanced effect. If an intervention takes place in a Natura 2000 area, then complementary requirements are in place.

² Another custom made measure in the re-fencing of the NEN occurs, according to ecological reasons. This is not mentioned in this scheme because there is no spatial intervention behind it.

Diagram 2. includes two concepts that have not been discussed yet, including National Ecological Network-balance approach (NEN-balance approach or in Dutch: EHS-saldobenadering) and determining the limits of the National Ecological Network (in Dutch: EHS begrenzing). The following text about these concepts, which is literally taken from the 'EHS-spelregels'.

The 'EHS-spelregels' mentions that NEN-balance approach and determining the limits of the NEN are noted in the Nota Ruimte as instruments used to make the following possible: more custom made measures and apply a more development focused approach. The goal behind these instruments is to make spatial developments possible in the NEN within a clear framework , if it leads to a net profit for the NEN. An elaboration on these concepts is given next.

Determining the limits of the National Ecological Network

Provinces can adjust the current fencing of the NEN, with preservation of the original ambition, in order to improve the cohesion of NEN areas and to sustainably adapt the NEN to it's environment. Re-determining the limits of the NEN can also take place due to other reasons, non-ecological reasons, if the initiative leads to enrichment of the NEN in the concerning region. State policy is leading with this. The state makes agreements with provinces on the way re-fencing takes place. (VROM, 2006:114)

Resetting limits to the NEN on a small scale, due to other reasons than ecological reasons, should at least suffice the following conditions. If these conditions are not met than the plan is not acceptable.

Requirements for considerations, concerning content:

- Only a limited amount of damage occurs of the actual characteristics and values of the NEN, and the cohesion of the NEN, due to the proposed spatial intervention;
- The initiative must finally lead to a qualitative and/or quantitative enrichment of the NEN in the concerning area;
- While strengthening the NEN it should be profitable. The spatial intervention is carefully grounded on the assigned location, including which alternatives have been considered;
- On site, such measures are taken that include a good integration with landscapes and nature.

Requirements for the process:

- The initiative taker commits to the execution of the qualitative and/or quantitative strengthening of the NEN, and agreements are made on the way it is executed. Also the moments on which the initiative taker informs the province of the progress is registered;
- The quality gain is not financed of regular NEN means;
- Re-fencing is only applicable with small-scale developments, and remains limited to solving bottlenecks and offering custom made measures.

The actual difference between non-ecological reasons and ecological reasons for re-fencing of the NEN, includes that in case of ecological reasons there is no spatial intervention involved in the NEN. Applying the re-determination of limits, concerning the NEN, on basis of ecological reasons, includes sufficing the following requirements:

- The initiative to re-fencing on that location is carefully ecologically founded. Re-determining the limits must lead to better chances in realizing the NEN,

- including for instance improvement of the cohesion of the NEN or improving integration operations in the NEN;
- The initiative of re-fencing can only take place if at least the original qualitative and quantitative ambitions of the NEN, in the concerning area, are preserved and preferably increased.
- Besides it is recorded where and which NEN areas disappear. It is also registered where these areas are once again introduced.

National Ecological Network balance approach

The 'EHS-spelregels' describes that: the National Ecological Network-balance approach (NEN-approach) originated from the need of the state and provinces to make a more development focused approach possible in the NEN. That is why the NEN-balance approach involves projects and/or actions, which are not separately viewed, but combined. The projects and/or actions need to have as goal to improve the quality and/or quantity of the NEN, on an area level, by credit. Quality and quantity must minimally remain equal, and should not mutually balance. The appliance of the balance approach consequently leads to quality gains for several concerned parties and several functions, among which nature is one function. An important condition is that these custom made measures are recorded in an area vision. (VROM, 2006:116)

How the NEN-balance approach is applied, according to the Nota Ruimte, is described next, while including binding basic assumptions. The NEN-balance approach is only applicable if:

- A combination of plans, projects and actions are presented within one spatial vision;
 - There is a mutual link between the concerning plans, projects or actions;
 - A written warranty for the realization of the plans, projects or actions can be considered, whereupon all involved parties can be addressed on;
- (VROM, 2006:116)

Besides the appliance of this balance approach requires the following:

- Inside the NEN a quality addition can be made, in which the surface of nature is minimally equal or increases. Such a quality addition can for instance occur because shifts in destinations are made inside the NEN; and/or:
- Enlargement of NEN surface occurs within the spatial vision as compensation of the area that is lost due to projects or actions; under the condition that this also provides a better functioning NEN. (VROM, 2006:116)

When parts of the NEN are also indicated as BHD area, then the state, in consultation with the European Commission, will decide on the requirements under which these custom made measures can be implemented. (VROM, 2006:116)

In order to be able to apply the NEN-balance approach the preconditions, which have to be formulated for different aspects of an area vision, need to be sufficed. If this is not sufficed then the 'no, unless' formula counts unabridged. The following requirement is set for an area vision. The extent of the area, on which the area vision applies, is determined in each case on basis of spatial issues, the planned spatial interventions as well as the proposed ecological goals. Furthermore it is relevant that the area represents one ecological coherent entity. The requirements, which the present and potential nature values demand of their environment, are mainly viewed.

Description of goals, concerning area visions:

- The area vision includes a combination of coherent plans, projects and/or actions within one spatial consistent view and grounded with a description of the mutual connection;
- An area vision should also concretely indicate which changes in destination of the area are anticipated. Both for planned spatial interventions as well as for gaining's of nature to be made;
- Also the qualitative and/or quantitative surplus values for the NEN, on the area level, need to be grounded, just like integration operations in landscapes and nature (spatial quality) that are necessary for the projects in the NEN-balance approach;
- The 'quality addition' (as the Nota Ruimte mentions it) is only reached if the quality, including the functioning of the NEN, improves by balance. Regular NEN compensation, according to the rules from the Nota Ruimte, 'EHS-spelregels' and the (provincial) elaborations, are not sufficient for a quality gain;
- The NEN must be a robust whole. The area vision can as a result of this focus on removing bottlenecks and/or mutually connect parts of the NEN related to existing policy that opposes to fragmentation.

Guarantee of implementation:

- Roles and responsibilities of involved parties are recorded in the area vision. The concerning parties commit themselves to the recorded roles & responsibilities, and to the determined terms of the realization. This is secured in writing, which makes them accountable for arranging it;
- The area vision involves a financial foundation from which it appears that the realization of the measures is secured (including a warranty for the financing and the implementation of the management, concerning the nature to be realized);
- The costs for the quality gain in the NEN, in relation to the original ambition, cannot be financed from regular means of the acquisition and arrangement of the NEN;
- In the area vision it is noted who takes on the monitoring of the implementation of the area vision, in order to inspect the actual realized qualities and gains, regarding nature. It is also registered how and who supervises and preserves it.
- A part of the area plan includes agreements on the way, and the moments in which the initiative taker informs the province on the progress.

To summarize the 'EHS-spelregels' was designed to also give elaborations on re-determining limits of the NEN and the NEN-balance approach. It remains to be seen if the rules of the game that have just been described are clear for the parties, which are involved with these two concepts.

2.3 Elaborations in specific policies

This chapter includes elaborations of specific policies, in which compensation is registered. This is extensively described in the 'EHS-spelregels', which is why this section is almost completely translated from this document. It should provide an overview of how compensation occurs in different ways. To start with mentioning in which policy frameworks compensation is registered, and how to adjust this to each other. This will be explained, while especially keeping the measures of the National Ecological Network (acronym: NEN) into account, since the 'EHS-spelregels' is quite focussed on connecting concepts to measures in the NEN. Afterwards a larger description is given per policy framework.

Adjusting compensation requirements if several policy frameworks are in force

As mentioned before compensation is required, concerning interventions in certain areas. This obviously involves the NEN. However it also involves areas under the Nature Protection Act (Dutch acronym: Nb-wet), including the Natura 2000 areas, which involves an European network of protected nature areas. This European network covers areas that are protected on basis of the Birds and Habitat Directive (acronym: BHD). The NEN-, Nature Protection Act- and BHD-areas partially coincide, and together these areas provide an important contribution to the realization of an European network. In comparison to other nature areas in the Netherlands the BHD-, Nature Protection Act- and NEN-areas possess a specific protection regime and the state has a special responsibility in this matter (VROM, 2006:112). Other legal frameworks in which compensation is registered include: red list species, the Flora and Fauna Policy (Dutch acronym: Ff-wet) and the Forest Policy (in Dutch: Boswet). The 'EHS-spelregels' advises to perform research in an early stage, before activities start, while focussing on the current presence of species or habitat protected under the Flora and Fauna Policy and if the Forest Policy is in force. When after mitigation has taken place in a project, and still compensation is compulsory as well, then a plan regarding this compensation can be composed, as mentioned next:

- First compensating measures need to be formulated. regarding negative effects on nature values that are protected by the Nature Protection Act.
- If after this negative effects are still left on the remaining values in the NEN area (concerning surface, cohesion and quality) then additional compensative measures should be drafted.
- Subsequently it needs to be verified if next to acquiring an exemption, regarding the Flora and Fauna Policy, still additional compensative measures are necessary.
- Finally it needs to be inspected if additional measures are required to suffice a possible re-planting duty, in force through the Forest Policy.

Nature protection act of 2005 and Natura 2000 areas

Compensation is in force, regarding the Nature Protection Act of 2005, if a project has significant negative effects in a protected nature monument, or on the quality of the natural habitats and the habitats of species protected in a Natura 2000 area. Next to this it involves species of which the area is appointed Natura 2000, while taking into account the goal of preserving the area. The initiative taker of a project, or other actions, in the protected area, should formulate a suitable assessment then.

- When the proper assessment shows that significant negative effects on the preservation goals are excluded, then the intervention is possible, if the effects of the intervention are mitigated. Conditions can be tied to granting the permit if this is necessary to prevent significant negative effects.
- When there is a significant negative effect on the preservation goals, then a plan or project in a Natura 2000 area can only proceed if there are no alternatives available or if compelling reasons of great social importance play a role. The search for alternatives must broadly be interpreted. It does not only involve to search for another location, but it could also involve a different way of executing the project. Compensation remains compulsory and needs to be realized before the intervention takes place. Even when compelling reasons of great social interest are involved. The European Commission stated that the registered quality and cohesion of the Natura 2000 network may not suffer under the compensation. This is also the reason behind the aim to compensate within the concerning Natura 2000 area. While on the other hand compensation can not take place within NEN areas. The state already invests in the NEN to reach

750.000 hectares by 2020, thus these means should not be used for nature compensation.

The consideration framework of NEN areas and Nature Protection Act areas differ in the following ways:

- The fitting assessment of the Nature Protection Act involves stricter rules than the consideration framework of the NEN, regarding damaging effects;
- The Minister needs to approve of such a plan or project in case of the Nature Protection Act;
- The consideration framework of the NEN speaks of 'reasons of great social interest' while the Nature Protection Act speaks of 'compelling reasons of great social interest'. These reasons are moreover strictly limited for areas with a priority type of habitat, or a priority type of species. The European Commission can give their approval in certain circumstances;
- The Nature Protection Act describes that compensating measures should be taken in advance and in a timely manner;
- Financial compensation is not possible in Nature Protection Act areas.

The Algemene Rekenkamer, which is an institution that inspects for instance if policy is executed in the way it was intended, stated the following on this matter. Their research from 2007 mentioned:

"The protection in Natura 2000 areas is more compelling than the NEN, because the protection has a legal status, which must suffice EU-guidelines and is recorded in the Nature Protection Act. In this way protection can be forced by a judge. The protection in the NEN depends on the actual subsequent decision-making in regional- and development plans." Also of interest is that the protection of NEN areas involve only new interventions, while the Natura 2000 areas include new interventions as well as existing use and existing plans. (Algemene Rekenkamer, 2007:39)

Next the focus is on giving an explanation of how Natura 2000 areas can be connected with two specific measures in NEN areas. This includes the NEN-balance approach and re-fencing in the NEN. From consultation with the European Commission it turned out that plans or projects, which lead to re-fencing the NEN or are part of an area vision for a NEN-balance approach, must be judged and tested on possible significant effects, regarding these preservation goals. This does not mean that custom made measures are not possible in Natura 2000 areas and Nature Protection Act areas. Not every intervention in a Natura 2000 area needs to have a significant negative effect.

Where overlap exists between Natura 2000 areas and NEN areas, also the NEN regime remains in force. After all when an intervention causes no significant negative effects on the preservation goals for a specific species regarding the Natura 2000 it can still affect the broader formulated 'actual characteristics and values' of the NEN. In case if an area involves a protected nature monument (under the protection regime of the Nature Protection Act 1998) a permit is only granted when it is sure that the action, with possible significant consequences, does not damage the natural characteristics of the protected nature monument, unless compelling reasons of great social interest oblige the allotment of the permit. Only actions (and no plans) need to be inspected with protected nature monuments. If an area is a protected nature monument of the state, but lost it's title because it is currently recorded in a Natura 2000 area, then the (general) protection goals remain in force, just like when the area was still a nature monument of the state.

Flora and Fauna Policy

It remains to be seen if the NEN-balance approach, re-fencing of the NEN, and other compensation measures named in the 'EHS-spelregels', will be beneficial for specific

species that are present in a certain area. The Flora and Fauna policy prohibits that burrows, nests, holes, steady tranquillity- and residence places are disturbed or destroyed. Next to testing the rules of the game, concerning the NEN, it can be necessary to test the Flora and Fauna Policy. And when required an exemption for the activities needs to be requested. An exemption, regarding the Flora and Fauna Policy prohibition orders, exists for spatial developments and arrangement, regarding general species. Only when work is done through a behaviour code, approved by the Minister of LNV, the exemptions for spatial developments and arrangement can be obtained, concerning remaining protected species and strict protected species.

When keeping the Flora and Fauna Policy in mind it is desirable that the initiative taker makes an inventory of the present protected species in an early stage, and consults the involved authorities on the possibilities and conditions of an exemption. Early cooperation is also desirable, because of the right seasonal planning of activities and preventing an delay because of that.

When protected species are present, then the initiative taker should inspect if the spatial interventions, regarding compensation, NEN-balance approach or re-fencing the NEN, negatively affects these protected species and nature values. In the compensation plan, the area vision for the NEN-balance approach, or in the initiative of re-fencing the NEN, it can be verified which species are involved and if it is a case with significant effects. If there are no effects or if the effects are not significant, then there are no limitations prescribed by the Flora and Fauna Policy on the execution. If there are significant effects, and the above mentioned exemption are not applicable, then the initiative taker searches for possibilities to prevent these effects. If this seems to be impossible the initiative taker searches for alternatives in location, design or implementation. When no alternatives are available an exemption can be granted, if it is a case in which social interest plays a role, like for instance nature development or protection of flora and fauna. The obligation remains, which involves the mitigation of negative effects as much as possible. Compensation of the negative effects on protected species can be necessary and compensation should be performed before the intervention takes place.

It is advisable to adjust the necessary mitigation in light of the Flora and Fauna Policy to measures in light of NEN compensation, NEN-balance approach or re-fencing in the NEN. Besides it needs to be reported in the exemption appeal. In this way the intentions of the compensation, NEN-balance approach or re-fencing NEN can be taken along during the assessment of the exemption application. Also in this way, it can be prevented as much as possible, to go through the different compensation regimes successively.

Red List species

The red list species are assigned by the Ministry of Agriculture, Nature and Food Quality. Only species that reproduce in the Netherlands are found back on the Dutch red lists. These lists can give an indication of how it goes with a species and certain categories are distinguished. Although these species are not automatically protected. Protection is possible, when species are registered in the Flora and Fauna Policy as well. Next to the Dutch red list species there are also international red list species. These are recorded in red lists of the International Union for Conservation of Nature (acronym: IUCN).

Forest Policy

The Forest Policy was established in 1962 to protect forest areas. The Forest Policy involves the removal of forest locally, and then the re-planting duty comes into force. This reforestation duty should be done 1:1 and should be realized within 3 years after the

timber was cut, but deviations can take place. Compensation, regarding the Forest Policy occurs, if activities leads to chopping down timber. The Forest Policy includes the possibility to implement the re-planting duty on a different site than where the timber was cut down, if planting on the chopped down site gives problems. For this an end approval of the Ministry of Agriculture, Nature and Food Quality (Dutch acronym: LNV) is necessary. The concerning site needs to be in the same area and certain conditions exist, concerning the quality & quantity and adjusting it to other legislation & development plans. The Forest Policy offers a possibility for an exemption, concerning the re-planting duty, under certain circumstances as well.

In the end it is advisable to adjust a possible re-planting duty of the Forest Policy to measures taken due to the 'EHS-spelregels'. In this way, during the assessment of the application, concerning compensation in light of the Forest Policy, intentions of the NEN-balance approach or re-fencing NEN can be taken along. Besides, going through the different compensation regimes successively can be prevented as much as possible.

Policy on Spatial Planning (Wro)

In 2008 the new policy on spatial planning goes into force. With this change, the state, provinces, and municipalities, will have different instruments available to them. The new Wro also provides opportunities, which is why the state and provinces will research the possibilities offered through this new policy in order to see how these can be op use, concerning the execution of the 'EHS-spelregels', and generally to improve securing of the compensation principle.

A couple of changes this new Wro will bring along, includes the following:

- Authority of approval does no longer exist (approval of Provincial Executive will no longer be necessary for development plans). In order to make that possible more consultation between involved parties will take place in the early stages (state, provinces, municipalities etc.).
- The regional plan is replaced by a spatial structure vision (structuurvisie). This vision is not automatically processed in communal plans through subsequent decision-making. The spatial structure vision is only binding for the provinces itself.
- The new Wro offers better supervision- and enforcement instruments. For instance, it offers a possibility to intervene if the work of municipalities is insufficiently practiced. There will be a connection between enforcement and criminal law as well.

These are only a couple of changes this new policy brings along. The implementation of compensation can change when the new Wro is applied by the provinces and municipalities. How this will proceed is not yet clear, since not a lot of information is available on the actual implementation of the new Wro by the provinces.

The policy frameworks, which most frequently are connected to compensation, have been mentioned and explained above. However compensation can also be connected to the Tracéwet and Policy of Environmental Management (Wet Milieubeheer). These policy frameworks also need to be taken into account, while planning an intervention.

2.4 Responsibilities

The 'EHS-spelregels' describes the roles and responsibilities of involved parties, which is literally presented next. Firstly the policy framework of the 'EHS-spelregels' was created due to a collaboration of the state, provinces, union of Dutch municipalities

(Dutch acronym: VNG), terrain managing organisations and social organisations. Thus the involved parties, with implementation responsibilities, were included in the creation of the 'EHS-spelregels'. Then the provinces were asked to translate the 'EHS-spelregels' into their provincial framework. In practice effective subsequent decision-making requires the province to work out the NEN policy framework to a provincial level. The provinces are responsible for the implementation of the NEN-balance approach, re-fencing the NEN and the compensation principle in the NEN, after the 'EHS-spelregels' policy framework is translated to provincial spatial policy. Finally the municipalities are responsible for applying the compensation principle in practice. In first instance, initiative takers will be in contact with the municipality. The spatial protection of the NEN only becomes effective on the moment it is recorded in the communal development plan. The development plan is after all the binding spatial plan that ties initiative takers of spatial interventions in the NEN. In this way municipalities put the protection of the NEN to practise.

But how is the implementation of compensation secured? Guaranteeing compensation implementation takes place by a selective supervision through the usual planning procedures. The state shall monitor both the registration of the provincial 'EHS-spelregels' framework and the appliance of the NEN compensation, NEN-balance approach & re-fencing the NEN, as implemented by the provinces. This monitoring of the state occurs through the usual planning procedures of regional plans, development plans (i.e. required in the former Wro), and exemptions of development plans (art. 19 sec.1). Besides the provinces are asked to provide a periodical overview of the application, regarding the rules of the game as given in the 'EHS-spelregels'. In this way insight about the current situation of the appliance of the rules of the game, concerning the NEN, can be provided to all authorities and private parties, when requested.

Finally which goals are set for the future implementation of compensation? In 2008/2009 the policy framework 'EHS-spelregels' is evaluated, by the state and provinces, and also the municipalities are consulted, while viewing the reached results. This also includes an inspection of how: a more development focused approach is stimulated, custom made measures in the NEN were encouraged and if the securing of compensation is promoted. To end with the fact that municipalities are expected to apply the provincial rules of the game, regarding the NEN. Besides municipalities need to record the net NEN in development plans conform the Nota Ruimte, which should also take place not later then 2008.

3. Theoretical & Conceptual framework

This chapter is divided in two sections, similar to the objectives. This research is focused on gaining insights about the implementation practices of the nature compensation policy. It is of interest to detect similarities and/or differences in implementation of compensation between six provinces of the Netherlands. Attention is also paid to how legitimate the implementation practices are for the nature compensators. Two specific analysis frameworks are required, since these topics differ. An analysis framework needs to be created to study the implementation practices of provinces, and another analysis framework needs to be designed to specifically research the legitimacy of compensation policy. This structure can also be recognized all through this chapter. First chapter 3.1 will cover how subsequent decision-making takes place, concerning the compensation policy. This subsection provides information that is necessary to carry out further research on how implementation practices of compensation policy took place. In chapter 3.2 theories are shared that deepens this research on implementation practices, by applying the levels of conformity. This includes: plan conformity, conformity of behavior and final conformity. The rating of provinces will be discussed as well. Finally chapter 3.3 covers how legitimate implementation practices are for the actual compensator. This involves the following topics: polluter pays principle, input-, output-, throughput- legitimacy, bottom-up theories and the rule of equity (including economic equity). Both analysis frameworks (i.e. focused on implementation practices and legitimacy) show a process in which the initial plan is viewed first and finally it comes down to the results in practice.

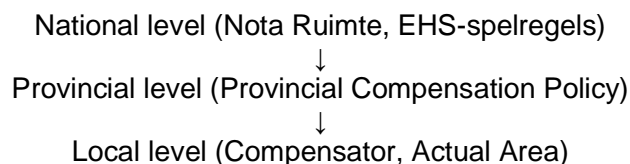
3.1 *Subsequent decision-making*

Howlett and Ramesh described implementation as policy decisions that are translated into action. This research involves how the policy decisions, as described in the Nota Ruimte and the 'EHS-spelregels', and specifically decisions connected to nature compensation, are translated into practice by the Dutch provinces. "While some policy decisions have been made on the general shape of a policy, still others are required for it to be set into motion" (Howlett & Ramesh, 2003). This, among others, refers to funding that must be allocated, assigned personnel, and the development of rules concerning the procedure. The general shape of compensation policy was given on national level, while provinces had the opportunity to make further policy decisions to set it into motion. Provinces of the Netherlands were assigned to translate nature compensation into practice while using the SGR/Nota Ruimte, offered by the government as a guideline. In 1995 there was also an elaboration on the compensation principle SGR, which was replaced in 2007 with the 'EHS-spelregels'. More information on the national compensation policy can be found in chapter 2. These are also of interest, regarding the national guidelines for implementing compensation policy.

This situation in which a national framework (i.e. Nota Ruimte and 'EHS-spelregels') is worked out by lower authorities is an example of **subsequent decision-making**. The specific circumstances, concerning subsequent decision-making, are characterized firstly by the distribution of formal authorities, regarding the same policy issues, over the different levels of government and within levels of government, according to De Lange. It was also noted by De Lange that "the relations between levels of government are determined by the decentralized situation of the Dutch state" (De Lange, 1995:17). Brussaard mentioned the following on levels of government that: "in principle every level of government has the freedom to implement its own policies and to set arrangements,

on the condition that this does not cross a rule concerning policy of a higher authority in an unacceptable manner” (Brussaard, 1987: 7, in: De Lange, 1995:17). In the Nota Ruimte strict rules are decreased and decentralized authorities are given more room to adjust their provincial policy to the framework of this nota. But the basic quality of the Nota Ruimte must be maintained, thus provincial and local authorities are not given total freedom from higher national authorities to implement policy decisions. At the national level a distribution of executive authorities exists, that comes into action with the division of tasks over the different departments (De Lange, 1995:17). The implementation agenda from the Nota Ruimte shows a division in tasks. Implementation paths with their prominent actions and activities are described here, and it also mentions who is responsible when possible (VROM, 2006). Of importance here is the role policy instruments have in the implementation process. As Maarse states: “subsequent decision-making can be described as the influence implementation of policy instruments have on the behavior of policy subjects” (Maarse 1991: 124, in De Lange, 1995:33). In this case it comes down to how provinces use instruments, regarding the execution of nature compensation, which should influence behavior of actors whom are bound to fulfill compensation duties that are obligatory, due to a planned intervention in a protected nature area.

How to describe subsequent decision-making, concerning compensation policy in this research? It involves the following **top-down** process, regarding implementation of compensation policy:



The idea behind the Nota Ruimte was to give lower authorities more room and the responsibility to implement policy decisions into their own provincial context. This process can be described as a policy decision reached at the ‘top’ of the political system and working it’s way ‘down’ to the implementers (Pülzl & Treib, 2006:93). Implementation is an evolutionary process in which programs are constantly reshaped and redefined, which was the core argument of Wildavsky (Pülzl & Treib, 2006:96). Virtually in every case implementation leads to ‘adjustment’ and ‘changing’ of the intended policy (Simonis, 1983; Smits, 1995 in: Turnhout & Leroy, 2004:9). The conception of nature compensation, starting from policy inputs defined by central policy makers and decentralized to lower authorities for implementation, appears to show a hierarchical order. At the same time, the idea is that these inputs will almost inevitably be changed in the course of their execution (Pülzl & Treib, 2006:96). Just like the compensation principle was changed during the course of its execution into a suitable policy adjusted to the provincial context. Incremental learning processes took place along the way from the national compensation guidelines to provincial and local compensation policy. This fairly general framework was developed with probably the intention that subsequent decision-making could take place in the provinces. The Dutch provinces were given the opportunity to separately implement the compensation principle into their provincial context. The provinces could redefine and reshape compensation guidelines into policy suitable for implementation in their provinces. This could have led to 12 different implementation practices, regarding nature compensation. The individual implementation practices of six provinces will be examined in order to describe how the implementation of nature compensation is fulfilled (see chapter 4 Methods for more information about the careful selection of provinces). Finally the consequences of implementation practices are observable, which makes it an empirical research.

3.2 Implementation as conformity

The question remains how provinces have implemented the compensation policy, and how the appliance of compensation policy currently occurs. In the end one wants to know if the initial plan corresponds to what has been applied in practice. This can be studied by using the concept conformity, which was extensively described by De Lange in 1995. Measuring conformity takes place on three levels:

- Plan or policy conformity;
- Conformity of behavior;
- Final conformity.

De Lange mentioned the following overview of these levels of conformity:

“First, the initial policy has to be included in the frames of reference (strategic plans and policy) of the agents addressed. Then, these frames of reference can guide the agents in their daily process of decision-making (conformity of behavior). Next, final conformity can be the resultant of this daily process of decision-making. By passing through this set of three, the answer to the question: whether the initial policy has contributed to the changes that were found in the environmental layout, will be nearer at hand. In theory, these three levels of conformity are successive. Although practice can show that a different order, regarding levels of conformity, is possible.” (De Lange, 1995:58)

These levels of conformity, designed by De Lange, have been used in certain studies. For instance, plan conformity of compensation policy was studied during the research of Kuindersma *et al.* from 1999. This current research also covers plan conformity, since quite a lot has changed in ten years. Furthermore conformity of behavior and final conformity are studied as well. Next every type of conformity is described more extensively to show how it is of use in this research.

3.2.1 Plan conformity

Plan conformity includes an analysis of plan statements and/or policy statements, concerning the initial policy, according to De Lange (De Lange, 1995:58). This is necessary within a policy evaluation, because without interpretation of policy one does not have a framework to which certain events can be related. On basis of this framework one should also be able to assess these events. In this research the Nota Ruimte and ‘EHS-spelregels’ are the two pillars that form the foundation behind the national compensation guidelines. Chapter 2 gives an extensive description of these policies, in relation to nature compensation. Important elements from this chapter involve: the area categories in which compensation duties are obliged, the ‘no, unless’ rule, procedures connected to mitigation/compensation and the evaluation/monitoring of compensation practices. These are actually all the elements that should represent provincial compensation policy, which are briefly summed up on the next page. It is desirable to see those components back in the current implementation practices of the Dutch provinces. Thus the areas in which compensation is in force are summed up next, along with the compensation procedures in seven steps (as mentioned in the ‘EHS-spelregels’).

Areas in which the compensation principle is in force

1. National Ecological Network (NEN) areas & robust ecological connections;
2. Birds and Habitat Directive (BHD) areas;
3. Nature Protection Act (Dutch acronym: NB-wet) areas;
4. Compensation registered in other policy documents:
 - a. Forest policy;
 - b. Flora and Fauna policy (Dutch acronym: FF-wet);
 - c. New policy of spatial planning (Dutch acronym: Wro).

Compensation procedure in seven steps

1) Testing the 'No, unless rule' consideration framework

No formula (interventions are basically not allowed), unless formula:

- a. Prove considerable social importance;
- b. Research the alternatives;

Compensation principle (No net-loss of values):

1. Integration operations of landscapes and mitigation;
2. Physical compensation including:
 - a. Compensation of surface (direct effects);
 - b. Compensation of quality loss (quality addition, in Dutch: kwaliteitstoetslag);
3. Financial compensation

Measures specifically designed for NEN areas:

4. NEN-balance approach
5. Re-determining the limits of NEN areas

2) Compensation plan according to standards

- Compensation plan, independent document according to standards
- Requirements on the content of compensation

3) Decision authorized authority on intervention and compensation

4) Embedding intervention and compensation into spatial plans

5) Private law agreement initiative taker and authorized authority

Legal binding agreements on the execution of the compensation plan:

- Bank warranty
- Final realization date
- Penalties when exceeding final realization date

6) Monitoring implementation by authorized authority

- Authorized authorities yearly report to the province
- Provinces verify these reportages and collect these inspected reports
- These provincial findings are reported to the state

7) Authorized authority takes over execution when final realization date expires

- The executing costs are for the initiative taker, including a bank warranty and penalty.
(These finances are situated in the environmental trust (Groenfonds) linked to the project)

The compensation procedures are given in seven steps in the 'EHS-spelregels', but certain parts could be combined. Basically the compensation procedures can be reflected with main concepts like: the 'no, unless' formula, registration of compensation types, instruments to guarantee compensation and monitoring/evaluating compensation. All the elements, of the compensation procedures in seven steps, can be divided under these main topics.

Although plan conformity measures do not only require an assessment of the initial policy, but subsequent decision-making of a plan or policy also needs to be reviewed, according to De Lange (De Lange, 1995:58). In this research it needs to be assessed how subsequent decision-making progressed, concerning the implementation of nature compensation. For instance De Lange showed:

"The **regional plan** is very suitable as the integration frame of all spatial relevant measures on provincial and regional level. Regional plans are identifiable for a certain structure/system, which among others involves the used regional planning indications (streekplanaanduidingen) and the connected mainlines of policy. Every province applies it's own system. Further more this can change through time." (De Lange, 1995:58)

It is once again stated that implementation of policy could differ between provinces, and in this case differ in regional plans. This is of interest in order to show an overview of current implementation practices. Besides De Lange noted:

"The regional plan is also an instrument for vertical coordination as well for horizontal coordination on provincial level (including coordination between different levels of government and within levels of government). After all the regional plan is the first level on which subsequent decision-making, concerning national policy triggers a spatial integrally interest trade-off." (De Lange, 1995:14)

Considering the importance of the regional plan it is of significance to use this plan, when looking into the implementation practices of provinces. As mentioned in the first chapter, regional plans are also of importance, because provinces should have included the compensation principle into this plan. Provinces have assigned more official policy documents, regarding the execution of compensation. This includes development plans, development notes and required compensation- & intervention- plans. Plan conformity should give an overview of how compensation policy is registered in official policy documents per province. A distinction in plan conformity can be made, which involves:

"Formal conformity and tangible conformity. Formal conformity exists of literally incorporating policy statements. While tangible conformity only involves the incorporation of the tendency of the initial policy statements." (Kuindersma *et al.*, 1999:12)

This could be kept in mind while researching the official policy documents. In the end subsequent decision-making is not sufficiently analyzed, if only plan conformity is determined. Kuindersma *et al.* stated the following on this topic:

"Firstly when plan conformity is affirmed, it does not have to be the case that subsequent decision-making took place, if the initial policy was not used in decision-making. Secondly when conformity is absent it does not mean that no subsequent decision-making took place. To analyze subsequent decision-making it is essential to look into the use of national policy." (Kuindersma *et al.*, 1999:14)

In this case the **usability degree** (bruikbaarheidsoordeel) could be of help:

"The usability degree involves discovering to which extent policy is applied by the intended users, and to which extent these users know the initial policy? The chance that a policy is implemented decreases, if users tend to value this policy as less usable, and when they are not aware of the content." (Kuindersma *et al.*, 1999:14)

How usable policy is can be connected to behavior. When is policy more usable, and what triggers behavior to change, positively or negatively, towards a certain policy? The change in behavior is discussed more extensively in the next subsection on conformity of behavior.

3.2.2 Conformity of behavior

Conformity of behavior involves how addressed actors operate in accordance with the initial -and in own policy framework perhaps transformed- policy statements (De Lange, 1995:59). The parties involved with the compensation policy include: the government, provinces, local authorities, compensators, affected parties, organizations etc. Certain questions come to mind when assessing if these involved parties act accordingly to the initial plan, and these questions were ordered in four categories:

- Role of involved parties
 - Are the key actors in the compensation process, as perceived by the province, involved in the compensation procedure?
 - Which relationships exist between the key actors in the compensation process, as perceived by the province?
- Experiences and appliance of compensation (Did compensation policy actually contribute to a change in behavior?)
 - Do parties agree on the compensation policy?
 - Do parties act according to the compensation policy?
- Guarantee of compensation fulfillment
 - Is a sufficient amount of instruments available to guarantee the fulfillment of compensation duties?
 - Are these instruments applied to guarantee compensation?
- Usability degree (compensation procedures)
 - To which extent is compensation policy known by the intended users?
 - To which extent is compensation policy applied by the intended users?

These questions should clarify: which roles involved parties have, how the compensation policy is experienced & applied in practice and how the implementation of compensation is guaranteed. This should give an overview of the involvement of parties and their actions in practice, which need to suffice the initial compensation policy. Before conformity of behavior can be determined, it is of importance to define which provincial policy decisions are of relevance. In this case policy decisions related to the implementation of compensation policy are of relevance. Besides, it should be noted in advance which behavior is to be considered as in accordance with the provincial policy decisions, and which behavior is not in accordance to those decisions (Kuindersma *et al.*, 1999:13). Is behavior that is not prescribed in provincial compensation policy, not in accordance? Even if it suffices the main idea behind compensation policy? A division between which behavior is according to compensation policy, and which is not, cannot really be determined due to the fact that custom made measures play a large role in implementation of compensation. Of course not following up and/or fulfilling compensation duties, which should have been registered in agreements, is not in accordance with the compensation policy. Finally it is of interest if the provincial compensation policy is properly followed during the compensation process, and if the compensation is fulfilled accordingly to the established agreements. Or have deviations occurred?

3.2.3 Final conformity

Final conformity includes the “definitive conformity of the physical reality to the intentions of the initial plan.” (De Lange, 1995:58) According to Kuindersma *et al.* in 1999 this depends on: “to what extent actual compensation took place, or if effective mitigation measures are taken, or interventions were cancelled due to the compensation principle”. Mitigation and compensation measures like these can best be inspected by looking into practical cases. In practice one can view the physical reality in which mitigative and compensation measures are taken. Besides the initial plan, including compensation guidelines from the Nota Ruimte/EHS-spelregels, and provincial policy statements on implementing compensation, need to be related to this physical reality. In the end the main question remains what has been registered in official policy documents and what actually occurred in practice?

In an analysis of final conformity the following elements are combined:

- Plan conformity: on provincial level the focus is on the implementation of the compensation policy, and on municipal level the interest goes to the initial compensation plan or possibly an altered compensation plan (that needs to be added/integrated in the corresponding development plan);
- Conformity of behavior: focused on discovering a change in behavior of involved parties, concerning the implementation of nature compensation policy;
- Finally the context in which a practical project takes place is of essence when examining the final conformity.

Final conformity is not simple a sum of the other levels of conformity (plan conformity and conformity of behavior), but it also includes in which circumstances decisions were taken and/or in which context a compensation procedure took place. The compensation procedure can possibly be influenced by outside forces or unexpected changes. The context surrounding a practical case needs to be taken into consideration, when viewing the final conformity, because it could have influenced the compensation procedure. Basically final conformity includes a comparison of policy intention with the outcome, while taking the content, behavior and context into account. In this research practical cases need to be examined in order to view the final conformity of compensation policy, regarding the six participating provinces. In this way the initial plan can be compared to the reality. Although currently not many compensation projects have been finished yet, which makes it difficult and nearly impossible to study final conformity. Besides, previous studies indicated not all the provinces have monitoring data or evaluations available, from which it can be determined how plans are executed in practice. It also appeared, from certain studies, that the realization of compensation projects is rarely verified by authorized authorities. This severely complicates the research on final conformity. However a condition for the realization of compensation can presumably involve the effectivity of compensation policy. The chance that compensation projects are properly implemented in practice could increase if an effective compensation policy is in force. Sabatier & Mazmanian developed criteria of effectiveness, which are given below (Sabatier & Mazmanian in Pölzl & Treib, 2006:92). This can be used to gain more insight in how compensation policy is implemented in practice, since ongoing and when possible finished compensation projects can be used to indicate the effectivity of provincial compensation policy. A connection was made between the effectivity criteria and the elements of final conformity (plan conformity, conformity of behavior & the context):

1. Policy objectives are clear and consistent;
(Plan conformity and Conformity of behavior)
2. The program is based on a valid causal theory;
(Plan conformity)
3. The implementation process is structured adequately;

- (Plan conformity)
- 4. Implementing officers are committed to the program's goals;
(Conformity of behavior);
- 5. Interest groups and (executive & legislative) sovereigns are supportive;
(Conformity of behavior)
- 6. There are no detrimental changes in the socio-economic framework conditions.
(Context)

Finally these effectivity criteria can be divided in three topics, including:

- Plan conformity: focusing on the nature compensation policy;
- Conformity of behavior: classification, involvement and support of actors;
- Context: changes in the socio-economic framework conditions.

Assumptions on the final conformity can be made when looking into the previously researched plan conformity, conformity of behavior and the context, which are all connected to the effectiveness criteria. Assumptions are only relevant if it is related to practical situations, because then a comparison between the initial plan and it's outcome can be made. The provinces can bring forward (ongoing or preferable finished) compensation projects. Besides the next section, on legitimacy of different implementation practices, is studied by looking into practical cases. These two practical cases could also provide the opportunity to research final conformity. When researching practical cases the focus is on: if the initial plan is executed just as prescribed in official policy documents, and how compensation was fulfilled on local level? Are the actual results, of implementation of compensation in practice, also what was intended? Eventually conformity of the physical reality is of importance in order to formulate a legitimate judgment on the impact of the compensation policy (Kuindersma *et al.*, 1999:13).

Finally it is a matter if conformity can be indicated or not:

"De Lange mentioned in cases of **non-conformity** it is not always immediately a matter of a lack in performance. Additionally Mastop noted performance of plan statements or policy statements takes place, if these statements are used in subsequent decision-making. This means that these statements are an essential part of the decision processes by subsequent decision-makers (the subject of planning itself included), in the sense that the statements concerned also determine the result of the decisions that were made" (Mastop 1991: 69, in: De Lange, 1995:31).

This should be kept in mind, however the following was noted for when conformity is affirmed:

"Likewise, when **conformity** is found, it is not possible to automatically speak of use and performance of policy. Statements about use and performance can only be made after careful analysis of the subsequent processes of decision-making that led up to this conformity." (De Lange, 1995:60)

The implementation of compensation appeared to be a less rational process than expected. It is not simply a case of provinces executing a national plan in exactly the same shape. Provinces were responsible for implementing the compensation principle into their regional plan. The position of provinces was strengthened in the Nota Ruimte. Provinces were expected to apply the fairly general framework offered in the SGR/Nota Ruimte, and adjust this to their provincial context. Besides an elaboration on the compensation principle in the SGR was provided, which was replaced by the 'EHS-spelregels'. Provinces could use these general national guidelines while implementing the compensation policy. In this process subsequent decision-making takes place and a top-down approach becomes visible. The whole process around finally executing the compensation policy involves many aspects. This research does not only involve if implementation of compensation policy took place properly, but it also includes how this

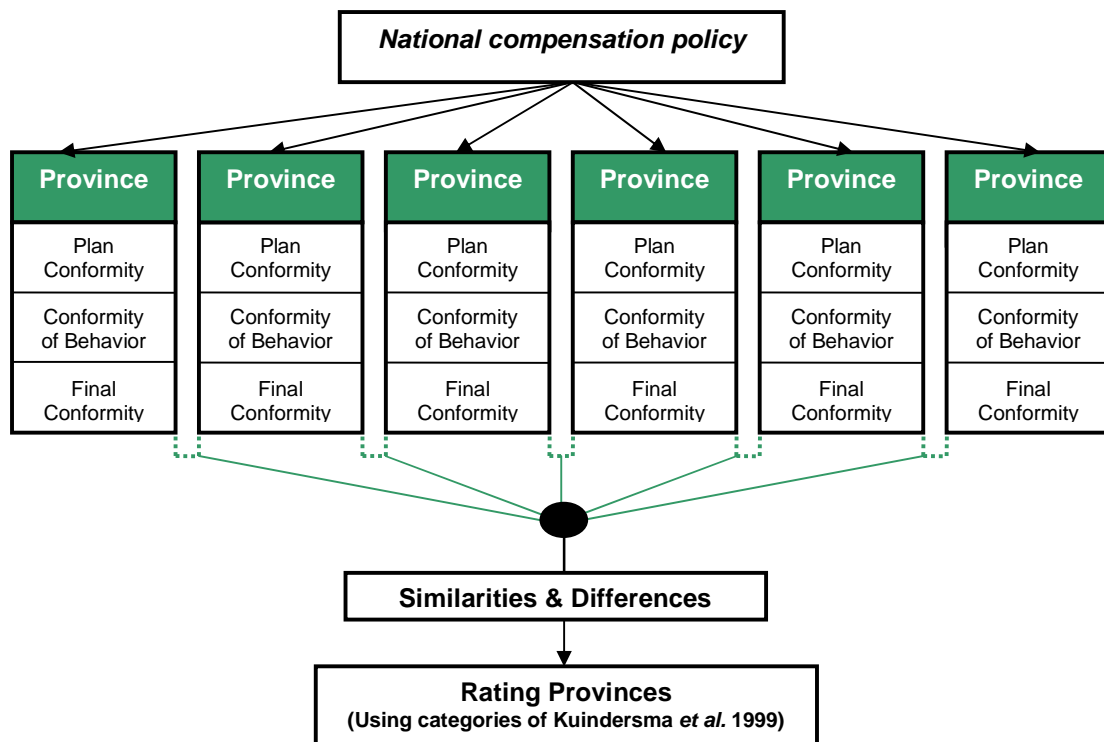
was achieved, and what the outcomes are in practice. Of importance is to research if conformity exists between initial plans and behavior of parties involved. This research is basically trying to visualize the process of subsequent decision-making, concerning the implementation of compensation policy, and to show its outcomes. Final conformity shows if intention corresponds with the outcome, and it is researched by looking into practical situations, which are viewed in the next section 3.3 on 'Legitimacy'.

3.2.4 Research design regarding implementation practices

The results from the levels of conformity show similarities and differences between implementation practices of provinces. This could be used to possibly find out if provinces are well ahead with implementing the compensation policy, while others might lack behind. Could certain provinces be an example for others? In 1999 Kuindersma *et al.* categorized all the twelve Dutch province, during their study into plan conformity. Chapter 1.1 Background, shows a table in which the provinces are clustered into forerunners, followers and laggards. During this research attention was paid to the same elements as Kuindersma *et al.* (i.e. detecting patterns in implementation practices between provinces). Only back then conformity of behavior and final conformity could not be researched yet, and quite a lot has changed in the meanwhile. It has been 10 years, since the research of Kuindersma *et al.* took place. This makes it interesting to see how the provinces proceeded through the years. Which provinces will currently belong to certain categories (i.e. using categories formulated by Kuindersma *et al.* in 1999).

Finally an overview of how the provincial implementation practices will be studied (including levels of conformity and the categorizing of provinces), is given in diagram 3. An elaborated overview of the entire research is given at the end of this chapter, in diagram 5.

Diagram 3. Research design regarding provincial implementation practices



3.3 Legitimacy concerning implementation practices

As previously mentioned the concept of nature compensation has become a well known topic in the media. A hype exists around the different ways of compensation implementation and the correct accomplishment of it. It appears that differences in implementation practices could exist between provinces. But do these differences influence the fair share of burdens divided over the nature compensators? How legitimate are different implementation practices of compensation between provinces for the persons who are obliged to compensate for their actions? Different forms of compensation implementation exist, including differences in physical and financial compensation. But it can also include differences in how provinces guarantee that the compensation duty is actually fulfilled. Thus the implementation of compensation could differ on many aspects between provinces. Is there a possibility that one compensator has higher costs for executing an intervention, than another compensator in a different province, when initially the intervention and other requirements of compensation are nearly similar? Other requirements to the compensation policy include for instance the area category in which compensation is compulsory and the types of compensation, see chapter 2 for more information on the national compensation guidelines. Ultimately the question remains if the same costs are connected to the accomplishment of the compensation duty, when compensators find themselves in practically the same situation?

What to keep in mind when judging if compensation is legitimately and correctly commanded by the authorities, and accomplished by the compensators? First it needs to be known who is actually allowed to cause negative effects to protected areas that oblige the compensation duty. The next question is how these persons need to fulfill mitigative or compensational measures? In this case it could be discovered if compensators that find themselves in exactly the same situation, but belonging to different provinces, are obliged to compensate differently or equally. Finally it is of interest to discover if these persons are forced, by the province, to completely fulfill their compensation duty? Is there a chance that some compensators compensate to the full extent, while other compensators do not completely meet the requirements of their compensation duty, and how fair would that be? These are all factors that influence the legitimacy of provincial implementation practices in relation to the compensators. Next theories are used to connect the concepts of legitimacy to what is considered equal treatment for compensators.

According to the Nota Ruimte the general idea behind nature compensation is “when an intervention is inevitable, then the initiative taker of the plan, project or action is responsible for the realization of mitigative measures to decrease/neutralize negative effects and if this is not possible the remaining effects should be compensated” (VROM, 2006:116). The **Polluter Pays Principle** resembles this description of nature compensation. The polluter pays principle includes that:

“According to this principle the costs resulting from measures to prevent, reduce, and control pollution it should be borne by the polluter (Sadeleer, 2002:21). Criticism on the polluter pays principle involves the statement that a price can be attached to the right to pollute, according to Sadeleer. At the same time Sadeleer notes that the polluter pays principle also contributes to reducing pollution - preventive function - and speeding up the process in which those responsible for pollution accept responsibility for ecological damage - curative function - (Sadeleer, 2002:22).

Thus the initiative taker is responsible for compensating ecological damage that an intervention causes. The authorized power that is responsible for approving an intervention in which compensation requirements need to be sufficed, should see to it that the initiative taker actually compensates (LNV, 2007:21). But do all people that

should suffice the compensation duty actually compensate? And is the compensation duty always completely fulfilled? Or are situations known that compensation was earlier eliminated, before the compensation was entirely accomplished? It comes down to this: if all obliged nature compensators are forced to entirely fulfill their compensation duty, according to the prescribed legislation? With this question one actually tries to find out if equal treatment took place, and this will be discussed more extensively later on.

It's not only the question if compensation is always entirely fulfilled, but the process that takes place during the implementation of compensation is also of interest. An important consideration to take in mind is whether actors, who are obliged to fulfill the compensation duty, accept the consequences of compensation policy? And do these compensators accept the fact that compensation probably takes place differently per province? Generally speaking, **legitimacy** refers to:

"The question of why the outcomes of binding collective decision-making ought to be accepted by those whose interests are being harmed by the decision in question (Scharpf 1970; 1999; 2004; Weber 1972; 16-17, Ch.9 in Keulartz, J. & Leistra, G., 2007:9). According to Keulartz *et al.* both prudential and moral criteria are of importance when looking into this topic and one will have to be perceptive enough to deal with the many trade-offs between them (Keulartz, J. & Leistra, G., 2007:43)."

Prudential criteria are covered in the previous section on implementation practices of compensation policy, and moral criteria are discussed in this section. This research offers the opportunity to gain insight into the problems and possibilities of legitimacy production in what is clearly a multi-level, multi-agent and ultimately a highly controversial arena of policy implementation (Keulartz, J. & Leistra, G., 2007:43). This controversial arena of implementation of compensation policy came into existence, due to the confusion that surrounds the concept of nature compensation, which could have possibly been caused by the different implementation practices in provinces. A hype came into being around the proper implementation method. This issue concerns actors from local to national level.

How can legitimacy, concerning policy implementation be reached? Keulartz and Leistra show that procedural legitimacy can be produced in three ways:

1. By letting actors decide for themselves (input legitimacy);
2. By ensuring that collective decisions serve individual interest (output legitimacy);
3. By guaranteeing a high level of fairness in the decision procedure itself (throughput legitimacy). (Keulartz, J. & Leistra, G., 2007:10)

These three types of legitimacy will be explained next, per level of legitimacy.

3.3.1 Input legitimacy

The degree of input legitimacy is determined by:

"The extent to which those that are subject to a collective decision can (co)determine the agenda. While strongly rooted in the tradition of direct or participatory democracy input legitimacy in current debates is generally operationalised as fair, inclusive and encompassing agenda-setting procedures." (Keulartz, J. & Leistra, G., 2007:11)

Of interest in this research could be how involved parties were able to influence the process surrounding the implementation of nature compensation. Who were part of the conversations on the compensation duty, and the compensation requirements? Thus to which degree did the nature compensators have the chance to (co)determine the agenda and to what degree did they have the opportunity to get involved in the process of the formulating and designing the compensation plan? How actively are compensators involved, by provinces, in taking important decisions surrounding the

compensation process? How could compensators contribute to, and perhaps influence, the compensation process? And finally have the provinces taken these preferences into account? This could be considered a **bottom-up** approach since involved parties possibly could contribute to the content of their compensation plan, and all the processes that led up to this plan, which has to be approved by a higher authority. Bottom-up theories include decentralized problem-solving, which is encouraged in the Nota Ruimte. Analysis of the bottom-up approach moves 'upwards' and 'sideways' in order to identify the networks of implementing actors and their problem-solving strategies (Pülzl & Treib, 2006:93). The room provinces and lower authorities were given to implement compensation could resemble the bottom-up approach moving sideways. Due to the framework of the Nota Ruimte every citizen was able to respond and take action when necessary, because compensation was recommended to be implemented into the regional plans and development plans (bottom-up approach moving upwards). Everyone has an opportunity to react when these plans are presented. Thus the Nota Ruimte tries to provide more room for parties involved to participate in the implementation process. But were there actual opportunities to participate in the implementation processes? If these opportunities occurred have they led to actual additions/changes? This can be discovered by researching documents and personal experiences of certain compensators.

3.3.2 Output legitimacy

Output legitimacy refers to:

"The extent that citizens are satisfied with the content of government policy, according to Boedeltje *et al.* (Boedeltje, M. & Cornips, J., 2004:6). This is likely to be the case if people reach their own goals and recognize their preferences in political decisions (Potman, 1989; Hoekema e.a., 1998 in Boedeltje, M. & Cornips, J., 2004:6). Thus the emphasis is on the extent to which the outcomes of the decision-making process serve the 'objective' needs and interest of the subjects in the decision in question (Keulartz, J. & Leistra, G., 2007:11).

Do nature compensators accept how they are obliged to suffice the compensation policy? Thus are they satisfied with the final decision? And how effective is the compensation policy, according to the compensators? Next output legitimacy is explained, relating it to effectiveness, which was literally taken from Boedeltje *et al.*:

"Output legitimacy derives from the effectiveness of government policy. However, effectiveness has only a meaning in relation to the preferences of citizens. It is argued that interactive processes will bring the content of policy more in line with the preferences of citizens, and that this will contribute to a positive judgment of these citizens about the content of the policy. Interactive procedures may help to link preferences of citizens to political decisions. Administrators and politicians can use the insights and information provided by citizens in order to improve the effectiveness of the policy decisions. The more this information is used, the higher the chance that the goals of these citizens are reached, and hence the higher the chance that outcomes will be effective. In this light, Tops (1999, pp.210-211) argues that a good interactive procedure is necessary to be successful in terms of the content of the policy, but that the quality of this procedure is not sufficient in itself for success. In other words: input legitimacy is needed to know what the preferences of people are, but this is not a guarantee for legitimacy on the output side." (Boedeltje, M. and Cornips, J., 2004:6,7).

This is of interest when studying both input- and output- legitimacy. How effective is compensation policy? And what are the reasons behind it being effective or not?

The emphasis, regarding output legitimacy, is to discover if compensators are content with how the implementation process, concerning compensation, turned out in their situation. Were clear legislative and/or administrative procedures present? Also of interest is to check if the compensation policy that was registered in the regional plan and development plan corresponds to what actually was accomplished in practice? A retrospective view on the whole compensation process should give an indication of how these compensators experienced fulfilling their compensation duty. This information can be assembled by individually interviewing certain compensators from practical cases. By inspecting documents of these cases it can be studied what the outcome was in the end.

3.3.3 Throughput legitimacy

Finally throughput legitimacy emphasizes:

“The importance of the design of the actual decision-making procedure – ensuring fair & inclusive flora in which each participant has equal standing time & equal speaking time – for the transformation of individual interests into collective reasons (Elster 1998; Bohman 1998 in Keulartz, J. & Leistra, G., 2007:11). It involves the process that leads up to the implementation of policy (Keulartz, J. & Leistra, G., 2007:11).”

How did the design of procedures pass in order to create a fair and inclusive flora for implementing compensation policy? Were standard procedures developed in order to create a righteous environment that provides equal opportunities for parties involved? A standard procedure given on national level involved the broad state's vision on several topics, and the decentralization of power (e.g. towards provinces). But do the separate provinces actually implement a standard procedure, concerning compensation policy? If certain provinces have similar standard procedures, could that mean that a standard procedure exists behind the concept of nature compensation?

The idea behind standard procedures is to bring on equal treatment between compensators. Everyone gets what he/she deserves according to the guidelines stated in standard procedures. This involves the **rule of equity**, which covers the idea that:

“Justice is done when people get what they deserve or what is due to them. The rule of equity is of use when people get their fair shares of something they want that is scarce. The trick is to figure out what people deserve, what is due to them, and thus what their fair shares are. The fair share of any one person is the same as that for anyone else who is the same in all relevant aspects. In this case they deserve the same things. The rule of equity requires that like- cases be treated alike, and different treatment be justified by reference to relevant differences. (Wenz, P.S., 1988:22,23)”

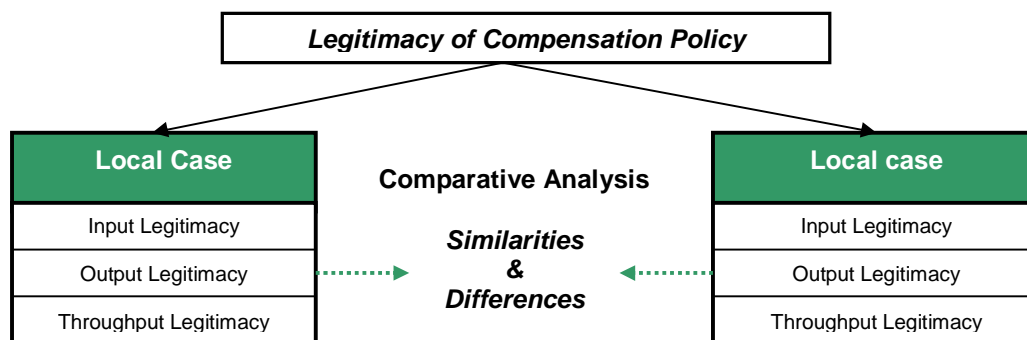
When connecting the concept of nature compensation with the rule of equity it would be preferable that the appliance of compensation policy brings on a situation in which compensators whom find themselves in exactly the same situation would have to compensate the same amount of costs (taking aside a comparing land value calculation). In this case the rule of equity can be specified into **economic equality**, which outlines the equality in the distribution of wealth (Shrader-Frechette, K., 2002:25). It involves if equal treatment under compensators exists, regarding burdens/costs obliged due to the compensation duty. These compensators should face the same situation. In reality implementation practices per province were allowed to be different in the Netherlands. This could have caused that the appliance of economic equity, concerning the implementation of nature compensation, is difficult to achieve on national level. The main question remains if an economic framework is in place that guarantees this equal treatment? The section on ‘Implementation practices’ could provide usable

information for verifying if an economic framework is present. Questions like how the different types of compensation are implemented into the regional plan and how it is used in practice are examined. This section is additionally focusing on moral concerns, connected to this economic equity. Economic equity can be discovered if the compensation obligations of two different compensators in a roughly similar situation, concerning their intervention plans and compulsory compensation measures, would meet certain requirements that represent equal treatment. It could be considered legitimate, with respect to equal treatment of compensators, if these requirements involve: equal costs, same duration, equal availability of suitable ground, and accomplishing the compensation duty entirely. All these requirements are closely related to costs of completing the compensation duty. While the completion of the compensation duty is more an end result. The accomplishment of compensation was actually connected to the polluter pays principle previously. This brings us back to the beginning, with the question if compensation is fully accomplished, and how fair it would be if this wasn't the case. If standard procedures are present, and if equal treatment takes place, can be discovered by researching personal experiences of certain compensators, and by studying documents of the practical situations concerning these compensators.

3.3.4 Research design regarding legitimacy

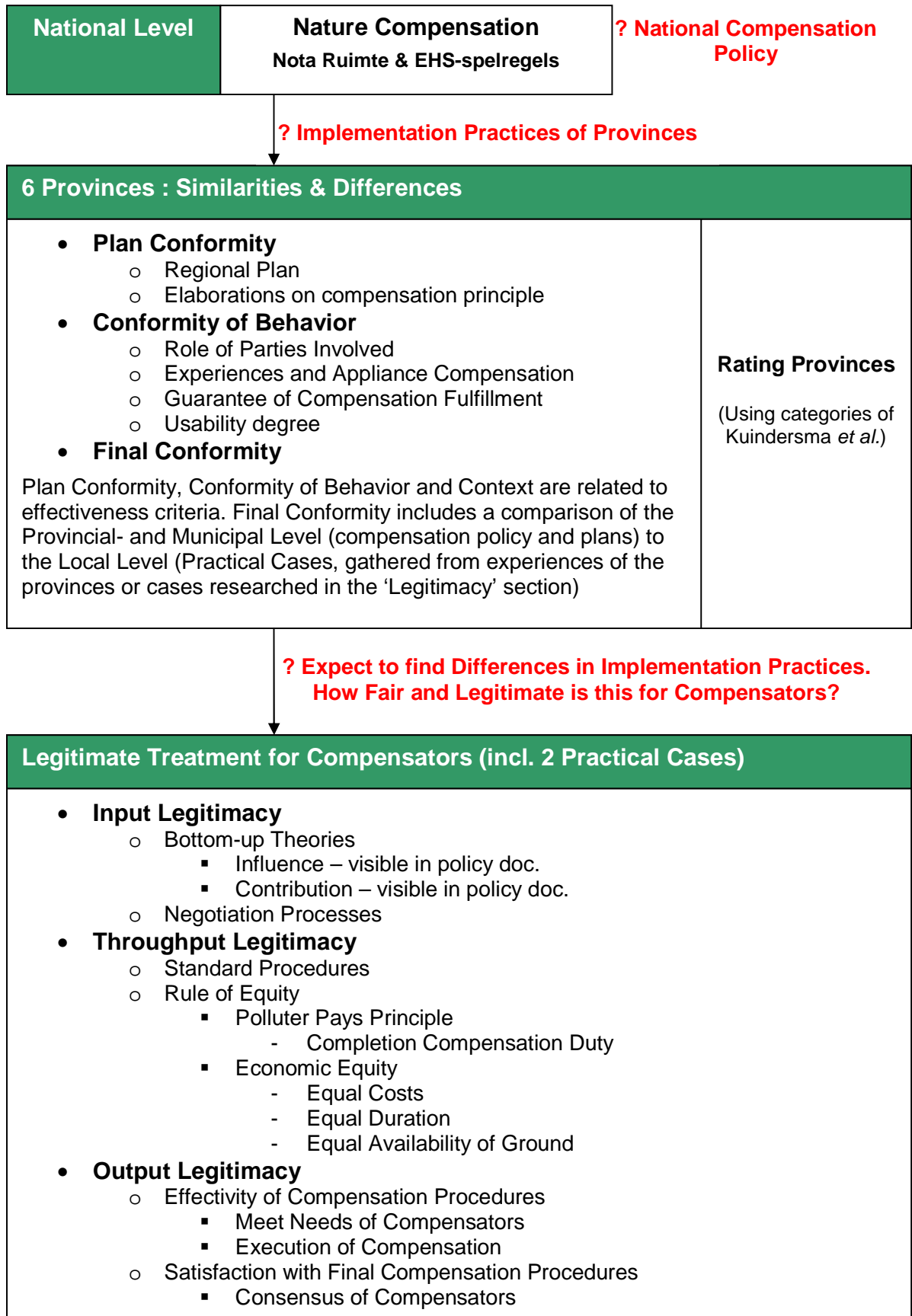
In this section several concepts have been connected to the levels of legitimacy. Diagram 4. gives a clarifying overview of how legitimacy will be studied. Two practical cases will be studied on the levels of legitimacy, and the results will be compared, while taking the similarities / differences into account. A general idea could be gained on how these two compensators actually experience the compensation policy.

Diagram 4. Research design regarding legitimacy



Finally a diagram was designed that shows both the sections on 'implementation practices, with the levels of conformity' and 'legitimacy with the levels of legitimacy'. Diagram 5 is shown on the next page, and summarizes the main thoughts behind these concepts. This scheme can give a clarifying overview of the entire research.

Diagram 5. Overview of Research



4. Methods

This research exists of two parts focused on implementation practices and legitimacy, concerning the accomplishment of the compensation. This requires two different working methods. Qualitative research takes place, because the focus is on understanding how compensation is currently applied in the Netherlands. The aim is to give a complete and detailed description of implementation practices, instead of quantifying a research method to a large extent to discover how compensation is applied. During this research an insider's point of view of the provinces was gained, and an insider's point of view of compensators is addressed surrounding the question of how legitimate different implementation practices are. Comparative case studies are performed in both research directions (i.e. provincial implementation practices and legitimacy). The implementation practices exist of multiple cases, including six of the twelve Dutch provinces. These involve hierarchic case studies, because all cases are selected in advance. Legitimacy is researched by comparing two practical cases. This involves nested cases, since they are selected through advice from the provinces, which means the cases on legitimacy are situated within two provinces that have already been studied. Thus this means the selection of practical cases for studying legitimacy, are selected *ex nunc*. How the case selection for this whole research exactly took place will be explained in chapter 4.1 Finally in both research directions a case comparison takes place, only after an independent study of individual cases. In the end case studies might be helpful to produce new ideas on a particular problem (theoretical generalization). These case studies are intended to shine new light on the problems surrounding compensation policy that has been put to practice. Next this chapter will cover the data collection, data analysis and the reliability & validity of this research.

4.1 Data collection

Documents are gathered, and interviews will be conducted, to research current implementation practices. Next to this documents, concerning two local cases, will be reviewed on a certain amount of topics related to legitimacy. Additionally interviews are taken from compensators related to these local cases.

4.1.1 Implementation practices

First the section of implementation practices will be researched by performing interviews with six of the twelve provinces of the Netherlands. Interviews will be taken with provinces, because they have a key role in implementing the compensation policy. Provinces are responsible for executing nature compensation on provincial and local level, according to the Nota Ruimte. Representatives of certain provinces are requested to participate in an interview, concerning the implementation of nature compensation.

A selection in provinces is necessary in order to extensively view the selected provinces. Also a time limit is present, due to another component of this research, which also takes up time. Previously Kuindersma made a clustering of provinces into forerunners, followers and laggards. It would be of interest to select two provinces per category. Are the provinces still in the same category since 1999, and how has the implementation of compensation changed in this time period of ten years? Provinces can be compared on similarities and differences, thus to detect patterns. The provinces Gelderland and Noord-Brabant are selected, because these were the only two forerunners present in the research of Kuinderma. Next Overijssel and Zuid-Holland are selected from the category

'followers' due to preferable geographical locations. Overijssel was approached to participate in this research. Unfortunately the person, specialized in nature compensation policy, was not available to make an appointment, due to sickness. When contacting the province Zeeland, which was also categorized as follower by Kuindersma *et al.*, an appointment, regarding an interview, was quickly made. Finally Friesland and Utrecht were selected from the category 'laggerds' also due to preferable geographical locations. The North, East, South, West and the centre of the Netherlands are represented by these selected provinces (North: Friesland, East: Gelderland, South: Noord-Brabant & Zeeland, West: Zuid-Holland and centre: Utrecht). See map 1. below.



Map 1. Selected & Interviewed Provinces

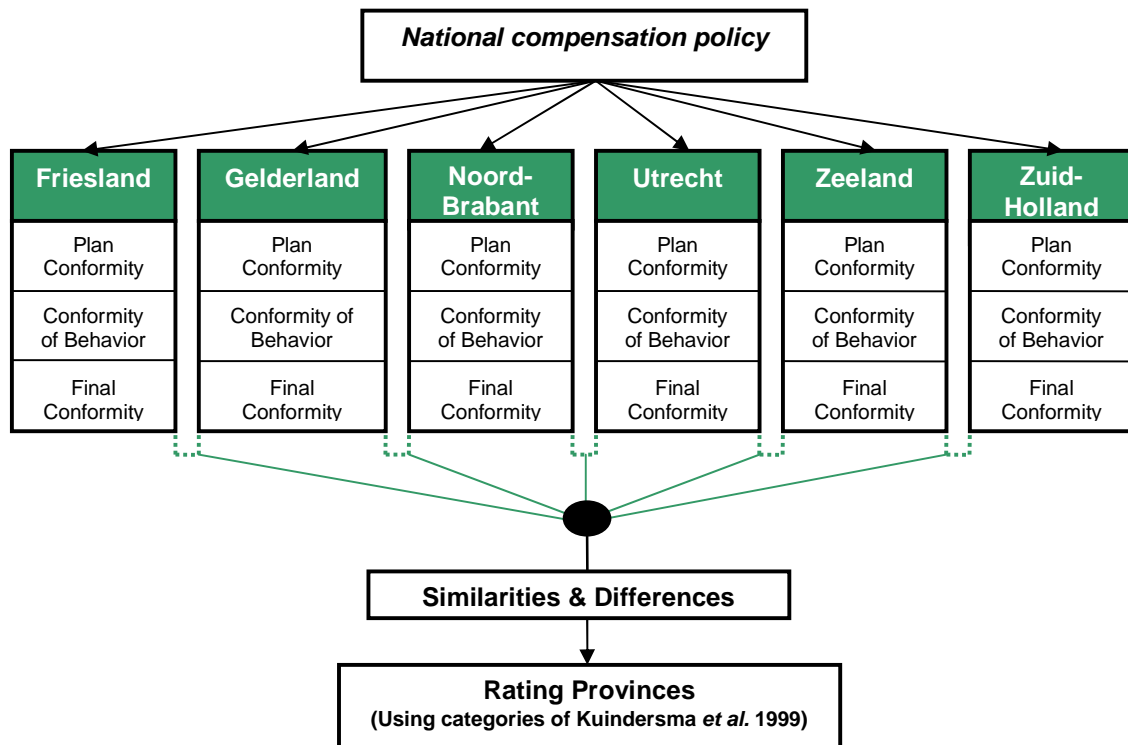
All six provinces have regional plans available on the internet. This is of great use in this research, because a large part of plan conformity can be examined by performing a literature study on these regional plans and other documents in which compensation is registered. How the national compensation guidelines were used in the provincial implementation of compensation policy can be researched by looking into the regional plans of the selected provinces.

The selected provinces are approached by calling the provincial government buildings to discover contact information of the representatives concerning compensation. These representatives are personally asked if they would like to participate in a interview on nature compensation. Semi- structured interviews are chosen because a general framework of themes and questions can be explored during the interview. The interview is still flexible, because it allows new questions to arise as a result from what the respondent brings to the table. By taping the interviews no information will be lost, because one can work out what has been said in your own time. During the interview the interview cycle will be used by the interviewer. Starting with a complete and clear introduction, asking a question, evaluation of the response, when necessary probing the response, recording the response, continue with next question and finishing up (Research methods for environmental sciences / ENP-21806).

The interview can be divided into two parts. The first part includes questions concerning how compensation is registered in official policy documents like regional plans and development notes (plan conformity). The second section involves questions about how

compensation is executed in practice (conformity of behavior and final conformity). Provinces are asked to introduce practical cases, which are connected to the questions in order to show how compensation is actually taking place or how compensation was accomplished. Ultimately the semi-structured interview will cover questions related to conformity of behavior, and will include the remaining questions on plan conformity as well, that could not be answered by a literature study. Also questions related to final conformity are asked. These answers from final conformity will be processed with results from the second research section, regarding legitimacy. To clarify how this research on implementation practices will be conducted, a short overview is given again in diagram 6.

Diagram 6. Research design regarding provincial implementation practices (part II)



Finally the design of the semi-structured interview, concerning implementation practices, can be found in Appendix I. A guiding letter is mailed to the provinces who will participate in the research on implementation practices. In this way the provinces are still informed of what to expect from the interview and it will give them an opportunity to possibly prepare for it.

When the interview is coming to an end the snowball effect will be used. This gives the opportunity to discover suitable projects for examining legitimacy, which is mentioned more extensively next.

4.1.2 Legitimacy concerning implementation practices

The section on legitimacy will be researched by looking into two cases that apply compensation in practice. Due to a time limit there is no possibility to assess a larger number of cases. It is still useful to research two practical cases, because a comparison between these cases can be performed, and hopefully a comparison between two

provinces can take place. It is of interest to select practical cases that are sufficiently covered in reports and media coverage. Then one could possibly detect similarities in what has been registered in official policy documents and what has happened in practice. The selected cases should have been discussed in official development plans, scientific reports and/or media to be able to apply the indicators developed in the theoretical/conceptual framework.

The provinces are asked if they can propose projects that are interesting, well defined and preferably completed. This is asked by using the snowball effect in the semi-structured interview, concerning the section 'implementation practices'. The provinces introduced cases on basis of the following criteria:

- An case where something interesting happened regarding the implementation and/or completion of compensation by the compensating parties;
- The case should be reasonably documented in order for the researcher to examine the case (preferably no extreme cases);
- Possibly completed compensation projects. This offers the opportunity to compare plans to the actual realization of the compensation.

During these interviews with provinces it was generally mentioned that compensation projects of governmental institutions usually pass more smoothly than private individuals. It was noted that perhaps private individuals are sometimes less informed on the compensation policy, and procedures, than governmental institutions. In the end more practical cases with an governmental compensator were forwarded by the provinces. This difference, between governmental institutions and private individuals, in implementation practices is very interesting, which led to connecting this fact with the existing criteria. The selection is extended with the criteria that the practical cases should include one governmental institution and one private individual or institution.

The selected governmental institution was chosen fairly easily. The province of Gelderland introduced a very interesting case, concerning the municipality of Nunspeet. This compensation process has caused a lot of reactions. The case could seem a bit extreme, because of all the commotion the compensation project brought with it. Although this makes it an interesting case and certainly covered in reports and media coverage. It is also useful, because it shows how the involved parties worked together on this compensation project, and finally reached the approval of the plans. This involved the state, province, municipality of Nunspeet and other involved parties. The other provinces also introduced interesting practical cases in which governmental institutions need to compensate. These cases were not selected, because they sufficed the mentioned criteria to a lesser degree than the practical case of Nunspeet.

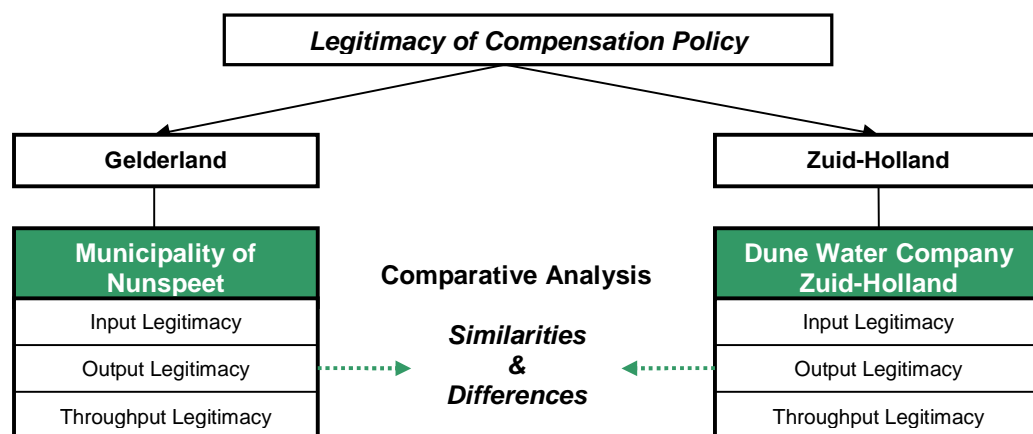
The second practical case was more difficult to select. The cases that the six provinces introduced did not frequently involve private individuals, companies or institutions. A description of why introduced cases were not selected will be discussed next per province. For instance Zeeland only recommended governmental compensators. These were all very interesting cases, but private parties were not really mentioned, which was of interest for the selection of the second practical case. The provinces cannot be blamed that they have forwarded less private parties, because this was not specifically asked of them during the interview. The provinces were not requested to make a difference in forwarding practical cases, regarding governmental and private parties. The cases were requested to be interesting, covered in reports and possibly completed. Only after all the interviews were taken with the provinces, it was decided that a governmental institution and a private party would make an interesting comparison to show if differences in implementing the compensation policy exist between them. Noord-Brabant also recommended a practical case in which a governmental institution is the

compensator, but also two private parties were mentioned. The province noted on these practical cases that it would be very complicated, and would cost a lot of work to get to the bottom of it. One of these private parties included the Efteling. Next Zuid-Holland introduced a case that was arranged before the compensation principle was in force. This was a reason for not choosing this case, because than one could not test how the realization of compensation and the plans corresponded to the provincial compensation policy. While Friesland described private owners, which mainly focused on forest compensation. It was indicated that it was not sure if these individual compensators would like to be contacted. In the end Gelderland should not provide the second practical case, because the first selected practical case, of the municipality of Nunspeet, already takes place there. It could be very interesting if the two practical cases would be situated in provinces that are categorized differently. This could raise an interesting comparison, due to the expected differences.

Which practical cases did make the final selection for the second case? First Amersfoort Zoo in the province Utrecht was approached to participate, but they declined. The province Utrecht recommended this practical case that sufficed the selection criteria, which is why it became the first choice. After this decline of Amersfoort Zoo the Efteling in the province Noord-Brabant was approached. After a while the Efteling also stated that they would not participate in this research. There were no practical cases, that were recommended by the provinces, left to choose from. This is the reason why all the given examples of compensation projects, from the provincial interviews, were viewed in order to find a second practical case. This finally led to the Dune Water Company Zuid-Holland, who were very positive about participating in this research.

The selected practical cases (i.e. the municipality of Nunspeet and the Dune Water Company Zuid-Holland) are extensively introduced in chapter 6.1. Further a general overview is given below of how legitimacy will be studied, with the connection to these two practical cases (see diagram 7).

Diagram 7. Research design regarding legitimacy (part II)



The two selected practical cases are examined on how they meet the indicators, concerning legitimacy. The levels of legitimacy structure these indicators. An indication of a legitimate process during the appliance of compensation depends on how much indicators can be detected and be verified from the literature study (e.g. development plans, reports, media coverage etc.) and the interviews.

By examining scientific research and media coverage one cannot obtain information on how the compensator experienced the whole process around executing the compensation duty. Semi- structured interviews are used to get an insider's point of view from compensators. The general framework of themes and questions is of importance to use in this semi- structured interview, because then one can question the compensators on similar topics. However the interviews are also adjusted to each practical case. Detailed questions, focused on a practical case, are formulated in order to discover more about how the compensator experienced the compensation procedure. The flexibility this type of interview provides is preferable, because it offers the respondent an opportunity to bring up related topics. By taping the interviews no information will be lost, because it can be worked out in your own time. The interview cycle, as mentioned above, will also be applied in these cases. A general plan, concerning questions for the semi-structured interview, is given in Appendix II.

Ultimately information of these two practical cases will be used to research final conformity, which is connected to effectivity criteria and conformity of behavior. This is only possible when the practical cases are situated in one of the selected provinces from the section 'implementation practices'. This is also the case as mentioned previously.

4.2 Data analysis

A literature study has been performed and interviews have taken place. But who participated in this research? A list of respondents, concerning interviews with six provinces, and compensators of two practical cases, can be found in appendix III. It now comes down to how theories are connected with the results from the literature studies and semi-structured interviews. Next how data is analyzed will be described.

Tables have been designed in order to efficiently structure and process these large amounts of data (i.e. of both sections on implementation practices and legitimacy). This can be found back in the appendixes in which data of the provinces and practical cases is processed (see Appendix IV and Appendix V).

First the implementation practices of provinces are reviewed. Plan conformity can be inspected by using a table that shows which elements of national compensation policy should be seen back in provincial compensation policy. The mainlines connected to conformity of behavior and final conformity are also presented in tables. It is not simply a question of yes or no with these types of conformity. Usually a story is attached behind it and frequently examples of compensation projects are used to prove a point. When processing data from the interviews, on conformity of behavior and final conformity, it needs to be verified with official compensation policy. In this way it can be inspected if the data is correct. With plan conformity it can be examined if the elements in the table, concerning national compensation policy, are present in provincial compensation policy.

Secondly the levels of legitimacy are processed, concerning legitimacy of implementation practices. Also these concepts need to be processed per element and have been captured in tables. It involves the experiences of the compensators. Input legitimacy shows how contributions could be made to the compensation/negotiation process. Next output legitimacy describes which end results have been accomplished, and how the whole process was experienced. Throughput legitimacy indicates how the compensation policy, and procedures are experienced.

Finally the processed data of provincial implementation practices can be found in Appendix IV and the processed data on legitimacy are given in Appendix V. This is

worked out more extensively in the coming chapters. These appendixes have been created by using and translating transcripts of the interviews. These transcripts are not included in the report, but are available on request.

4.3 Reliability and validity

The **reliability** of this research is increased by making the research proposal as transparent as possible. It is extensively described what will be done and how this will be achieved, which should create a clear overview of what the research involves. When it is understandable what will be done, it becomes easier for another person to repeat a research.

By using several methods and a large number of sources one increases the **internal validity** of a research. This research covers the following methods: literature research and semi-structured interviews. This was chosen in order to address distinctive aspects of the implementation process, concerning compensation. By performing literature studies a more general picture behind the national compensation policy can be developed. Besides extensive research on how provincial compensation policy is registered in the regional plan can be discovered by carrying out a literature study. Also other documents, in which compensation is registered, will be included in the research. Documents, concerning the practical cases, are explored at length as well. Additionally six provinces, and the actual compensators of two compensation cases, are approached to obtain a detailed look into their experiences and visions of compensation implementation. By using different types of methods this research has not become limited. The large amount of sources include: scientific reports, policy texts, previous research on compensation, six provinces and two practical cases including the actual compensators. These sources have carefully been stated in the acknowledgement. It becomes visible to others what is done and how this is done. This makes it transparent, because all these aspects are described in a detailed and precise manner.

The goal of this research is not to make it suitable for appliance of other policy research. It was focused on compensation policy only. This involves **external validity**, which includes the extent to which it is plausible that conclusions of the study might be generalized to other situations, than the situation researched. External validity is safeguarded when a large random sample from the population is taken. The provinces are approached, due to their key role in implementation practices. Only half of all the Dutch provinces are approached, because the time limit of this research prevents the possibility to look into all twelve provinces. Six provinces were carefully selected by using Kuindersma's category system of 1999. This included provinces categorized into: forerunners, followers and laggards in processing national compensation policy to provincial level. Two provinces are selected per category and it is taken into account that the provinces are situated in the North, East, South, West and the centre of the Netherlands. This careful selection could make it possible to generalize results of these provinces to apply for all the Dutch provinces. But the general idea behind external validity does not apply for the two practical cases, which was a conscious decision. Only two practical cases can be assessed on legitimacy, due to a time limit (this being the second section of this research). A selection of practical cases will take place from cases that were introduced by the provinces. The two selected cases need to be covered in official spatial plans, reports and/or in the media for further research to be possible. It all depends on how much information is available of certain practical cases and if there is a possibility for an interview to take place. All cases, including the provinces and practical cases, were carefully selected, which contributes to the external validity. On the other hand the amount of 2 practical cases, regarding legitimacy, is not enough to be able to

make generalized conclusions from it. Although these two cases do contribute to being an example for future research in studying the legitimacy of the implementation and completion of compensation duties.

Triangulation of sources and methods could arise in a research. **Triangulation of sources** involves the use of information from different data sources. And **triangulation of methods** includes the use of multiple methods to get information from the same data source or from various data sources. It is also possible to use too many methods and sources and how to prevent this from happening in your research.

The triangulation of too many sources and methods is prevented in the section of 'implementation practices' by addressing the research into certain directions. Literature study focuses on how national policy was registered in the regional plans (plan conformity). Next to this semi-structured interviews take place, concerning six provinces, to explore how compensation is actually executed in practice and to learn more about provincial experiences (conformity of behavior & partly plan conformity).

The triangulation of too many sources concerning the section of legitimacy is prevented by using information focused on only the two selected practical cases. Different data sources can be used to collect this information (spatial plans, reports, media coverage). Triangulation of methods is prevented by first looking into documents, concerning two practical cases. Additionally the compensators of these cases will be interviewed in order to develop a more complete picture on how they experienced the whole process surrounding compensation policy.

As mentioned previously this research includes the information source: interviews. Interviews are used to gain insight in both research sections. The following criteria are kept in mind in order to evaluate the responses given in the interviews:

- Completeness: the respondent has given all the relevant information
- Clearness: the interviewer knows how to record the answer (understand the answer)
- Relevance: the response refers to the object, person, situation or event in the question (and not to something else)
- Consistency: all statements made by the respondent are the same throughout the interview (Research methods for environmental sciences / ENP-21806)

5. Patterns provincial implementation of nature compensation

This chapter is largely based on information gained through the processing of data, concerning the implementation practices of six Dutch provinces. These results are presented in very detailed tables, which can be found in Appendix IV. The analysis of the implementation of nature compensation policy is central in this chapter. The data from the provinces will be examined in relation to the three levels of conformity. First plan conformity is discussed in chapter 5.1. Followed by conformity of behavior in chapter 5.2 and final conformity in chapter 5.3. A final comparative analysis is given in chapter 5.4, which shows the foremost insights that were gained by studying the three levels of conformity. This chapter also covers some connections with theories, concerning the degree of conformity. Finally chapter 5.5 provides a comparison between the provinces. Ratings are connected to the implementation practices of these provinces, and this results into forerunners, followers and laggards. Previous studies will also be connected to all the findings, since compensation policy has frequently been reviewed in the past.

5.1 Plan conformity

Plan conformity is researched by comparing national guidelines on nature compensation with provincial compensation policies. These national guidelines have been registered in the Nota Ruimte and the 'EHS-spelregels'. Nature compensation is connected to the National Ecological Network (acronym: NEN), Birds and Habitat Directive (acronym: BHD), Nature Protection Act (Dutch acronym: Nb-wet), Flora and Fauna Policy (Dutch acronym: FF-wet) and the Forest Policy (see chapter 2 for more information). Previously, plan conformity has been researched by Kuindersma *et al.* in 1999, which resulted in an extensive research on detecting patterns in implementation practices between provinces. Differences and similarities, concerning implementation practices, were examined. A lot has changed since 1999, when the research of Kuindersma *et al.* took place, with the Structuurschema Groene Ruimte (Dutch acronym: SGR) still in place. It is of interest to inspect if, and to which extent, the national compensation guidelines are currently processed by the provinces. Next comparisons will be made between provinces, in order to show differences and similarities, concerning the implementation of compensation policy. The area categories, in which compensation is in force, will be described first in chapter 5.1.1. Followed by examining the compensation procedure, as described in the 'EHS-spelregels', in chapter 5.1.2. Next some remarks are given in chapter 5.1.3 about the influences that the implementation of a new spatial policy might have on the implementation of compensation policy. To end with a recapitulation of this chapter in 5.1.4.

5.1.1 Area categories in which the compensation policy is in force

Areas, in which compensation is in force, have been assigned/registered by the provinces. Areas like the NEN, BHD, Nb-wet, FF-wet and the Forest policy are all mentioned in policy documents. Additional area categories could also be recognized (e.g. Zuid-Holland, Utrecht etc). Area categories can differ in descriptions in policy documents, for instance when it is interwoven in a bigger framework. For instance, Gelderland has implemented essential qualities and environmental conditions. While Utrecht implemented a green contour, and Noord-Brabant has incorporated a green main structure and an agricultural main structure. Often provinces have special

guidelines for certain areas of importance (e.g. Friesland: Waddeneilanden, Gelderland: Veluwe, Utrecht: Utrechtse Heuvelrug, etc.). Sometimes interventions in these areas with special guidelines are especially difficult, because of the strict nature protection regime. This can be a reason for adjusting compensation policy to specific locations, in order to make interventions still possible. It can also be adjusted due to scarcity of space, like in Utrecht (NEN-balance approach) and Zuid-Holland (qualitative compensation & custom made measures earlier possible). Thus differences in the implementation of area categories can exist, but the main idea is covered by all the provinces.

5.1.2 Sufficing the procedures of the EHS-spelregels

The detection of area categories, as mentioned above, is just the first step. Next the compensation procedures, as mentioned in the 'EHS-spelregels', will be discussed. These compensation procedures are presented in seven steps in the 'EHS-spelregels'. However chapter 3.2.1 explains that all the elements of these seven steps can be gathered under certain main concepts. Next table 3 shows the main points, in relation to the seven step compensation procedures, and an indication is given of how the six provinces suffice these procedures. Explanations of how these ratings were set, are given per topic

Provinces	Compensation procedures (EHS-spelregels)				
	Registration of 'No, unless' rule	Registration of compensation types (mitigation, physical compensation, financial compensation, NEN balance approach, limits NEN)	Instruments to guarantee compensation (compensation plan, embedding plan, private law agreement, bank warranty etc)	Monitoring/ Evaluations (no net-loss of values)	Meeting Nota Ruimte & EHS-spelregels
Friesland	+++	+	+	-/+	+
Gelderland	+++	+++	++	++	+++
Noord-Brabant	+++	+++	++	+++	+++
Utrecht	+++	+++	++	-/+	++
Zeeland	+++	+++	++	-/+	++
Zuid-Holland	++	+	+	-/+	+

Table 3. Sufficing the compensation procedures of 'EHS-spelregels', per province

Registration of 'No, unless' rule

The framework of the 'no, unless' formula has been implemented by all of the provinces. Only the rating of Zuid-Holland is somewhat lower, since this province indicated in 2006 that the 'no, unless' formula was not sufficiently worked out in the 'Nota Planbeoordeling, regarding the consideration frameworks of the BHD, NEN and Nature Protection Act (Province Zuid-Holland, 2006:125). It is not entirely clear if this is still the case in Zuid-Holland nowadays.

It seems that the provinces have almost literally incorporated the text of the 'no, unless' rule (which shows a degree of formal conformity). Sometimes differences exist in the concepts of great public interests, and considerable social importance. Gelderland only mentions great public interests, while the other provinces also describe considerable social importance. The Algemene Rekenkamer described that Gelderland indicated "the concept 'considerable social importance' has been avoided consciously, since they consider this a vague concept. The social importance differs at national level and at local level." (Algemene Rekenkamer, 2007:50) Kuindersma *et al.* stated in 1999 that there are differences in formulation of this concept, and therefore differences in meanings behind it. Nowadays it is quite well known that interventions in certain areas are not allowed, if there is no case of considerable social importance, and if alternatives are available.

Thus the main idea behind the framework of the 'no, unless' rule has been implemented by the provinces (which shows a degree of tangible conformity).

Registration of compensation types

Mitigation and compensation are in place when a project passes the 'no, unless' rule. First one looks into integration operations and mitigation. Damage needs to be limited as much as possible by using mitigating measures, and it should soften the consequences of interventions on nature and landscapes. All the provinces generally noticed that in practice the mitigative measures cannot take away the damage in most cases, and compensation is necessary. Compensation exists of physical compensation (surface or quality loss) and financial compensation. There are also measures especially designed for the NEN, including the NEN-balance approach and re-determining the limits of the NEN. All the types of compensation have already been described extensively in chapter 2.2. Next quite detailed information is given of how provinces have implemented these concepts.

Physical compensation is divided in compensation of surface or quality loss. Firstly compensation of **surface** basically means that in the replacing acreage a basic design needs to be realized in which the lost values can be developed. This usually occurs on a 1:1 basis (i.e. compensation is equal to the damage). In case of **quality loss** of existing nature values, during the development stage of the replacing area, an extra charge on top of the physical compensation is calculated. This extra charge is called a **quality addition** (in Dutch kwaliteitstoelag). The amount of quality addition in ha. depends on how replaceable an ecosystem is. Provinces indicate how replaceable certain types nature and landscapes are by implementing nature goal types. This is often connected to the duration it takes to replace nature. Table 4 on the next page shows how quality addition is prescribed by the 'EHS-spelregels', and how provinces implemented quality addition. The provinces differ quite much in the implementation of quality addition, and this is explained in more detail next.

	EHS-spelregels	Friesland	Gelderland	Noord-Brabant	Utrecht	Zeeland	Zuid-Holland
Replaceability							
Very quickly replaceable =< 5 years	-	Unknown Only known for Forest policy	-	0-10 years -	-	-	Unknown Kuindersma <i>et al.</i> states that quality addition from SGR is uses in practice.
Quickly replaceable 5-25 years	0,33	Unknown	=< 25 years: 0,20	10-25 years 0,33	0,30 0,10 when connected to NEN area	Within 10 years 0,33	Unknown
Replaceable 25-100 years	0,66	Unknown	0,30	0,66	0,70 0,30 when connected to NEN area	Within 25 years 0,66	Unknown
Difficult to replace => 100 years	Decided per case	Unknown	0,40	Custom made measures on top of 0,66	Decided per case	Longer than 25 years Decided per case	Generally not accepted

Table 4. Quality addition per province

It becomes visible that it is not clear how quality addition is applied in Friesland and Zuid-Holland. Although quality addition, regarding the Forest policy, has been registered in Friesland. The table shows that Gelderland has lower percentages than the 'EHS-spelregels' suggests, which means that their implementation of quality addition is less strict than the 'EHS-spelregels' prescribes. Noord-Brabant has the same percentages, but the years connected to it are higher for (very) quickly replaceable nature (till 10 years

instead of 5 years and 10-25 years instead of 5-25 years, which is also less strict than the 'EHS-spelregels' prescribes). While Utrecht shows lower percentages when an area is connected to the NEN. Finally Zeeland has implemented less years for certain percentages, which is stricter than as stated in the 'EHS-spelregels'. Furthermore how quality addition was implemented in policy documents generally resembled the 'EHS-spelregels' quite much (except for Friesland and Zuid-Holland).

Next it was of interest to analyze if possibly standard formulas existed behind **financial compensation**, or if a financial framework exists. Financial compensation only becomes an option when the initiative taker can prove that there are no other possibilities to compensate (thus after mitigation and physical compensation). It appeared that financial compensation is a custom made measure and differs per case. Provinces indicated that a financial framework is not really feasible. The compensation projects differ too much to achieve this. It is a matter of keeping the concept abstract that makes the appliance of it possible. Gelderland and Noord-Brabant give a description of what can be taken into account when dealing with financial compensation. The 'EHS-spelregels' even gives examples of how to apply it. Examples of how to apply financial compensation are not found back in the provincial policy texts, except Noord-Brabant shows which type of costs are connected to financial compensation. The provinces also indicated that financial compensation does not occur that frequently. For example Zuid-Holland sees it as a sort of rest-compensation. Thus it remains vague how financial compensation is arranged, when viewing policy texts. I guess the variation in compensation projects makes it difficult to create standards, but couldn't standards be connected to certain types, of area categories and certain combinations of area categories?

Currently the existence of compensation banks is a hot topic. Suitable compensation grounds could be obtained more easily, since people can go to the compensation bank that provides compensation grounds. This could speed up the compensation process. Suitable compensation grounds would be available on request, and long/difficult searches for suitable grounds can possibly be prevented. Costs can decrease as well due to a shorter compensation process. The provinces noticed the existence of a compensation bank, and which opportunities this would offer. Gelderland spoke of it quite much, and they even run pilots on how a compensation bank can be shaped/used. On the other hand the question remains if compensation banks are not just a way to deal with compensation in a financial way (i.e. buying of compensation). Noord-Brabant already indicated to see financial compensation as buying of compensation duties. Future experiences can only show which effects a compensation bank can have.

Lastly the measures connected to NEN areas are mentioned. The **NEN-balance approach** and **re-determining limits of the NEN** are not often described extensively. Usually a short passage is given in policy documents. Zuid-Holland has not processed these concepts yet. Noord-Brabant has not processed these concepts either, but with the new Wro it came on the agenda. Friesland indicates that further elaborations are needed. While Gelderland, Utrecht, Zeeland have processed it into policy documents. Utrecht is applying the NEN-balance approach, which is very clarifying to see it put to practice at the 'Utrechtse Heuvelrug'. These concepts (NEN-balance approach and re-determining limits) are quite new, and it remains to be seen how it will be applied in the future. And if further elaboration on it will be made in policy documents.

To recapitulate, compensation types can be adjusted to certain circumstances (scarcity of space, room for interventions to takes place if large areas fall under protection regimes etc.). Every case is different, and there are different ways to deal with it. The main difference, between the provinces in implementing compensation policy, is that certain provinces stick to the main concepts behind compensation while others have

extensive elaborations. The larger part of the compensation types have been processed in provincial policy documents (i.e. extensively or briefly). It became clear that nature compensation is closely related to custom made measures. All the provinces left room open, during the implementation of compensation types, in order to be able to work on the large range of different compensation projects. More unequivocality could be desirable between the different implementation practices of provinces. The 'EHS-spelregels' should provide this, and the processing of the 'EHS-spelregels' by the provinces needs to be awaited.

Instruments to guarantee compensation

The instruments to guarantee fulfillment of compensation changed when the new Wro set in. The idea is that the new Wro should offer better supervision- and enforcement instruments. It was not really clear to the respondents of the provinces how this would work out. It is also the question if provinces and municipalities are willing to use them. It has to be awaited how new instruments will be used.

Provinces frequently mentioned that they bring involved parties in contact (i.e. someone has suitable compensation grounds and someone is searching for compensation grounds). On a provincial level it is sometimes easier to get an overview, of compensation projects and available compensation grounds, than on a local level (municipalities). The province has previous experiences and knowledge on nature compensation, where that is sometimes lacking with municipalities. This is a way of working together on projects (province and municipality). But when compensation is not fulfilled before the realization date passes further measurements can be taken. For instance a bank warranty can be required and penalties can be in place when compensation is not fulfilled in time. Gelderland, Noord-Brabant, Utrecht, Zeeland, Zuid-Holland have registered that a bank warranty is required. Friesland indicated that a bank warranty can be asked, but the respondent noted that he has never used it (perhaps colleagues did?). Nothing on this is found back in policy documents of Friesland. Not all provinces have implemented penalties, when exceeding the realization date. Penalties are set in Gelderland, Noord-Brabant and Utrecht, while it is unknown if penalties are in place in Zeeland and Zuid-Holland. Final realization dates, bank warranties and penalties are ways to secure fulfillment of compensation duties. From an inspection of the Ministry of Housing, Spatial Planning and the Environment (Dutch acronym: VROM) it appeared that "Gelderland has arranged the embedding in planning in a better way than the other provinces. This is possibly due to a provincial evaluation that took place in Gelderland in 2002." (Gjaltema *et al.*, 2006:36) This study of the VROM-Inspection was also positive about Noord-Brabant. The research of the VROM-Inspection only focused on Gelderland, Noord-Brabant, Overijssel and Limburg. While Friesland, Utrecht, Zeeland and Zuid-Holland were not analyzed for this study. Thus it is unknown how these provinces would have scored in this research.

Monitoring/ Evaluations

The monitoring of compensation projects and evaluations are one of the last steps in the compensation process. It is essential to evaluate how projects were executed. Only then it can be measured if the damage to the original values was really compensated (no net-loss of values). Monitoring and evaluations have not really been processed in policy documents. Exceptions are Gelderland and Noord-Brabant. These provinces have implemented the monitoring of projects and evaluations quite extensively. Especially Noord-Brabant and Gelderland possess accurate inventory data, and assessments made on basis of this inventory data usually are mostly correct in practice (Gjaltema *et al.*, 2006:36). According to the VROM previous evaluations of nature compensation policy in

Gelderland and Noord-Brabant have led to a considerable improvement (Gjaltema *et al.*, 2006:32). The VROM also stated that Gelderland and Noord-Brabant have a carefully designed registration system (Gjaltema *et al.*, 2006:33). A registration system should record: which plans include compensation, in which way, and within which term. In Gelderland compensation projects are registered when the development plan, or changes in a development plan, are approved by the Provincial Executive (Gijzen *et al.*, 2003: 41). During the interview with Noord-Brabant the extensive registration system to monitor and evaluate projects became visible. It appears that Noord-Brabant is forerunner in setting up a system to monitor and evaluate projects (with registration forms and progress forms). Municipalities and initiative takers still need to adjust to the system, since the required forms that are designed to gather information on projects are not returned to the province yet. But the system exists, and only needs to be used (involved parties need to get used to it, according to the respondent of Noord-Brabant). Yearly monitor reports are already present in Noord-Brabant. Gelderland and Noord-Brabant are on the right way, but further appliance, adjustments and improvements are necessary because not all monitoring criteria from the 'EHS-spelregels' are met yet (i.e. verifying all projects, yearly reports, reporting findings to state).

The other provinces can still work out quite a lot, concerning monitoring projects and performing evaluations. The respondent of Zeeland indicated that they are in no need of evaluation reports (rather work very practically), although evaluations are sometimes required with large projects in which the state is involved (Westerschelde). It seems that monitoring and evaluations do not fit in the approach of Zeeland. While other provinces indicated that they are willing to work on a registration system. Sometimes this has gotten a lower priority due to the implementation of the new Wro or lack of time (e.g. Utrecht). Friesland indicated that the implementation of compensation is still in the early stages and elaborations are still needed to be processed. And Zuid-Holland mentioned someone is now working on the book keeping, but that it is not the task of the province to collect monitoring data and evaluate projects. These provinces have no evaluations available in which monitoring data of projects become visible. Zuid-Holland performed an evaluation in 1999, but I was not able to find this document. The future must tell to which degree compensation was actually implemented.

Ultimately a question remains: who will monitor projects and perform evaluations? Some provinces think that municipalities are responsible to evaluate (e.g. Zuid-Holland). Gelderland and Noord-Brabant supervise the monitoring and evaluations themselves. But for instance Noord-Brabant does indicate that the municipalities are responsible for the proper implementation of compensation projects, and the guarantee that this is done conform plans/agreements. The responsibility for monitoring and evaluating compensation projects can differ between the province or municipalities.

5.1.3 Influences of the new Wro

It appeared that quite some obscurities surround the implementation of the new Wro. All the provinces have worked out details on the implementation of the new Wro, but still it remains to be seen how the Wro will exactly be shaped. The new Wro includes new instruments, and this has consequences for how spatial planning is arranged. For instance more is handed over to municipalities, since the municipalities do not need the approval for spatial projects from provinces anymore. On the other hand preliminary consultations with the province will increase, and provinces can intervene when necessary. All the provinces indicated that they did not know exactly which effects the new Wro will have, in relation to nature compensation. All the provinces worked out the new Wro, although not much information can be found on how Zuid-Holland

implemented the new Wro. The other provinces have documents on this topic, or they have published articles on their websites. Some already had guidelines for the ordinance (Gelderland, Noord-Brabant, Utrecht, Zeeland) and others did not. Generally nature protection regimes, like for instance the NEN, BHD, Nb-wet etc, will be recorded in such an ordinance. This means that the compensation principle is also included, since it is connected to these policies. Friesland looked into this matter, and indicated on their website that a provincial ordinance does not fit in the administrative culture of Friesland. The respondent of Friesland indicated that through an ordinance less custom made measures can be provided, and this decreases the spatial quality. Provincial ordinances can always be consulted when necessary. During the interviews I received the feeling that provinces were waiting to see what the state desired from them. For instance the respondent of Utrecht indicated that they did not want to do work for nothing, when it possibly does not meet the desires of the central state. Or provinces were perhaps waiting to see how other provinces would implement the new Wro. In Utrecht the implementation of the new Wro already influenced nature compensation. Setting up a monitoring system, regarding compensation, received a lower priority because the new Wro needed to be implemented in 2008. There was a lack of time. Perhaps this is also the case with other provinces? Provinces did put effort into the implementation of the new Wro. For instance Noord-Brabant has implemented a timeline connected to the implementation of the new Wro, and the provincial website shows the progress that's being made. In the end the question remains if provinces will suffice the requirements set through the new Wro. The website from Friesland already noted that the regional plan fits as the spatial structure vision (in Dutch: structuurvisie) within the new Wro, according to an inspector from the Ministry of Housing, Spatial Planning and the Environment, who confirmed that incompatibilities are not shown between the new Wro and the regional plan. The future must tell how the other provinces will implement the new Wro, and which consequences this has for compensation policy.

5.1.4 Summary

To which degree did subsequent decision-making take place when implementing the Nota Ruimte and the 'EHS-spelregels' into provincial compensation policy? These national guidelines were clearly covered in the provincial policy documents. Provinces defiantly showed differences in the way they implemented compensation, and to which extent. But the main idea behind compensation and most of the connected concepts were registered by all the provinces. Appendix IV shows detailed descriptions on how provinces sufficed certain criteria that were connected to plan conformity. Next a final comparison on plan conformity between the six provinces will be discussed, and also in relation to the theoretical framework.

Firstly how and to which extent were policy statements from the initial plan (national guidelines) implemented by the provinces? Kuindersma states that **formal conformity** (literally incorporating policy statements) and **tangible conformity** (tendency of the initial plan is incorporated) can be recognized (Kuindersma *et al.*, 1999:12). As mentioned previously tangible conformity existed during the implementation of compensation by the provinces. The main idea behind the concepts, concerning nature compensation, was registered in policy documents. Formal conformity was also detected. Often the 'no, unless' rule is literally copied for the larger part or elements of it. Just as components of certain types of compensation are largely taken from national guidelines. Compensation is always adjusted to the larger framework behind the regional plans. This sometimes causes for certain elements to be assigned differently, but usually the main idea behind it is the same. Some provinces prefer to implement it in an abstract manner. Zeeland prefers a compact theoretical background (all the rules of the 'EHS-

spelregels' do not make it easier) and wants to work in a more practical way. While other provinces have implemented the compensation principle in a (very) detailed way, like Gelderland, Noord-Brabant, Utrecht. For instance a scheme, with an action plan can be very clarifying and shows details. Gelderland, Noord-Brabant, Utrecht and Zuid-Holland have a scheme in place. Finally the respondent of Zeeland indicated that they were quite content with the compensation policy, since they have developed it themselves. While other provinces indicate that elaborations are needed (e.g. Friesland noted to need elaborations on several topics and Utrecht wants to design a registration system). During the interview with Gelderland it appeared they were putting much effort in preventing the compensation policy to become only a policy on paper (accent on monitoring and evaluations). While Noord-Brabant is quite busy in working on the last part of the compensation process.

When focusing on **subsequent decision-making** of the Nota Ruimte (general information) and the 'EHS-spelregels' (extensive elaboration) it can be noticed that these frameworks have been created quite recently. The Nota Ruimte exists since 2006 and the 'EHS-spelregels' origins from 2007. This has not given the provinces much time to fully implement all details given in these frameworks. On the other hand certain provinces implemented new regional plans quite recently (e.g. Friesland in 2007 and Zeeland in 2006). The regional plans of the other provinces originated from before 2006. Certain provinces indicated they sufficed the Nota Ruimte (i.e. Friesland, Utrecht, Zeeland). During this research the concepts of the Nota Ruimte were also found back with the other provinces. A different outcome was reached, when viewing how the 'EHS-spelregels' was incorporated. This document covers an extensive elaboration on everything surrounding the concept: nature compensation. Most provinces have not yet implemented all the elements from the 'EHS-spelregels'. Generally the last part of the compensation process, including monitoring and evaluations, were not traced back in policy documents (e.g. Friesland, Utrecht, Zeeland, Zuid-Holland). Besides the compensation principle of Zuid-Holland still originates from 1997. The 'EHS-spelregels' includes several additional guidelines that have been designed since 1997. The 'EHS-spelregels' notes that in 2008/2009 the state and provinces will consult municipalities to see which results are booked (LNV, 2007:41). This should give a closer insight on how the 'EHS-spelregels' is being applied. When a regional plan is quite new it can be the case that the province is not planning to change it, while adjustments are necessary to make a more unambiguous compensation policy. The respondent of Utrecht even indicated that the 'EHS-spelregels' are quite late. This is true since all the Dutch provinces were given the freedom to implement compensation themselves since 1995, which resulted in differences of compensation policies. In the end the 'EHS-spelregels' gives an overview of how compensation can be implemented, which can be very clarifying. The next step is to actually study how municipalities (on a local level) implement compensation policy, and which results are booked in practice.

Other policies exist, next to the Nota Ruimte and the 'EHS-spelregels', which have influences on the implementation of compensation. As mentioned previously the implementation of the new Wro brings along many new instruments and changes in subsequent decision-making. All the provinces indicated that it was not sure yet which effects the new Wro would have on nature compensation. Certain provinces have published more on the new Wro than others, and Friesland and Zeeland already officially stated that they sufficed the new Wro. The future will tell how compensation remains to be implemented.

National guidelines have been incorporated, but to which degree is it **detectable during the actual decision-making**? Mastop notes that "performance of plan statements or policy statements takes place if these statements are used in subsequent decision-

making (Mastop 1991: 69, in: De Lange, 1995:31). In this research it depends on whether national guidelines are an essential part of the decision processes, in which subsequent decision-makers (province and municipalities) take place. Does national compensation policy determine the results of decisions that are made, concerning nature compensation? Compensation projects are certainly taking place, according to national guidelines in a general way. As mentioned before provinces differ quite much in their implementation of compensation, but the main idea behind for instance the 'no, unless' formula remains the same. The types of compensation differed mainly due to the extent in which they were worked out. Noord-Brabant was very detailed in working compensation out, while Zeeland noticed that so many rules were not necessary, and by formulating the main topics they want to keep it practically. Friesland was still in the early stages of implementing compensation, and kept indicating that elaborations are needed on many topics. It can be noticed that all provinces built in space to make processing of all the different cases possible. Room to make custom made measures, while still keeping the compensation policy in mind. It remains easier to process the different cases, if the compensation principle is describing the bigger picture, instead of a detailed description of guidelines and rules. This makes the role of provinces and municipalities quite important during the determining and shaping of projects, since policy is not giving all the direction. Although certain regions, especially Randstad provinces and to a lesser extent Noord-Brabant, experience the realization of compensation goals as very difficult and even impossible sometimes (Gijzen et al, 2003: 13). These cases involve great competition with other spatial functions. This has been processed in the compensation policies of Zuid-Holland and Utrecht. As recapitulation it appears that provinces also differ and resemble in this case.

During this subsection we have discussed the provincial compensation policy. Two provinces indicated that there is ***no such thing as a compensation policy***. Zuid-Holland mentioned that compensation does not have it's own track, but is always connected to other policies (NEN, Nb-wet, Forest policy etc.). As the regional plan of Zuid-Holland states "compensation (measures) are only used as an addition and as strengthening of the regular policy, focused on nature and landscapes" (Zuid-Holland, 1997:3). While Utrecht indicated that compensation is part of a bigger framework (concerning the 'no, unless' rule). Because compensation is connected to other policies does not exclude compensation from being a policy itself. Nature compensation involves several elements, including the 'no, unless' rule, mitigation and compensation, and also the policies it's connected to. This whole framework is considered a policy, which was reason for this research.

5.2 Conformity of behavior

In subsection 5.1 the plan conformity is described. By studying plan conformity insights were gained on how the initial national guidelines, concerning nature compensation, were processed into the provincial policy frameworks. Compensation is registered in policy documents, but the question remains how actors operate in these provincial compensation policies? Has a change in behavior occurred, and if there is a change in behavior than what has caused this change? Two points in time need to be assigned, when studying a possible change in behavior. It is not really possible to compare behavior to earlier studies, since conformity of behavior, connected to nature compensation, has elements that presumably have not been researched yet. In this case the provincial experiences, through the years, have been used to look into conformity of behavior. Their experiences are used to study if/how behavior changed while compensation policy evolved. The theoretical framework defines to which topics attention is paid while studying conformity of behavior. This includes: the role of involved

parties in chapter 5.2.1, experiences and appliance of compensation in chapter 5.2.2, guarantee of compensation fulfillment in chapter 5.2.3, and the usability degree of compensation policy in chapter 5.2.4. Afterwards a short recapitulation is given in chapter 5.2.5

5.2.1 Involvement of key actors and their relations

All the provinces indicated that the key actors in the compensation process mainly involve: the state, the province itself, municipalities and the initiative takers. As the respondent of Utrecht mentioned:

“When focusing only on compensation it is quite simple, including the persons who decide on it like municipalities and the province. Then you have the initiative taker who is prepared to fulfill compensation. When a new location needs to be arranged a planning procedure is connected to it. At that point all kinds of other parties can start to interfere in a project. In that way anyone can get involved in the compensation procedure.”

Other provinces also stated that anyone can get involved. Provinces gave examples of involved parties, which can be found per province in Appendix IV. Which parties are involved also depends on the stage of the compensation process. For instance Nature Monuments and State Forestry Service frequently manage compensation areas after compensation is fulfilled, thus they are involved in later stages of the compensation process. When coming back to the key actors (i.e. province, municipalities, initiative taker) it became visible that the municipalities are mainly in contact with the initiative takers. The provinces are usually not in direct contact with the initiative taker. Although several provinces indicated that they think along with the involved parties. Zuid-Holland also mentioned that they connect parties, when the initiative taker / municipalities cannot find suitable locations to compensate. Other provinces noted that they have a role in connecting involved parties as well. Next to this it seems that provinces and municipalities can be in close contact. For instance Friesland and Utrecht indicated that municipalities have several questions for the province, while Noord-Brabant notes municipalities occasionally have questions. But information distribution to municipalities and initiative takers is crucial. The province plays a role in the beginning of the compensation process by offering information and guidance in the early stages of the compensation process to prevent compensation coming around the corner in the final stages. Finally there is a difference between projects, concerning how much information and guidance is necessary during the compensation procedure, which sets the relationships. Further relations between key actors differ per case (i.e. varying from individual projects to large scale projects in which the state is involved). These differences in projects can influence which relations exist, and the involvement connected to these relations. Perhaps more parties/relations are present in the large high profile projects than when dealing with a project of an individual private owner. The role of key parties differ per project, but a general overview was just sketched out. In first instance the key actors generally include the: state, provinces, municipalities, and initiative takers. These parties are all involved in the compensation process, and all have a certain role. Later on in the compensation process other parties can possibly get involved.

5.2.2 Experiences and appliance of compensation

An description of experiences with nature compensation and the appliance of it will be discussed. The following questions will be covered next: if parties agree with the compensation policy and if they act accordingly?

Do parties agree on the compensation policy?

Various experiences were shared during the interviews with the provinces. A brief overview is made about a couple of different experiences. Agreeing on the compensation policy really seemed to depend on which project or involved parties you looked into, which is quite obvious. For instance the respondent of Gelderland indicated that the province supports the compensation policy but the support can sometimes be less with lower authorities and civilians. As the respondent of Noord-Brabant mentioned:

“When parties are confronted with this policy it is not experienced as pleasant. It costs money and long procedures are connected to it. It is frequently indicated that these procedures are experienced as too long. They want to go on. Financially it is also considered as an issue, which is logical of course.”

While Utrecht notices strains that arise if compensation is underestimated (difference in value of land is large between agriculture and nature) or when involved parties refuse to perform research (concerning the ‘no, unless’ rule or connected to the compensation). In the end limitations always bring along tensions, which influences the degree of agreement on the compensation policy. Besides Zuid-Holland stated:

“Resistance is frequently noticed with initiative takers. It is often clear for the initiative taker that compensation needs to be accomplished because otherwise the members of the Provincial Executive will not approve the plan. Thus in order to get your plan through parties need to follow the compensation policy. There is no getting around this obligation, but the extent is discussable. Due to the negotiation model it is possible to differ in opinion, and negotiate with each other. In the end involved parties need to come to an agreement together. Contact in early stages can frequently trigger the initiative taker to review, and alter the project in order to lessen the compensation costs. Together ways are found to decrease costs.”

Thus finally initiative takers have to agree on the compensation policy if they want to proceed with their plans, but the extent of compensation seems to be discussable. As the respondent of Zeeland indicated:

“A smart initiative taker will not resist the compensation duties, but arranges it as quickly as possible. They discover this quite quickly. Compensation is inevitable. In the past people could try to avoid compensation, but that is not smart. Compensation can better be arranged, otherwise everything goes wrong in the end of the procedure. The Council of State will need to know how compensation is arranged. If this is not arranged than they can start over again, which will cost years of time (and costs will rise too). For instance the Maasvlakte and the container terminals involve billions, and it can make a difference of millions if the procedure goes well.”

It is very important to properly arrange compensation duties, in order to prevent delays in the later stages of the compensation procedures. Certain parties make smart use of this and accept the compensation policy, while trying to accomplish compensation as fast as possible. Noord-Brabant stated that the compensation policy is accepted generally. Additionally Utrecht mentioned that “environmental organizations and local environmental groups indicated they are pleased with the fact that this policy forces municipalities and initiative takers to make proper plans (in which no damage exists and alternatives are researched)”. Ultimately it seems that the compensation policy is accepted. Parties have no other choice then agreeing on the compensation policy, because otherwise interventions cannot proceed. If initiative takers are smart then they will not fight it, but work with it as quickly as possible to prevent tedious surprises in the last stages of the compensation process. The working method of initiative takers will always differ, and depends on the degree of acceptance. It is a fact that a large range of various parties exists, who come into contact with nature compensation. This will always result in differences in acceptance.

Finally the respondent of Utrecht stated:

“It is not simply a matter of agreeing on the compensation policy. Numerous parties do not look at it in such a general way. They often try to determine how it fits with their company, in their environment, or within the municipality.”

Thus parties do not really look at the policy in first instance, but observe how it fits their own situation. Naturally initiative takers try to find out how the compensation policy is of influence on their own project, in order to find out how to proceed. To finally conclude that involved parties generally agree on the compensation policy. It is better to work with the policy instead of resisting it, because otherwise certain plans cannot proceed.

Do parties act according to the compensation policy?

The interviews could be used to gain insight of how parties act according to the compensation policy. The provinces indicate people are aware that compensation policy needs to be sufficed. Although not all the provinces could indicate how compensation projects were applied in practice. Monitoring data and evaluations are very useful to find out if parties act according to the compensation policy, and if projects are properly executed in the field. Unfortunately only Noord-Brabant and Gelderland published evaluation reports, and have a registration/monitoring system in place. It appeared from previous studies (e.g. VROM-Inspection, Rekenkamer) that not all projects were embedded in spatial plans, while policy documents require this. It also appeared that several compensation projects were partially executed or not at all. From this it appears parties do not always act accordingly to the compensation policy. As the respondent of Gelderland mentioned:

“In the past compensation policy looked good on paper, but the realization of compensation in the field was often not sufficiently applied. In Gelderland some municipalities/civilians only act when they are reminded of compensation duties, while others have great problems in finding suitable ways to compensate and creating surplus value with it.”

The respondent of Gelderland indicated that they are still after those cases, so that these unfinished compensation duties will finally be implemented. Thus involved parties are forced to act according to the compensation policy. Besides the respondent of Noord-Brabant stated:

“It’s an effort for municipalities to suffice the policy as well, but they do want to suffice it. This also has to do with the available time, manpower and the filling in of forms. The province can imagine this could be difficult. It frequently does not go as it supposed to yet.”

So it appears that municipalities in the Netherlands sometimes lack resources to sufficiently implement nature compensation. Municipalities do see a range of different compensation projects pass by. Several provinces indicated that large scale projects frequently go along better than the smaller projects. It is possible for larger projects to have more resources available, or to have gained experiences with former compensation projects (e.g. companies, governmental authorities). Individual projects can possibly involve people that are in touch with nature compensation for the first time (e.g. private owners). The availability of resources, and previous gained knowledge on the rules of the game, can influence the appliance of compensation policy.

Compensation cannot be eluded, but helpful/creative solutions can occur when dealing with nature compensation. It is possible to make practical use of the compensation policy. For instance, Gelderland is currently looking into running pilots where the province acts as a compensationbank, because then the province can directly act on a demand. This could shorten the period of the compensation procedure, and the

compensation could be fulfilled more easily. More provinces have shown interest in this, while others already think financial compensation is buying of compensation duties (how would the services of a compensationbank be seen in that case). Gelderland is also looking into the option of using compensation as a financial source, by taking over compensation duties one can also increase the value of a property. Apparently there are ways to make compensation more appealing/profitable.

Finally it appears that compensation policy is generally followed in order to get plans through. In the past not all compensation projects were embedded in spatial plans, and then it could be very difficult to demand the execution of compensation. Nowadays all the provinces acknowledge the necessity of correctly documenting agreements. The fulfillment of compensation can be forced when necessary, although it still seems that the realization of compensation projects in the field does not always take place. This is the last part of the compensation process, which should also be sufficed. In this perspective the involved parties do not always act according to the compensation policy, because frequently compensation duties are not executed to the full extent, or sometimes not at all. This brings us to a difficulty since only two provinces have verified the progress of certain compensation projects in the field. All the provinces indicated that the progress of compensation projects isn't systematically verified in the field yet. While such information could be very valuable during the research of how parties act according to the policy. In the end the respondent of Utrecht mentioned that the compensation policy is quite new, and the development duration of compensation can differ from 5-100 years, which is a longer period than that has passed yet. This also makes it difficult to assess if involved parties act according to compensation policy. It remains to be seen how ongoing compensation projects evolve in the future.

5.2.3 Guarantee of compensation fulfillment

This section will contain information on which instruments are available to guarantee compensation fulfillment and if these instruments are being applied.

Sufficient amount of instruments available to guarantee compensation fulfillment

Instruments to guarantee compensation fulfillment can involve: embedding it in spatial plans, private law agreement, bank warranty, final realization date, penalties. Not all the provinces make use of bank warranties or penalties (see plan conformity). According to an article of Woldendorp "the instruments to force the compliance of the necessary compensation measures are often absent (Woldendorp, 2008: 93). This article also noted that "the embedding of compensation measures in spatial planning often leaves to be desired in practice (Woldendorp, 2008: 95)." These are ways to guarantee compensation fulfillment, but apparently it is not always applied. Related to this the respondent of Noord-Brabant noted:

"An agreement and penalty clause can guarantee compensation fulfillment, but it remains the question if municipalities have enough manpower, money, etc. to properly make use of it. The respondent has the idea that municipalities frequently lack this. Thus the task of municipalities to guarantee compensation can be a problem, certainly concerning nature compensation. Municipalities set priorities of course."

Another article of De Lange indicated the following about municipalities:

"The quality of civil servants at lower authorities is not up to standards, according to Commissie-Mans. The knowledge of lower authorities does not lack, but the capacity." (Peter de Lange, 2008)

This confirms the ideas of Noord-Brabant. While Utrecht indicates the opposite with indicating "yes there are enough instruments in the principle of course, but it always remains the question if they are prepared to use them". It was mentioned that there are certain instruments, which can be applied in urgent matters (e.g. disownment, or others instruments regarding compensation). But using these instruments are already a big step to take (which does not occur easily).

The accomplishment of compensation projects is often out of the hands of the provinces, which means it is out of sight. As the policy document 'Beleidsregel Natuurcompensatie' of Noord-Brabant indicated "the province assumes municipalities take on the guarantee of compensation fulfilment of decisions registered in agreements, since the development plan and the compensation plan are formulated by and/or falls under the responsibility of the management of a municipality." Thus municipalities are responsible for securing compensation measures. When coming back to the actual compensator it appears from the article of Woldendorp that:

"The initiative taker frequently has no power on the fulfillment of compensation duties, because they do not have the control on a compensation ground. According to the jurisprudence it is not possible to connect requirements to an authorization, when the license-holder has no power in the compliance. The initiative taker is dependant on the cooperation of others. They are also dependent on the cooperation of the government, because the compensation measures need to be embedded in spatial planning." (Woldendorp, 2008: 93)

But what happens when compensation duties are not entirely fulfilled, or when it does not take place in time? Noord-Brabant stated:

"Municipalities do not step in when compensation is not fulfilled, at least they have never heard of it. Much is still unclear in the end of the track, concerning the compensation process".

During this research it never became clear if municipalities actually take over compensation duties (use bank warranty, hand out penalties). No examples of this were given. It is remarkable that authorities do not step in when compensation is not fulfilled. On the other hand how could provinces or municipalities know, when verification of the progress/realization of compensation duties is not systematically applied.

Finally these instruments to guarantee compensation fulfillment can be influenced by the implementation of the new Wro. As Woldendorp states "the province could loose their grip on the compliance of compensation duties, when the new Wro sets in (e.g. approval not required anymore) (Woldendorp, 2008: 97). Additionally Utrecht notes that "when the new Wro sets in a number of instruments are gained, which also could give authority. If this will be used is another thing, but it is possible." This is also the case with the current implemented instruments, concerning nature compensation. Utrecht has the idea that:

"The new Wro makes it less unambiguous. They will lean on the municipalities quite much. The big question that arises is if they will be capable to arrange everything sufficiently on that level, with yet relatively limited capabilities and knowledge. The respondent of Utrecht has his concerns about how this will go after the first of July 2008 (when the new Wro sets in) and notes that when the ordinance is in place it should become somewhat sharper, but the involved parties still need to understand what the policy involves."

As de Lange advises: to provide a better education to civil servants and expand their capacities (Peter de Lange, 2008). To conclude the responsibility of securing the compliance of compensation duties largely falls under the municipalities. On the other hand provinces should have a registration/monitoring system that could indicate when compensation projects are not completed entirely or when it is not in time. Although such

systems receive their input data from municipalities/initiative takers. Cooperation between these parties, on the topics that have just been mentioned, is needed to improve the compliance of compensation duties.

Are these instruments applied to guarantee compensation?

The appliance of instruments to guarantee compensation fulfillment is already mentioned above, when the instruments were introduced. From the policy documents it appears that enough instruments are present to guarantee compensation, but in practice these instruments are not always used. During this research it became clear that in the past the realization of compensation in the field was insufficiently applied. Perhaps because the guarantee of compensation fulfillment was insufficiently forced. On the other hand Friesland for instance indicated they rather convince initiative takers and reach consensus, than use force. As mentioned before municipalities do not step in when compensation is not fulfilled, at least it is still unknown if this occurs. Besides Woldendorp questions if this is easily to realize in practice (Woldendorp, 2008: 94). From previous research (VROM-Inspection, Rekenkamer) it appeared that compensation projects are not even embedded in spatial planning sometimes. As Gelderland observed:

“Giving an area a certain function, like nature, valuable landscape, agriculture etc., does not mean that this area is managed as that function (goal type) implies. By means of legal documents connected to certain areas it can be forced to be managed in a suitable manner related to the goal type of such an area.”

But it remains a fact that regularly agreements are not met. Woldendorp describes that:

“Because the securing of compensation fulfillment does not or rarely take place, it's a stimulation for initiative takers to not apply compensation measures, when the fulfillment of compensation duties are not maintained/secured. And if the fulfillment of compensation duties still needs to be implemented when a project is executed, than it is often not high on the (administrative and political) agenda any more.” (Woldendorp, 2008: 97)

Although provinces do indicate that they are making sure the agreements are still being met (e.g. Gelderland). During this research it became very clear that this last part of the compensation process, including monitoring/evaluating/verifying/forcing of compensation duties, still needs to be worked out more extensively. Some provinces are more ahead than others, but all the provinces can still improve at least the last quarter of the compensation procedure. For instance the representative of Noord-Brabant indicated that “they miss the organizational possibilities to find out if compensation is actually implemented as it was meant/as it was agreed on, and that the last part of the compensation process still needs to be worked on.” Yet again the future developments, in securing fulfilment of compensation duties, need to be awaited. Just like the use of new instruments, concerning the new Wro.

5.2.4 Usability degree

Previously Kuindersma *et al.* explained the usability degree and indicated “the chance that a policy is implemented decreases when the users tend to value this policy as less usable, and when they are not aware of the content (Kuindersma *et al.*, 1999:14). Attention will be paid to the existing knowledge about the compensation policy, and to which extent it is being applied. What triggers behavior towards compensation policy to change, positively or negatively, when applying the usability degree?

To which extent is compensation policy known by the intended users?

Again very different experiences were shared about this topic by the provinces. It varies from Utrecht indicating:

“The ‘no, unless’ formula is still a quite complicated piece of legislation. Nearly no municipality is good in it, and it has already been about three years. They do not really understand how it goes and often fall back on the respondent to gain insight on how it should exactly be addressed by them.”

Additionally the respondent of Zeeland detected:

“Smaller initiative takers can have difficulties with the compensation policy/procedures. Sometimes private owners just want to solve these problems with paying money. Also municipalities occasionally have difficulties with the appliance of compensation, but this actually is not the case anymore.”

Gelderland noticed that extra information can be necessary to make the compensation procedure clear. Thus information supply and informing involved parties is desirable. For instance at municipalities the composition of people working there often changes. Often spatial planners have to learn more about nature compensation, since they are not familiar with it, when being new to the topic. The provincial representative of Utrecht noted the importance of “getting informed from the start. But some do not want to know and keep it at a distance.” While Friesland observed that initiative takers just do not think of compensation immediately. Thus the extent of knowledge on compensation policy depends if they are aware of the concept, and on how approachable involved parties are. If involved parties are not willing to work along with the track concerning the ‘no, unless’ rule and compensation, then they could possibly have less knowledge of the compensation policy (since they are not open to being informed). According to Utrecht:

“It all became sharper from 2004. But you can still detect parties, which are not really acquainted with this matter, to experience it as tough. There are certainly some municipalities who have great difficulties with it.”

During this research it appeared that questions will arise, even when the compensation policy is known. It remains difficult to assess how this policy should be released on your own project. Limits of what is possible are often sought. Woldendorp gave examples in which it appears that what compensation duties exactly involve, frequently cannot be indicated accurately (e.g. disturbance, disintegration, dehydration, pollution etc). This article states “such knowledge gaps give motive for discussion, which can lead to delay and form a risk in the juridical procedures (Woldendorp, 2008: 91).” Sometimes projects do not fit within the policy framework (even professional counsellors have questions if this occurs). Nature compensation frequently does not include clear-cut solutions, but custom made measures are often required. Such measures make the processing of compensation duties more burdensome, since it goes many ways. On the other hand the compensation policies do offer guidelines, which should be taken into account during the compensation process.

The knowledge of the compensation policy of course depends on which party is approached. People who have more experiences with it, will probably have more knowledge on the concept ‘nature compensation’. As Zeeland noted:

“All municipalities understand this very well. Although smaller projects could possibly be unaware of it. The municipalities will need to point out then that spatial planning would be difficult, because it is in a nature area in which compensation is in place. But before the compensation principle comes into force, something else needs to be answered (no, unless formula), which is frequently overlooked/skipped. They think, now we will compensate then.”

Just as Noord-Brabant mentioned that people sometimes walk in and say they have a plan, for which they need to compensate. But it does not work like this. First the 'no, unless' rule needs to be applied, before compensation even comes into sight. On the other hand Noord-Brabant and Zeeland mentioned compensation policy is often accepted, and nowadays everyone knows about compensation. Existing nature cannot be destructed without having to compensate. The big players frequently understand it very well. As Zeeland said "the initiative takers often do not like the fact that compensation is needed, but they understand it and the smart ones also extensively show how well they have arranged their compensation duties." This gives a different look into the appliance and knowledge of nature compensation.

Thus the actual knowledge on compensation differs per project and probably even per individual within municipalities, companies, organizations, private owners etc. Although the provincial policy documents can be very clarifying (i.e. with schemes and sample forms) it apparently does not always lead to involved parties being aware of the content. This criterion involves two extremes. It can be detected that when parties are reluctant to act according to the compensation policy, they probably are not so open to be informed, which increases the duration of compensation processes, since parties might not have to expertise to deal with it. Others just do not know how it works, or are new to the concept. The other extreme includes parties that know how it works, and it appeared that creative solutions can occur then. Ultimately questions can always arise during the compensation process, despite of knowledge on the compensation policy (varying from provinces, municipalities, counsellors, scientists to the actual initiative takers). The policy documents are taken to structure the compensation process, but together they have to agree on how it will proceed.

To which extent is compensation policy applied by the intended users?

This criterion is very difficult to assess when compensation projects are not always verified in the field. In order to examine if compensation duties are applied according to the compensation policy (i.e. according to the agreement/plans) it needs to be compared to the actual results in the field. All the provinces indicated that more checks in the field should take place. This is not always possible (missing resources, manpower, time, etc) or is it given a lower priority? Another difficulty involves the quite recent implementation of compensation policy. The duration of developing nature can vary from 5 to over the 100 years. Sometimes this makes it impossible to say something on the extent to which compensation policy is applied by the intended users.

The appliance of the compensation policy can depend on the knowledge of the intended users. If parties are not aware, or lack the knowledge on the policy, it will affect the appliance of compensation policy. As mentioned before the provinces notice that people still need to be informed. Zuid-Holland notes that the initiative takers perhaps are not aware of every detail, concerning the compensation policy, but the province arranges that the necessary knowledge is provided in a early stage of the compensation process. The other provinces also emphasized this. But it finally comes down to how this information is used in practice, and how the compensation is applied. Gelderland and Noord-Brabant can say the most on this topic, because these provinces have evaluation reports and joined studies in which projects were verified in the field. Gelderland and Noord-Brabant both notice that compensation duties were often not or insufficiently fulfilled in the past. The respondent of Gelderland checks that previous agreements are still being met. As mentioned before there are instruments available to secure the compliance of compensation duties. However Noord-Brabant indicated these instruments are not used by municipalities. How well the compensation policy is applied, and which results are booked in the field should become clear from future evaluations (of

all the provinces). The realization in the field is an important element to look into since in the past this part was often overlooked.

5.2.5 Summary

The question remains if compensation policy contributes to a change in behavior. Which behavior is to be considered as in accordance with the provincial policy decisions, and which behavior is not in accordance to those decisions? It appears that provinces can differ quite much in their working method, concerning nature compensation. Certain provinces seem to be closer to the initiative taker than others (e.g. provinces which help finding suitable ground and bringing parties into contact). On the other hand all the provinces have the same main idea to come to agreements together. Friesland and Zuid-Holland even distinctly mentioned this in their policy documents. As the provincial website of Friesland notes that the province aims to book consensus and results through good consultation, with a shared basic assumption that involves the strengthening of spatial quality in Friesland (Friesland, 2008). While in Zuid-Holland an negotiation model has been established, and their compensation principle notes:

“Previous experiences of Zuid-Holland have taught that regulations to determine the nature and the extent of compensation is barely possible. It can also obstruct the possibility to adapt to specific circumstances. The province has chosen to go into further consultation and negotiations per situation to determine the most desirable shape of compensation and the execution of it.”

During this research it appears that collaborations on compensation conditions are sometimes perhaps more valued than detailed guidelines from the regional plan. When consultations take place a consensus is required in order to be able to create custom made measures, and the province tries to think along in this process. Of course here the large differences between projects sets in yet again. During the interview with Zeeland it became quite obvious that there are differences between large projects (with for instance a budget of 80 million gulden in the Westerschelde project) and smaller projects (like individual initiative takers or small businesses). Larger projects probably have more resources to fulfil compensation, and are frequently already familiar with the compensation policy due to earlier experiences. Smaller and individual projects could possibly have less experience with applying compensation policy, and through this need more guidance from authorized authorities. Information supply remains essential, for both municipalities and initiative takers. But creative solutions can arise when parties know the compensation policy. For instance as Friesland shows in an example, including entrepreneurs that would rather not compensate and entrepreneurs that acknowledge the values which can be added to an area through compensation. Finally all the initiative takers will look for the boundaries, what is accepted as compensation and what is not accepted. As conclusion it comes down to the separate projects, which needs to be viewed in order to examine the change in behaviour.

Thus the processing of national guidelines differs between provinces, which could lead to differences in appliance of compensation (which leads to differences in behavior). Some provinces have detailed compensation policies while others prefer short and abstract compensation policies, or it is indicated compensation still needs elaborations. In the end all the provinces have the possibility to apply custom made compensation measures, because the compensation policy documents leave space open to process the large range of different projects. This is also a reason why the provinces will likely show behavior in accordance of compensation policy, because it is registered ‘loosely’. Of course exceptions exist, which will be explained next.

Behavior which was not according to the compensation policy mainly focuses on the last part of the compensation process, in which a lot can still be worked out. All the provinces have implemented instruments to guarantee compensation fulfillment. These exist of embedding projects in spatial planning and private law agreements. Provinces differ in the implementation of bank warranties, realization dates and penalties. It appeared that projects are not always embedded in spatial plans, and private law agreements are sometimes missing too. Not to speak of bank warranties and penalties. During this research it became clear that these instruments are not applied by municipalities, at least it was never heard of. How should the fulfillment of compensation duties be secured when the instruments are not used? Is compensation policy a paper policy or is it part of daily policy practices? It seems that the juridical requirements connected to compensation duties does not guarantee the fulfillment of compensation. Who will force the fulfillment of compensation duties? So a lot is registered in plans, but the execution of it often deviates in practice. The registration and monitoring of projects, and evaluating the whole process, should provide more insights. Gelderland and Noord-Brabant have these systems in place. But the main problem is the verification of projects in the field. Do plans correspond to the realization in the fields? All the provinces can work on this. For instance Noord-Brabant indicated in their compensation policy that projects are randomly verified in the field, but it only occurred when the province collaborated on certain studies. Anyway who is responsible to verify projects in the field. Are municipalities responsible, since they are usually responsible for guaranteeing the proper implementation of compensation duties. Or are provinces responsible, because they should have the general overview of all the projects (i.e. they merge data into monitoring and evaluation reports). Ultimately it seems that behavior is not always according to the compensation policy in the last part of the compensation process.

In the end behavior changes/adjusts due to evolving compensation policy. The developments, concerning compensation policy, influences the behavior connected to the implementation practices. Other influences on the compensation policy, and by this on the behavior connected to it, should also be kept in mind. For instance the implementation of new policies can affect the compensation policy. Which influences will the new Wro and its new instruments have on compensation policy? Another example involves public and political support for compensation projects, which can be of importance during the implementation of compensation. For instance in the Westerschelde project strong resistance against the removal of polders existed. This led to an discussion in the parliament, and as a consequence the political support for the removal of polders stayed out. On 17-04-2009 the parliament decided outer dike nature recovery is preferred to the removal of polders, and the Hedwigepolder will not be removed. The European Commission will give the final answer to this situation. This high profile project shows how much influence the public and the politics have. Compensation projects can be cancelled, if there is no social and/or political support. The province had worked out which compensation should take place in the Westerschelde case, but due to resistance other options will need to be viewed. This also involves a change in behavior by moving in a different direction with the case. These are just two examples of influences on the compensation policy and its implementation practices, but many more could be detected. Thus the evolving compensation policy is rather connected to the changes in behavior.

5.3 Final conformity

Final conformity includes the definitive conformity of the physical reality to the intentions of the initial plan (De Lange, 1995:58). During this research the correspondence between the compensation plans, and the actual realization of compensation duties in

the field was studied by applying the effectiveness criteria of Sabatier & Mazmanian. The following elements can be found back in these criteria:

- Plan conformity: focused on subsequent decision-making (i.e. processing national guidelines into provincial compensation policy).
- Conformity of behavior: focused on discovering a change in behavior of involved parties, concerning implementation practices of nature compensation policy;
- Context: involves the influences which can affect implementation practices of compensation policy.

Ultimately final conformity is focused on answering the following question: 'Have the initial plans, varying from national guidelines (Nota Ruimte, EHS-spelregels) to provincial compensation policy to the actual agreements/compensation plans, been followed up by sufficing it during the realization of compensation duties? It becomes difficult to make conclusions on this topic, because it appeared during the research of the other levels of conformity that monitoring data and evaluations are often not available. Verification of the realization of compensation plans/agreements in the field does not frequently take place either (in all the provinces). Thus the actual situation in the field is often not known, and exactly such information is needed to study final conformity. Another difficulty is that only a small portion of compensation projects is finished now. While the majority exists of ongoing compensation projects. One reason, among others, can be that the duration for developments of compensation can vary from five to over a hundred years, and the compensation policy only exists since 1995. This complicates the study on final conformity and that has been the reason to add the effectivity criteria of Sabatier and Mazmanian (see chapter 3.2.3 for more information on this decision to add effectivity criteria). By looking into these criteria more insights can be gained on how compensation policy is experienced and applied in practice. Presumably more compensation projects will likely be realized with an effective compensation policy than with ineffective policies. During this research the provinces talked about several compensation projects, which were used to examine final conformity and thus the effectivity criteria. Perhaps some provinces referred to more practical cases than others, or some provinces addressed evaluation reports. All the provinces gave enough information to briefly look into the effectivity criteria. Only this is just a small section of compensation projects taking place in the provinces, and it only involved the experiences of the provinces. In order to get more insight in this matter more compensation projects should be studied on the effectivity criteria. Some criteria are also focused on other parties than the province (e.g. initiative takers, interest groups, other implementing officers), and perhaps these actors should be approached in order to gain a more complete overview. Additionally the two practical cases (e.g. Municipality Nunspeet in Gelderland and DZH in Zuid-Holland), which were meant for the next chapter on 'Legitimacy', could also give a better look into how the effectivity criteria were being met. A lot of information was available on these cases and also inside knowledge, which gave the opportunity to inspect how the effectivity criteria were being applied in practice or not. The findings of these two provinces cannot be generalized, since only two cases provided extensive information. This could result in limited conclusions, because it leads to certain ideas about the sufficing of criteria of these provinces, and other practical cases could prove otherwise. It is advisable to study more compensation projects on the sufficing of the effectivity criteria to gain more insight in the implementation practices. Next final conformity will be described per effectivity criteria and a final comparative analysis is provided afterwards.

5.3.1 Criteria of effectiveness (Sabatier & Mazmanian)

During this section most examples of compensation projects will be left out in order to outline the general overview, while showing how provinces interpreted the criteria and to

which extent effectiveness criteria were met. If more detailed information is desired than Appendix IV can be consulted, which gives extensive information on final conformity per province.

1) Policy objectives are clear and consistent (Plan Conformity & Conformity of Behavior)

Generally the policy objectives are experienced as clear and consistent. Provinces indicate that involved parties cannot ignore the compensation policy. It is clear compensation duties need to be fulfilled. Sometimes it is even mentioned in policy documents that they have tried to describe compensation policy as clearly and transparent as possible. Others indicate they try to arrange it as efficient, practical and distinct as possible. It was often emphasized that this perhaps means less guarantees are tied down, but they don't want that either, because then it becomes impossible to accomplish. It needs to be simple, but in the meanwhile you also need the guarantee that it will be executed. The provinces indicate to think along with the municipalities and initiative takers. Consultations are needed to come to a good plan.

The clarity, concerning implementation of compensation, of course also depends on the civil servants who communicate it to the outside and how the management brings it. Changes in members of the Municipal or Provincial Executive should be taken into account, because not everyone has the same amount of knowledge on compensation policy, and sometimes people are new to the topic, or perhaps a shift in the politics can be of influence. Certain provinces do indicate difficulties can be experienced by municipalities and initiative takers. It is sometimes experienced as a tough piece of legislation. Certain provinces even think the biggest obstacles involve municipalities and initiative takers who do not understand it, and they are responsible for the process. The province and/or municipalities do offer information and when necessary guidance, if policy objectives are not clear. Providing information to municipalities and initiative takers is essential, but questions will always arise because compensation involves interpretations. Will certain plans be allowed or not, and can something be counted as compensation or not? There is a certain range in which compensation projects must fit and boundaries are always sought. This brings along questions, because everyone tries to look for options of how compensation can fit with their own situation and/or in their environment. Thus how policy objectives can be experienced depends on the person. Aspects to take in mind with this includes: previous gained knowledge on compensation policy, former experiences, position, network of connections etc.

Finally the provincial compensation policies seem to be clarifying, which became visible in the section on plan conformity. Some provinces have worked out more guidelines than others. Certain provinces prefer to process it in a short and abstract way, through which information is found very quickly, and it is more easily structured. While other provinces give a lot of examples that clarify the compensation process, and give directions on how to deal with the 'no, unless' formula. Additionally clarity can be provided by adding action plans/schemes, sample agreements, registration and progress forms. The 'EHS-spelregels' was also designed to create an unambiguous compensation policy, and to clarify the whole compensation process. In the end policy objectives can be experienced as more clear and consistent when the 'EHS-spelregels' are implemented, and some provinces are further with this than others. The question remains if better worked out compensation policies are really experienced as more clear and consistent. Finally it can differ per province, which working-method is the best.

2) The program is based on a valid causal theory (Plan Conformity)

It is very difficult to judge if nature compensation is based on a valid causal theory, including if no net loss of values takes place. If no net loss of values occurs can be studied by monitoring/evaluating projects, and by verifying if the realization in the field is conform the plans. Verification still does not take place frequently enough in all the provinces. A problem can be the lack in available manpower, resources, time etc. Another problem can involve the question of who is responsible for the monitoring of projects and the check-ups in the field. It can be the case that nobody keeps hold of this kind of information. Then no answers can be given on the following questions: if finally the same type of ground is compensated, or if the quantity remains to exist etc. Certain provinces only provide the preconditions for a compensation project, and when these are met the province is finished with a project. But to monitor if the quantity of nature is actually realized does not fall under the province's responsibility. Monitoring is the responsibility of the authorized authorities, and the management of these areas is the responsibility of the organization to which the area was handed over to. While other provinces guide the monitoring of compensation projects, perform evaluations and verifications. Ultimately the compensation will surely be a contribution in relation to the lost values, but you cannot put a '=' between it. Provinces do not dare to say which way the advantage goes. Verifying projects in the field can result into valuable information, concerning the causal theory of no net loss of values. The future can possibly tell if no net loss of values takes place in Dutch compensation projects.

To close with some critical notes, concerning this criterion (based on the interviews):

- It might not be possible to already know if projects result in no net loss of values, since the compensation policy is still quite recent (1995). It can take 20, 30, 40, 50, 100 years before it is possible to say something on the quality of the compensation and in relation to it's original location.
- Sometimes the original nature qualities cannot be compensated and other nature values are compensated instead, just like in the Westerschelde project. There will always be a net loss of values, because the original values will not be replaced, but other nature values will be accomplished.
- There are also many other factors on which provinces do not have a grip, like for instance air pollution, darkness and lightness, etc, which do proceed. This can be of influence during the development of a compensation project.

3) The implementation process is structured adequately (Plan Conformity)

Obviously action plans, overviews, schemes, sample agreements, registration- and progress- forms can structure the implementation process. Certain policy documents even have specific policies for certain areas and/or certain species like meadow birds. All these elements can structure the implementation process in the early phase, during the appliance of the 'no, unless' formula, and while the embedding of compensation plans in spatial plans, and during the closing of legal agreements etc. These agreements and plans can than structure the rest of the implementation process, including how and where compensation needs to be fulfilled, and when it needs to be realized (with consequences if this is not achieved). Remarkably a province mentioned that "it is not structured at all because every project is different." Different projects sometimes require to be dealt with differently (needing different structures), which is quite right sometimes.

Provinces mainly try to provide good conditions in which compensation can be shaped (e.g. financially and/or by finding suitable locations etc). After that it is up to the parties involved. The working-methods of provinces in this can differ. For instance Zuid-Holland has established a negotiation model and Friesland puts much emphasis on finding

consensus. It becomes clear that all provinces want to come to an agreement together, but certain compensation policies look more flexible than others, due to the extent in which it is elaborated. It did not become clear which effect the difference in compensation policy meant, in relation to the fulfillment of compensation projects (due to a lack of monitoring data and evaluations). Which effects the different compensation policies (and also different structures) can have will become visible when more is known about how compensation projects are realized in the field.

Still the question remains of how structured the implementation process is experienced. Generally it is experienced as structured, but this depends on the municipality/initiative taker. Everyone is searching for the margins. It never or rarely occurs that someone wants to compensate generously. Often they come back to the following considerations: 'if something is possible or not'. Next to this certain municipalities more frequently involve the province in early stages of the compensation process and in the preliminary consultation. This is probably done to avoid a lot of trouble in the final stages of the compensation process, which makes this an example of involved parties that understand the policy and try to work with it. Initiative takers can structure the implementation process by staying in good contact with the province and municipalities. Thus in the end it comes down on how municipalities and initiative takers experience the structure of compensation processes themselves. In this research the experiences of the province were mainly used. Additionally municipalities and initiative takers can be approached to study how structured the implementation process is experienced.

Another way to examine how structured the compensation process is experienced can involve how clear and consistent policy objectives are experienced. When the objectives are clear and consistent it can structure the compensation process.

4) Implementing officers are committed to the program's goals (Conformity of Behavior);

Generally the compensation policy is well known with provincial implementing officers that work with it. Implementing officers at provincial level are supportive of the compensation goals, and can generally find themselves in the compensation policy. The commitment of provincial implementing officers appeared in the interviews. For instance in Friesland the provincial implementing officers could be divided in two groups, concerning a certain compensation project about chopped trees. Certain implementing officers thought compensation was required, because the trees fall under the Forest policy. While other implementing officers disagreed, because those trees belonged to an provincial experiment, and compensation would have cost the farmer a fortune. Both groups show commitment (i.e. to the forest policy and to the supposedly required compensator). This practical case shows that the province of Friesland has a variety of implementing officers in place, through which a variety of interests are valued. The provinces try to help compensating parties and think along. Information distribution is also essential for municipalities and initiative takers, because they can still have much difficulties with the 'no, unless' formula and compensation. Additionally the provinces frequently try to bring people into contact, with the goal that it will possibly result in positive consequences for both parties.

On the other hand Utrecht mentioned that their department has a nickname of being the green interference power. The respondent of Utrecht noticed that the department continuously has to say: wait a second, the 'no, unless' rule, and this has a negative meaning connected to it (plans are always refused, unless..). Other provinces also experiences such situations. Furthermore the support at lower authorities can be less as well. Municipalities can have difficulties with applying the compensation policy during the

processing of spatial planning. Besides municipalities do not always have enough resources, manpower and time available to properly execute their duties (i.e. securing compensation fulfillment). Although occasionally there are for instance ambitious alderman who test the boundaries on what the province will find acceptable, which shows a certain degree of commitment to work with compensation policy. Apparently it was also noticed that more and more municipalities and colleagues within the province do acknowledge it's good that this policy exist. Initiative takers need to come clean and suffice the compensation policy. Several steps need to be taken and the proper documents (e.g. private law agreements, compensation plan etc.) are required, otherwise interventions will not be approved.

In the end implementing officers needed to adjust through the years, because the compensation policy evolved. Unfortunately it seems that compensation still does not have a major part in their daily operations, but implementing officers seem to be committed. Although this depends on which implementation officer of course, because yet again a lot of differences exist between implementing officers on different levels and even at the same level.

5) Interest groups and (executive & legislative) sovereigns are supportive (Conformity of Behavior)

A lot of different interest groups have been mentioned during the interviews with the provinces. Occasionally sovereigns, like for instance DLG passed by in the conversations. It became visible that certain key organisations had a role in the compensation processes, like for instance the LTO for agricultural interests, Rekron for recreational interests, and environmental organisations. The involvement of these organizations depends on the difference between large high profile projects and small individual projects. Generally more interests are connected to larger projects than to the smaller ones. For instance many interest groups were involved in the Efteling case in Noord-Brabant. This is a special case because interest groups were asked to join meetings in which the terms of the compensation project were decided on. The implementation of a plan can pass more smoothly if interest groups and sovereigns are supportive. In the Efteling case interest groups received a certain function, because they were able to participate in the negotiation process, concerning the compensation plan. The Efteling gave interest groups the power to give their consent about the plans or not. This is actually the function of the province (i.e. inspecting if the plans are conform the compensation policy). Although the province does not mind of course if more is compensated than prescribed by the compensation policy. Interest groups resisted this project in the beginning, but in the end they could participate in the shaping of plans and compensation. Interest groups can have a certain role in different compensation projects.

During the interviews it appeared that environmental groups are supportive of the compensation policy, because it forces municipalities and initiative takers to make an accurate plan. It forces them to look into how damage is prevented, and research is carried out on finding alternatives. Although not all the provinces have had that much contact with NGO's, while other provinces did. The support of interest groups depends on the projects. For instance the interest groups in the Westerschelde project were not supportive at all about the removal of polders. And frequently the LTO is not supportive, since they think it is not fair that compensation needs to be performed outside the NEN (through which agrarian grounds are lost to compensation). On the other hand the Efteling ultimately gained the support of interest groups by registering more compensation in plans than the compensation policy requires. The support of interest groups can differ quite much per project, and since a large range of organizations fall

under the category 'interest groups' it can differ even more. Thus it remains to be seen per project.

6) There are no detrimental changes in the socio economic framework conditions. (Context)

During this research the same examples were given of detrimental changes in the socio economic framework conditions, which are shortly described next:

- Disasters;
- Large infrastructural works;
- Implementation of new policies (e.g. the implementation of the Nb-wet in relation to the case of Nunspeet and the recently implemented new Wro);
 - The municipality of Nunspeet lost a lot of time due to procedures. Stricter rules were in place with the implementation of the new Nb-wet in 2005, and Nunspeet was required to compensate more. The municipality did not want to compensate more than it already did, because they thought enough was compensated. Eventually the province and municipality worked out their differences. This project in Nunspeet is connected to great social and economic interest. The delay could have caused detrimental changes;
 - In Utrecht it appeared that the implementation of the new Wro had consequences for the further implementation of nature compensation. The monitoring of compensation got a lower priority due to changes in the organization and the implementation of the new Wro. They indicated attention needs to be paid to the creation of a monitoring system, but it was often postponed due to lack of time;
- Not having social and political support;
 - In Zeeland the Westerschelde project involved strong resistance against the removal of polders. This led to an discussion in the parliament and as a consequence the political support for the removal of polders stayed out. On 17-04-2009 the parliament decided to prefer nature recovery in outer dike areas above the removal of the Hedwigepolder. The European Commission will give the final answer to this situation. This high profile project shows how much influence the public and the politics have. Compensation projects can be cancelled, if there is no social and/or political support. The province had worked out which compensation should take place in the Westerschelde case, but due to resistance other options will need to be viewed;
 - In Zuid-Holland a solution was designed to involve farmers in a project, which should mitigate the loss of ground to compensation, but it failed. There was no interest for it. This project could have been profitable for the involved farmers, but instead this solution could not proceed and farmers experienced a loss.

Usually the provinces only gave one or two examples of detrimental changes in the socio economic framework conditions. It appeared that detrimental changes in the socio economic framework conditions only occurred occasionally. The implementation of new policies and the lack of support of the public/politics have influenced the implementation practices of compensation policy quite much. However only one or two occurrences of such changes does not immediately mean this criterion is not met, because it occurs incidentally and the extent of the changes is of importance as well.

5.3.2 Summary

Finally a closing notion on the effectivity of compensation policy. The compensation framework was differently implemented by the six provinces. It remained quite difficult to

asses how the provinces sufficed the effectivity criteria, although the main idea behind the concepts usually resembles. During this research it appeared that certain criteria are more valued than others. For instance it is very important that the causal theory (no net loss of values) is sufficed. Information is necessary on how policy is applied in practice and which results are booked. From these results legitimate conclusions could be made on the performance of compensation policy. This is of interest for the future development of a policy. Thus should this criterion perhaps have more weight than other criteria? This could be interesting for subsequent studies. During this research at least interesting results were gained by applying the effectivity criteria. Insights were gained in the implementation practices of compensation. Although more research on the effectivity of compensation policy is advisable.

5.4 Final comparative analysis

This final assessment will look back on some details of the levels of conformity. The first question is to which degree does conformity exist, and if conformity can be detected at all. As Mastop notes:

“Performance of plan statements or policy statements takes place if these statements are used in subsequent decision-making, which means that these statements are an essential part of the decision processes by subsequent decision-makers (the subject of planning itself included), in the sense that the statements concerned also determine the result of the decisions that were made.” (Mastop 1991: 69, in: De Lange, 1995:31)

During this research it became clear that the national guidelines were worked out in provincial compensation policies, and some provinces sufficed these guidelines more than others. Of interest is the role of the provincial compensation policies during the decision processes by subsequent decision-makers. To which degree can the compensation policies be found back in the following proceedings: appliance of the ‘no, unless’ rule and compensation framework, embedding of plans in spatial planning, closing private law agreements and compensation plans, monitoring and evaluations. From experiences of the provinces it appears that the ‘no, unless’ formula is applied, but from previous studies it appeared that plans are not always embedded in spatial planning in the past. Although this is often required in policy documents. Private law agreements and compensation plans are also mentioned in policy documents. But not much can be said about how these plans are realized in the field. Only Gelderland and Noord-Brabant have registration and monitoring systems in place. They also have verified if plans are realized in the field, which was published in evaluation reports. It appeared that several projects have not been fulfilled yet or only partially. There are instruments to guarantee compensation fulfillment, but these have not been applied yet by the municipalities. How should compensation duties be secured then? In first instance the provinces should know which projects are sufficing the compensation duties and which do not. Verification of plans in the field is essential (for all provinces). As Kuindersma states:

“Eventually conformity of the physical reality is of importance in order to formulate a legitimate judgment on the impact of the compensation policy.” (Kuindersma *et al.*, 1999:13)

Impacts are already visible since the compensation policy keeps evolving, and behavior towards compensation policy changed. Most people are aware that interventions in protected nature areas have consequences, and that compensation duties cannot be avoided. Through the years nature compensation has gained a more prominent role in spatial planning and nature conservation policies. Future results from monitoring,

evaluations, and verification of plans in the field should provide more information to formulate legitimate judgments on impacts of the compensation policy in the provinces.

When coming back to the effectivity criteria of Sabatier & Mazmanian it appeared that some elements have certain relations with the compensation practices and influences on it. These will shortly be described next:

- Difference between past and current compensation procedures and practices;
- Difference between compact/abstract compensation policies and extensive compensation policies. It remains to be seen which working-method results in more sufficient realizations of compensation duties in the field;
- Difference between large and smaller projects, and even differences between municipalities. Since the projects differ so much they need to be viewed per project. But why design an unambiguous compensation policy than? The 'EHS-spelregels' does give an extensive overview of how compensation can be implemented, which can be clarifying. Finally it was indicated that you always have to inspect in which framework a project fits and proceed from there on;
- The importance of information supply about compensation became very clear. Preliminary consultations are of great use as well;
- Public and political support is very important. This could influence the progress of a project, and it can even lead to the cancelling of a project;
- A change in Municipal and Provincial Executive can have an influence on implementation practices of compensation (e.g. delaying a project or pushing it through)
- Provinces differ in their experiences with applying different types of compensation (e.g. Friesland gained most experiences with forest compensation, Zuid-Holland had several experiences with red list species, and others experienced the NEN more, etc). Less experiences with significant negative effects can occur, since the new Nb-wet is from 2005. Besides it is not exactly clear which effects the new Wro will have on implementation of compensation;
- The compensation policy is still quite recent (1995) and this makes it difficult to estimate if no net loss of values takes place. It can take 20, 30, 40, 50, 100 years before it is possible to say something on the quality of the compensation, and in relation to it's original location.
- As mentioned before it is essential that monitoring, evaluations and verification of plans in the field takes place. Although sometimes it is still vague who's responsibility it is to set these things in motion. Sometimes the systems are already there, but just need to be applied optimally (municipalities, initiative takers need to get used to it);
- In the end the question remains: 'Is compensation policy a paper policy?' Compensation policy scores good on paper, but apparently this is not a guarantee for the fulfillment of compensation duties. Today there are several ways to legally register compensation duties, and when necessary instruments are in place to force compensation to be fulfilled. How come this does not occur in practice? To which degree are compensation duties completed nowadays?

Ultimately future developments of the compensation policy remains to be awaited. It is especially of interest how the new Wro will influence the implementation practices. The decentralization connected to this new policy could have quite some effects on the implementation of compensation.

5.5 Rating of the provinces

Previously plan conformity has been researched by Kuindersma *et al.* in 1999, which resulted in an extensive research on detecting patterns in implementation practices

between provinces. Differences and similarities, concerning implementation practices, were examined. The provinces were divided in three categories: forerunners, followers and laggards. In this research two provinces were selected per category, including Forerunners: Gelderland & Noord-Brabant, Followers: Zuid-Holland & Zeeland, Laggards: Friesland & Utrecht. Kuindersma *et al.* noted the following about subsequent decision-making of national compensation policy (back then from the SGR) into provincial compensation policy, concerning the above mentioned provinces:

- Friesland and Utrecht did not register the policy, while other provinces did.
- Friesland did not have area categories. Gelderland, Utrecht and Zeeland implemented area categories, while Zuid-Holland and Noord-Brabant had the highest rating for implementing area categories. (Currently all provinces have implemented the required area categories).
- All provinces implemented the framework of the 'no, unless' formula.
- All provinces implemented compensation. Generally all the provinces incorporated the steps given in the SGR.
- When focusing on securing compensation fulfillment Friesland, Gelderland and Zeeland arranged this. Utrecht, Zuid-Holland and Noord-Brabant had higher ratings on securing compensation duties. (Kuindersma, 1999:22)

A lot has changed since 1999, when the research of Kuindersma *et al.* took place, with the SGR still in place. As mentioned before, compensation is described in the Nota Ruimte and the 'EHS-spelregels' currently. It is of interest to inspect if and to which extent these national compensation guidelines are currently processed by the provinces. Next a comparison between six provinces will be given. The categories from the research of Kuindersma *et al.* were used, while the results from this current research are shown next to it. Table 5 shows an overview of provinces categorized as forerunners, followers and laggards.

	Research of Kuindersma <i>et al.</i> 1999			Current Study 2009		
	Forerunners	Followers	Laggards	Forerunners	Followers	Laggards
Provinces						
Friesland			X			XX
Gelderland	X			XXXX		
Noord-Brabant	X			XXXX		
Utrecht			X		XXX	
Zeeland		X			XXX	
Zuid-Holland		X				XX

Table 5. Comparison between six provinces

In Appendix IV the provinces were rated. These ratings become visible in the table. Explanations for these choices will be given next:

Forerunners

Noord-Brabant and Gelderland have processed national guidelines most extensively, which also resulted in a registration/monitoring system. Evaluations have been applied as well and these provinces have cooperated with certain studies (VROM-Inspection and Rekenkamer). Verification of compensation projects took place during these studies. Both provinces indicate more can be done about this last step of the compensation process. Especially the verification of projects in the field.

Followers

Utrecht and Zeeland also have worked out the national guidelines quite well. Utrecht processed a scheme in the regional plan, which is very clarifying. Only both provinces do not possess a registration/monitoring system. No evaluation reports are available as well. Zeeland does have evaluations of the Westerschelde case, but this is required since the state is involved.

Laggards

Friesland and Zuid-Holland have implemented the national guidelines, but elaborations could be desirable. Friesland already mentions frequently that elaborations in the regional plan are needed and will be made. Friesland indicated that they are still in the early stages of implementing compensation policy. While the compensation principle of Zuid-Holland still originates from 1997. Back then it was quite up to date to the SGR (Zuid-Holland was categorized as follower by Kuindersma *et al.*), but nowadays it is not anymore with the 'EHS-spelregels' in place. Next to this Friesland and Zuid-Holland do not have a registration/monitoring system in place. Evaluations are not available either. It is not clear who would be responsible if these elements were to be applied. Zuid-Holland indicated it is not their responsibility to monitor / evaluate projects, because when the project is finished the province is done with it. Although the practical case in Zuid-Holland showed very outstanding experiences. In that case the compensation policy and their negotiation model seemed to work perfectly. But how is this experienced with other compensation projects in Zuid-Holland? It becomes clear that these provinces could make the most adjustments to their compensation policy in order to suffice the 'EHS-spelregels'.

Conclusions

This research shows that the forerunners remained the same (i.e. Gelderland and Noord-Brabant). Kuindersma *et al.* noted that Gelderland and Noord-Brabant were ahead of official state compensation policy back in 1999 (Kuindersma, 1999:20). Noord-Brabant already started with working out the compensation principle in 1992. While Gelderland started in 1987, mainly including forest compensation in the beginning. In the past these provinces were well ahead with the implementation of compensation policy, and could this be a reason for these provinces to still be forerunners in 2008/2009? Currently Noord-Brabant and Gelderland have implemented registration systems, published evaluation reports and indicate more work still needs to be done. The other provinces still have to achieve this (as the 'EHS-spelregels' advises it). Some are willing to work on monitoring projects, while others do not see the need of evaluation reports or indicate it is the responsibility of municipalities to monitor/evaluate. This is the reason (among others) for connecting lower ratings to those provinces. During Kuindersma's study the laggards (e.g. Friesland and Utrecht) did not implement the compensation principle or registered it very briefly in their regional plan (Kuindersma, 1999: 21). Nowadays Friesland is still in the early stages of implementing compensation policy and Utrecht has implemented the compensation policy quite well, but is still missing a registration system. During this study Zuid-Holland appeared to suffice less criteria, since their compensation principle is still from 1997, while the other provinces adjusted and improved their compensation policies. This probably caused the shift between Zuid-Holland (previously a follower & currently a laggard) and Utrecht (previously a laggard & currently a follower). This can be explained by the current differences in implementing nature compensation.

Ultimately the big question remains if provinces that have worked out national guidelines more extensively (including a higher plan conformity) actually lead to more completed compensation projects (higher conformity of behavior and final conformity)? Which working method (e.g. Zuid-Holland with a briefer and older compensation principle, including a negotiation model versus the extensively worked out compensation principle of Noord-Brabant) results in more compensation projects being executed, according to the initial plans? Again future evaluations can bring interesting answers to this question. Thus it remains to be seen how implementation practices will evolve through the years in the Dutch provinces.

6. Legitimacy of implementation practices

This chapter is largely based on information gained through the processing of data, concerning the legitimacy of implementation practices. Legitimacy was studied by looking into two practical cases, which were situated in Gelderland and Zuid-Holland. The municipality of Nunspeet and the Dune Water Company Zuid-Holland (acronym: DZH) were approached. Results from these two cases are presented in detailed tables, which can be found in Appendix V. This chapter will cover the mainlines. First background information on the projects of the municipality of Nunspeet and DZH is given in chapter 6.1. Then the three levels of legitimacy will be described. First input legitimacy is covered in chapter 6.2, then output legitimacy is described in chapter 6.3, and finally throughput legitimacy is mentioned in chapter 6.4. To end with a final comparative analysis in chapter 6.5.

6.1 Introduction of practical cases

This subsection will briefly present information about the two practical cases. Differences and resemblances can be noticed, since descriptions of both of the projects will be given. Information about the municipality of Nunspeet and DZH is presented next to each other in order to make it easier to compare both cases. The table below shortly presents the basic idea behind these projects. Afterwards the topics of this table are explained more extensively.

<i>Initiative takers</i>	Municipality of Nunspeet	Dune water company (DZH)
<i>Project</i>	Business area 'De Kolk'	'De Hertenkamp'
Damage	Nature Protection Act (i.e. Natura 2000 area) and the presence of the Black Woodpecker and the Honey Buzzard	Infiltration decision of ground protection (IB) and taking over provincial compensation duties
Compensation	<ul style="list-style-type: none"> - 80 hectares added to the Natura 2000 - 10 hectares of monotonous pine forest changed into deciduous forest - improvements for the NEN & Natura 2000 areas (i.e. Schaarweide project, including 5,55 hectares) 	<ul style="list-style-type: none"> - 15 hectares in the Hertenkamp, including: <ul style="list-style-type: none"> * improving hydrological system * removal of bulb cultivation /bulb shed * development of nature * adding recreational value (e.g. walking paths)
Phase	Starting activities/projects	Monitoring and evaluations
Complications / Objections	Previously resistance because of past history. Now generally support for plans.	No complications.
Planning	Activities start in 2009	Monitoring and evaluations with air photography
Costs	Average price of € 35.000, - per hectare.	Costs contain € 3.30 per m ² (€ 2,75 per m ² while excluding internal costs)
Results	Approval of plans.	Nature development, removal of bulb cultivation and bulb shed, walking trails, change of destination (in the regional plan and development plans)

Table 6. Brief overview of projects applied by the municipality of Nunspeet and DZH

Projects planned in protected areas

Municipality of Nunspeet

Business area 'De Kolk'

In December of 1993 an administrative agreement was made with the province Gelderland. It stated a business area of 30 hectares could be developed at the eastside of Nunspeet as compensation for the loss of employment due to the closing of the Generaal Winkelmankazerne. The average increase of employment per year has been negative in the municipality of Nunspeet. According to studies it appears that Nunspeet has need for a business area of about 28,2 hectares until 2020. It is expected 475 employment places are gained through the new business area. The dilatation of this new business area goes through the NEN and Natura 2000. This road goes to the highway A28. Additionally the Natura 2000 area includes habitat for the Black Woodpecker and the Honey Buzzard. However recent data on birds from the SOVON and research by a ornithologist show that these birds are not present in the area.

Dune water company (DZH)

'De Hertenkamp'

Compensation was required due to the 'Infiltratiebesluit Bodembescherming' (Infiltration decision of ground protection, Dutch acronym: IB). Compensation projects were divided into: compensation of damage to vegetation in seepage lakes, compensation of ground and compensation of damage to vegetation of shores at infiltration pools. The compensation that was executed in the Hertenkamp belonged to this last category. This would have taken 12 hectares, but it was possible to compensate 15 hectares there. DZH took over 3 hectares of compensation duties from the province for the broadening of a (land dividing) road, which brought it up to a total of 15 hectares of compensation in the Hertenkamp. It was possible to receive grants, because DZH took over compensation duties from the province. Grants were not possible for the compensation in relation to the IB.

Compensation

Municipality of Nunspeet

Nature development took place on a large scale, because the closing of the Generaal Winkel-mankazerne made it possible to add 80 hectares to the Natura 2000. This was in exchange for the new business area De Kolk of 30 hectares. The compensation was also used to settle a relatively limited damage of 5,54 hectares caused by the construction of the southern dilatation of De Kolk. Two other extra measures are also mentioned. Involving 10 hectares of monotonous pine forest, which will be changed on site into deciduous forest. Secondly improvements are made in the NEN and Natura 2000 areas through the Schaarweide project, including 5,55 hectares. From now on attention is paid to this project. Detailed information can be found in the ontwikkelingsplan of the Schaarweide. The ontwikkelingsplan of the Schaarweide creates a framework for the future fulfillment of nature compensation within the municipality, and it offers direction with the design of development plans. The ontwikkelingsplan is not directly

Dune water company (DZH)

As mentioned above the compensation included 15 hectares. Several measures were planned in the Hertenkamp. Firstly the bulb cultivation was removed from the water-collection area. This site needed to be transformed from a bulb farming area to a nature area. A shed in which bulbs were stored also needed to be removed. In the meanwhile another goal involved the increasing hydrological gains through calcium-rich seepage water (water belonging in the area) and keeping it in the area as long as possible. The drainage water (water foreign to the area) should be kept out of the area as much as possible. Finally meadows (in dutch: vroongraslanden), dry dune grasslands, open dunes, duinbeken and duinrellen should be realized. The respondent of DZH also showed detailed management plans describing how the area should be managed now the compensation is executed.

Compensation (continuation) Municipality of Nunspeet

binding, but development plans are. These measures show that damage and disturbance to protected areas are prevented. The measures include both quantitative compensation (surface NEN) and qualitative compensation (more varied forests, new grassland vegetations etc.), and this leads to a positive balance for the NEN. The physical damage of the Natura 2000 is also completely compensated. Disturbances to the Natura 2000 area are also taken into account.

Phase

- In Nunspeet the plans are authorized since December 2008 and projects can start.
- DZH implemented compensation and an evaluation is planned.

Complications / Objections

Municipality of Nunspeet

The procedure connected to the business area of De Kolk has taken long time. In 1993 an agreement was already made in which the new business area was mentioned. Stricter legislation came into force when the new Nature Protection Act (Dutch acronym: Nb-wet) was implemented in 2005. The municipality felt cornered by this. The agreement made it possible to construct a new business area, but only if the Generaal Winkelmankazerne was removed. The removal resulted in 80 hectares that was added to the Natura 2000, but due to the new Nb-wet extra compensation was required. Nunspeet felt that they were required to compensate twice now. The agreement from 1993 was useless, since more compensation was required due to new Nb-wet. Frustration and irritation became visible between the province and Nunspeet. The province even publicly doubted the credibility of the municipality of Nunspeet, due to the incomplete fulfilment of previous made decisions. Nowadays the relation between the province and the municipality of Nunspeet is good again. The ontwikkelingsplan of the Schaarweide showed the dedication of the municipality. Finally it resulted into an approved project.

Dune water company (DZH)

No complications. DZH tried to involve everyone through providing information on the plans (e.g. meetings, presentations, individual conversations, flyers, posters etc.). Finally the public only reacted positively. The municipality of Wassenaar was also positive because of the open planning process. Thus DZH had public and political support. The authorization came quite quickly. The execution of compensation took place, and DZH sometimes invites representatives of the province, Provincial Executive, municipalities, and DLG to come and have a look at the accomplished results in the field. An evaluation is planned, including air photography to inspect how the compensation area is developing. Developments in the area are currently studied by inventorying the presence of certain flora and fauna species.

Planning

Municipality of Nunspeet

In December the project was approved by the Provincial Executive. In the spring of 2009 the development of the first phase will start, concerning the Schaarweide. Besides a beltway will be started before the end of March 2009 (i.e. before the breeding season). It can give dilatation for the construction site 'De Kolk'. Not all the grounds are in possession yet at the Northern part of the beltway, which is why construction cannot start here just now. The whole beltway can take a couple of years. The first phase of construction on the site of the business area can start when the dilatation is realized.

Dune water company (DZH)

DZH totally rearranged the Hertenkamp in 2003, through which a natural fringe of dunes can develop. A monitoring plan has been designed in which the hydrology (i.e. quantity and quality of ground- and surface water), ground, vegetation, and fauna are mentioned. The evaluation with air photography still needs to take place.

Costs

Municipality of Nunspeet

The implementation costs are connected to the development vision, which has a duration of 20-30 years. The expenses include:

- Movement of earth € 15.000
 - Management costs € 5.000
 - Facilities and vegetation € 7.500
 - Research costs (10%) € 2.750
 - Unexpected costs (15%) € 4.500
- This leads to an average price of € 35.000 per hectare of nature development. The ontwikkelingsplan for the Schaarweide also mentions possibilities for grants.

Dune water company (DZH)

The Hertenkamp started in 200/2003 after a public tender. The ground was converted on site. The costs contain € 492.954,69 (including BTW) and with this € 3.30 per m² (€ 2,75 per m² when excluding internal costs). As mentioned above the finances are partially for DZH, but it also included grants regarding the Regiwa / GeBeVe of the Ministry of Agriculture, Nature and Food Quality and the province Zuid-Holland (for taking over compensation duties related to broadening a road).

Results

Municipality of Nunspeet

Currently there are no results visible in the field yet, since the plans were just recently approved. The execution of certain projects have just started or still need to start.

Dune water company (DZH)

The results involve:

- Nature development including: meadows (in Dutch: vroom grassland), streams in the dunes, sandbank (in Dutch: strandwal), and mud pools for toads;
- Removal of bulb cultivation & bulb shed;
- Improvements for the hydrological system;
- Walking trails connected to the green walking network of the province. Previously this area was not open for the public, but now it is. Neighboring people and recreationists make use of the area;
- Change of destination (in the regional plan and development plans) from agrarian use to nature with functions as recreation and water collection as well.

Extra Information of the Practical Cases

Municipality of Nunspeet

- Ontwikkelingsplan Schaarweide (2008)
Plan with developments for the Schaarweide.
Collaboration between the municipality of Nunspeet and Arcadis
- Bestemmingsplan Natuurcompensatie
bedrijventerrein De Kolk (2007) Development
plan for the new business area De Kolk
- Workshop 2 Ontwikkelingsplan Schaarweide
(presentation from the province)
- www.nunspeet.nl (website of municipality)
- www.destentor.nl with following articles:
 - * Nunspeet legt nieuwe natuur aan (2006)
 - * Compensatie met rug tegen de muur (2006)

Dune water company (DZH)

- Bestuursovereenkomst Vermindering
Waterkwaliteit gerelateerde effecten (IB)
Voortgangsrapport (2004) Progress report IB
- Beheer Hertenkamp (nieuwe situatie)
Management of the Hertenkamp
- DZH Bestek 9902 Hertenkamp Wassenaar
(2001) Costs of the Hertenkamp project
- Communicatieadvies Herinrichting
Hertenkamp (2000) Communication advise for re-
designing the Hertenkamp
- www.dzh.nl (website of DZH)

This subsection introduces the practical cases and gives information that forms the basis for further research on the three levels of conformity. This background information will often be taken as a reference later on.

6.2 Input legitimacy

Input legitimacy was mainly connected to bottom-up theories. How could the compensator influence and contribute to the compensation process. The interviews and policy documents should provide insights into this matter. Input legitimacy involves how compensators could influence negotiations, which is described in chapter 6.2.1. Next the determining of the agenda is explained in chapter 6.2.2 and active involvement in decision-making is mentioned in chapter 6.2.3. To which degree support/resistance existed towards the projects is stated in 6.2.4. Finally to end with chapter 6.2.5 in which bottom-up theories and top-down theories are connected to Nunspeet and DZH.

6.2.1 Influence on negotiation processes

In first instance the compensation policy needs to be followed by a compensator, and this is a phase in which the compensator cannot influence the process. However it appeared that both Nunspeet as DZH had opportunities to influence the negotiation process when compensation duties were accepted. They were able to design the plans, and by doing this it was possible to process their ideas of how to compensate. In the end it seems that DZH had more opportunities to influence their negotiations than the municipality of Nunspeet. The municipality mainly had to convince involved parties of the necessity, while the necessity in the case of DZH was quickly accepted. Next more information is provided about both cases.

The **municipality of Nunspeet** encountered certain consequences that the implementation of the new Nb-wet caused in 2005. In a sense the agreement of 1993 was already sufficed, since 80 hectares was added to the Natura 2000 by removing the Generaal Winkelbankkazerne. Although more compensation was required due to the new Nb-wet, and this was experienced as compensating twice (i.e. 80 hectares was already compensated). In a way the municipality had no influence in this phase of the

compensation process, since legislation needs to be sufficed. It caused quite some confusion and discussions. The LNV was sceptical about the necessity of this project and this needed to be demonstrated. However the importance of the new business area was proven by the need for opportunities to increase employment (i.e. employment was lost due to the removal of the Generaal Winkelmankazerne). The agreement from 1993 also makes this project kind of inevitable. Then the municipality had two situations in which their influence could be noticed. For instance the choice of the traced out road section needed to be accepted by the LNV. It was a choice of putting the traced out road section nearer to citizens or nature. The municipality studied the options and used these findings to convince other parties. Nunspeet showed the traced out road section they proposed was the most optimal one and by this influenced the compensation process, since the LNV agreed to it. The second example involves damage to the habitat of the Black Woodpecker and the Honey Buzzard. It was indicated that their foraging areas were located there. Finally data on birds from the SOVON and from an ornithologist proved that the Black Woodpecker and the Honey Buzzard are not present in the area. Still these species could possibly habitat there in the future. The influence of the municipality becomes visible, since it was proven that these bird species were not present. Extensive conversations took place with the LNV. In the end Nunspeet stated:

“The municipality understands the rules and follows them, because they have no other choice. This policy does not anticipates a situation in which new legislation is implemented. The new Nb-wet did not exist when the agreement was arranged about the new business area and the removal of the Generaal Winkelmankazerne. The municipality was confronted with this afterwards.”

The prehistory of this project makes it quite difficult, but the plans finally have been approved in 2008. Nunspeet showed good will with the Ontwikkelingsplan of the Schaarweide in which old and new debts are processed. This was quite important, because the municipality had some old debts in which compensation was never realized and Nunspeet needed to prove they could sufficiently arrange all their debts. The LNV, province, interest groups all needed to be convinced. Nunspeet tried to involve everyone during the design of these plans (e.g. presentations, workshops). It finally resulted into the plans that have been approved.

Next the respondent of **DZH** indicated the following about the negotiation process:

“They could influence the compensation process due to close consultations/contact with the province and their relationship is optimal. DZH could point out certain elements of importance to their contact at the province (Bureau Natuur, Harry Smit who was also interviewed to study the levels of conformity). For instance the quality of infiltrated water is connected to actors/polluters. How can this be used to make simple adjustments that can cause extra plusses for nature.”

DZH is a special case, since it involves a dune water company and nature company through which profits from collection of water and nature are equally important. DZH is an example of an initiative taker who notices that compensation can add value to an area (and be valuable for their business). It appears that the water company profited by the removal of bulb cultivation, since that is positive for the water quality, but in the meanwhile this is also advantageous for the development of nature. Additionally the collaboration between the province and DZH, concerning the broadening of a road and taking over compensation duties, proved to be favourable because grants could be used for the implementation of compensation in the Hertenkamp. These are examples of situations in which DZH could influence the proceedings of the compensation process, while it was also in their favour and in favour of nature development. Yet how were the plans shaped and designed during the initiative phase. The respondent mentioned:

“At first the province, municipality Wassenaar, DLG, Stichting Duinbehoud were present during meetings about the plans. Afterwards more parties were involved

during the initiative phase (e.g. interest groups, working-parties concerning birds, other nature associations etc.). Conversations took place on the fact that compensation needed to be fulfilled and where areas of interest are specifically situated. A clear reasoning showed how plusses for nature could be gained by applying simple measures and in certain areas. The Hertenkamp was one of these areas.”

By involving parties in the design of plans support can possibly be gained. In this case there was no resistance and involved parties were very enthusiastic. DZH influenced the process of informing key actors and other involved parties, which resulted into positive results. Although the respondent mentioned that in the beginning Stichting Duinbehoud thought DZH was damaging dunes, but they also acknowledge that DZH is in a exquisite situation (i.e. the water company earns money from selling water and the nature company is in a great position to manage nature). Stichting Duinbehoud and DZH know each other well and also have a very open communication. Again it shows how DZH was able to gain support for their plan, which influences the compensation process. In the end the removal of bulb cultivation has positive effects on the quality of water, but it also increases the development of nature. The Hertenkamp is also open for the public (i.e. previously not open due to bulb farming) and the walking paths add (recreational) value too. Influences are quite visible, since this project brings along such improvements to the Hertenkamp area that no real resistance existed, and value could be added to the area by DZH.

6.2.2 Possibility to co-determine the agenda

It became visible that the practical cases experienced this element differently. The topics of the agenda of the municipality of Nunspeet mainly focused on proving the necessity of the project and certain actions. While DZH could add several topics to the agenda through the open communication that existed. Their role as manager of the area is also valued by the province, which offered opportunities to co-determine the agenda. In the end both Nunspeet and DZH could add topics to the agenda, which is described next.

The respondent of the **municipality of Nunspeet** noticed certain topics really needed to be discussed, like “the municipality needed to convince the LNV about how the ‘no, unless’ rule was applicable in their case. Thus the ‘unless’ part.” The new business area was urgent because of the loss of employment through the removal of the Generaal Winkelmankazerne. Additionally the respondent noticed “questions arising about the dilatation and the necessity of the assigned traced out road section was.” These topics mainly ruled the agenda at first. Afterwards the focus was mainly on how compensation could take place, and in which shape compensation should be implemented. All these topics determined the agenda principally. It seems that the municipality really needed to convince the LNV about the necessity of this project and all the other topics surrounding it. The topics that could be added to the agenda mainly focussed on the design of the plans and how to get them approved.

DZH mainly focussed on the open environment that gave possibilities to add many topics to the agenda. The respondent of DZH stated “ numerous topics could be added to the agenda during the negotiations on compensation duties. The reason behind this fact was the open communication between all the different parties.” The DZH respondent for instance indicated “the province of course values having good consultations with the manager of certain areas. The manager frequently knows the most about the areas and which could score the best.” This statement shows how much the knowledge of managers can be valued by the province. Does that also increase the possibility to co-determine the agenda.

6.2.3 Active involvement in important decision-making

It became visible that the contact with the province was very important during the compensation process. Both DZH as Nunspeet emphasized the role of the provinces during the compensation process. Active involvement in important decision-making became visible in the collaboration between DZH and the province Zuid-Holland, which is explained below. Besides Nunspeet shows how meetings and consultations led to the current plans. Thus both DZH as Nunspeet were actively involved in important decision-making but in different ways, which is described next per case.

The involvement in important decision-making was especially noticeable in the Hertenkamp project of **DZH**. It involves a provincial intervention of broadening a land dividing road, and the compensation duties that were covered by DZH in the Hertenkamp. The province approached DZH and asked if their compensation duties could be realized with the Hertenkamp project (i.e. more hectares could be compensated than was necessary for DZH, so the water company had space to include the provincial compensation duties in the project). It was a win/win situation because the province had solved the implementation of their compensation duties, and DZH could improve the Hertenkamp even more. Especially with the grants that became available through taking over these compensation duties. The respondent mentioned:

“This collaboration was really perfect, and it really has to do with the networks of contacts. Their interests were taken into consideration as well (e.g. prioritizing the execution).”

It became visible in this project how important the relation between the province and DZH actually is.

The involvement of the **municipality of Nunspeet** in decision-making mainly was recognized by how the compensation process proceeded and the role of certain parties. Nunspeet indicated:

“They have involved the province from the start, and many conversations took place on how to proceed. Especially the old debts needed to be resolved first. This was important for the province, because in the past they have cooperated with development plans of the municipality and changes in these plans were approved, which were not followed up by Nunspeet.”

These old debts were processed in the Schaarweide, next to the new debts of the new business area. The province has guided and advised the municipality (e.g. even indicated who to talk to within the LNV). The connection between the province and Nunspeet became visible, and this was of importance in the decision-making process (i.e. the province supervised the whole process). Nunspeet also took in the advises and directions from the LNV, during the formulation of the plans. The main discussion seemed to be about the choice of where the road should be and certain endangered bird species. These were important topics on which the LNV and Nunspeet needed to agree on together. In the end the respondent of Nunspeet stated:

“All the meetings have contributed to mutual understanding. The meaning behind the policy became clearer for the municipality and what this policy involves. Besides other authorities and interest groups understood that Nunspeet wanted to realize this very accurately and founded.”

Ultimately meetings and consultations are of importance, concerning active involvement in important decision-making.

6.2.4 Support / Resistance

It appears that Nunspeet and DZH show similarities and differences in support/resistance of their projects. They both seem to value the relation with the province and they both indicate the need of convincing interest groups of the purpose. Otherwise the practical cases differ quite much. An essential difference is that the Hertenkamp of DZH seemed to be approved by everyone, while the business area of De Kolk resulted in quite some resistance (i.e. from authorities to interest groups). Next a description is given about the support and resistance that was shown in both cases.

The **municipality of Nunspeet** had to deal with quite some resistance. Varying from the LNV, province, within the municipality to interest groups etc. Firstly different ways of thinking were noticed with the LNV, which caused for tensions. Consultations were mainly focussed on the traced out road sections, and the measures that are required for the Black Woodpecker and the Honey Buzzard (while these bird species have not been detected in this area). However within the municipality opinions also differed about the implementation of compensation (i.e. some still have the feeling of compensating twice, but realize it needs to be accepted to get any further with the project). Next to this the relation with the province is good now, but in the past the province showed doubt in the municipality of Nunspeet, because they had old compensation debts that were never realized. Suspicion also had to be taken away with the Gelderse Milieufederatie. As mentioned before old and new debts were all processed in the Schaarweide project. This project involves the concept 'compensation bank'. The municipality wants to build up a positive balance by mitigating, and one could fall back on it when something occurs for which ground is needed to compensate (see Ontwikkelingsplan Schaarweide). The plans showed good will. Nunspeet needed to show they are prepared to fully implement their compensation duties, and than interest groups are usually willing to think along with the municipality and cooperate. But Stichting Natuurschoon still resists this project, because a part of the northern side of the business area would not really be necessary in their opinion, since it would damage pastures. The size of the business area is too large, according to them. But the size has already been agreed on and registered in 1993. This is quite remarkable since the agreement should have been appealed back then, if problems were experienced with the size. And then you have the farmers, who will lose ground to the business area of De Kolk and to the compensation project of the Schaarweide. The respondent indicated that he could understand if farmers would resist, since agrarian grounds are lost. To close with resistance shown by people who objected to the choice of where to put the traced out road section. A neighbouring citizen once asked on an information evening: "if the birds are more important than those people?" Thus they did not really want the traced out road section nearby (an example of Not In My BackYard - NIMBY). These are quite a few examples of resistance, that the municipality had to deal with. Research studies were of importance to show the essence/necessity. While information distribution was essential to properly inform involved parties, and give them opportunities to participate in the design of the plans (i.e. to a certain degree). The municipality involved all the possible parties in the process of creating of the plans (including the province, Gelderse Milieufederatie, surrounding citizens, farmers etc.). Nunspeet held presentations, which were broadly set up, and sketched out what was meant to occur in the Schaarweide, and where compensation would be implemented. In the end support of the key actors and involved parties (of course exceptions exist) was gained.

In contrary the Hertenkamp project of **DZH** mainly received support instead of resistance. Although the respondent indicated:

“It was frightening when the IB first came into force. The director could feel like: they are going to prescribe what to do, and decide for him. After the shock it was alright and finally the relation became good. It all went in a very normal way.”

Adjustments needed to be made to suffice the IB, and this proceeded well through open communication and good contacts. Another point that could cause resistance involved some people who might mind the parked cars from the recreants in front of their houses. But the majority was also aware the nature area would become accessible (i.e. previously it was closed due to bulb cultivation). Later on it becomes clear neighbouring citizens frequently make use of the Hertenkamp, just as recreants. Finally when the permit was requested it went very fast. The municipality of Wassenaar was happy with the fact that DZH had done everything in such an open communication. Presentations were held for the city council, mayor and alderman. Usually Harry Smit (Bureau Natuur - Province) was also present to tell about the provincial interests in this case, while DZH showed their interests, regarding water production, water quality and nature. It seemed that informing/involving key actors and other parties was an essential part of the initiative phase of the compensation process, and DZH has done this in an extensive way. It appears the Hertenkamp only received support, and involved parties were aware of the plusses that could be developed in this area. Although the respondent indicated “you can always have one or two persons that cause trouble (e.g. Ganzenhoek), but with the Hertenkamp 99, 9% loved it.” The Hertenkamp seems to be an exemplary compensation project.

6.2.5 Bottom-up <> Top-down theories

During the interviews mixed signals were noticed on the appliance of bottom-up and top-down theories. Both the municipality of Nunspeet and DZH have indicated the province pointed out compensation was required. The municipal representative said:

“Their ability to influence the process was quite limited. They are depended on what is decided by other authorities.”

Nunspeet indicated to understand the rules and they will follow them, but only because they have no other choice. It comes down to the fact that their project will not be approved, if the municipality does not suffice the compensation policy (i.e. the new Nb-wet from 2005). While DZH noted the province required compensation, since infiltration caused damage every year (i.e. due to the infiltration decision, Dutch acronym: IB). In the beginning DZH was perhaps shocked about the content of the IB and all the requirements that should be met. But open communication took place and it was quite a normal process. An agreement was made between the province and DZH in 1993, which included projects to compensate for the damage of infiltration. Ultimately the influence of Nunspeet can also be noticed in the plans they created.

Thus policy was forced from higher up, but compensators can bring arguments forward to direct the content of their plans somewhat. In the end the plans will need to suffice preconditions that have been set by the province/state. The design of plans is shaped by how the compensator could influence the negotiations, bring forward topics to the agenda, their involvement in important decision-making, and if support and/or resistance existed for a project. Bottom-up theories could be recognized in the descriptions of these elements above. In both projects people were involved in the initial phase, and participation in the design of plans was possible (i.e. perhaps key actors had a larger role in the design of compensation plans than other involved parties). Thus the province implemented provincial compensation policy that needs to be sufficed (top-down), but the compensator will bring forward plans in which many actors are involved during the initiative phase (bottom-up).

6.3 Output legitimacy

The emphasis with output legitimacy is directed to the achieved end results concerning compensation, and the satisfaction with the whole compensation process. First the experiences with implementing compensation are described in chapter 6.3.1. Then chapter 6.3.2 gives an description of how the plans correspond to the actual realization of compensation in the field. However the question remains, how effective the execution of compensation was, and if the needs of the compensator were met during the process towards it. This is quite interconnected with the acceptance of the compensation policy, which is covered in chapter 6.3.3. Lastly the contentment with the compensation policy is mentioned in chapter 6.3.4.

6.3.1 Experiences of accomplishing results & whole compensation process

The municipality of Nunspeet and DZH experienced the compensation process very differently. The duration of the compensation process differed, and the ease or difficulty with obtaining approval for the plans differed. More details of these cases are given next.

The **municipality of Nunspeet** noted the following about the compensation process:

“It has been a long process, in which a lot of consultations took place. It has costs so much money too (e.g. all the studies and reports). If it is worth while should still need to be awaited. The execution of the development plan has not started yet (i.e. this interview was held before the development plan was approved). He expects everything to pull through.”

Thus results still need to be accomplished in the field, and it remains to be seen how this is experienced by the municipality. The municipality realizes “this needed to occur accordingly to the legislation that is in force currently but the logic, legitimacy, reasonableness, and fairness have not always been detected.” In the end the plans are approved, which is a result. The municipality can finally start the long desired construction of the beltway, business area De Kolk, and compensation project Schaarweide.

On the other hand the respondent of **DZH** indicated the following about their experiences:

“DZH was very content with the end result. The respondent is still quite impressed by the power of nature to recover, and he noticed that everyone is very positive about the project (e.g. within the municipality of Wassenaar, neighbouring people etc.).”

People finally have access to the area (previously closed due to the bulb cultivation) and they really make use of it. Additionally many flora and fauna species can be observed in the Hertenkamp. Everyone is enthusiastic about it and the project really succeeded, according to the respondent. DZH was very positive about the whole compensation process, and it was frequently noted an open communication existed with good relations between the involved parties. It seems this made it possible to get the maximum out of this compensation project. In the end not only nature profits from the compensation measures, but these measures also influenced the water quality, which is favorable for DZH. In the end actually everyone can benefit from this area, because the nature area is open for the public.

6.3.2 Realization of compensation corresponds to actual plans

A degree of legitimacy involves the accomplishment of compensation duties according to the actual plans. The municipality of Nunspeet and DZH are situated in different phases

of the compensation process. This is of influence when judging how plans correspond to the realization of compensation in the field, which is described next.

Unfortunately it was not possible to study the end results of the compensation project of the **municipality of Nunspeet**. The development plan of the business area De Kolk together with the 'Ontwikkelingsplan Schaarweide' were only recently approved by the Provincial Executive. In 2009 they started with activities, concerning the intervention and compensation. It needs to be awaited if the realization of compensation corresponds with the plans.

It is a different situation with **DZH**, since the compensation duties have already been executed. The respondent of DZH noted the following on this:

"Everything is realized according to the plans. The destination of the Hertenkamp changed from agrarian use (bulb cultivation) to nature with additionally the use of recreation and water collection. This is registered in both the regional plan as in the development plan of Wassenaar. Besides all the activities have also been executed (e.g. removal of bulb cultivation + bulb shed, improvements of hydrological system, and transforming the area back to certain types of nature)."

Everything has been realized, but an evaluation still needs to be applied. Air photography takes place once in the five years to view the developments. Only the past three years this was not possible, due to bad weather and air traffic of Schiphol. It remains to be seen what air photographs will show. On ground inventories of certain flora and fauna species already takes place, and the water quality is studied too. The gathered data is given to the province (this is a formal part). Informally several key actors (e.g. province, municipality of Wassenaar, DLG, Stichting Duinbehoud etc.) were/are invited to visit the sites and observe the realized results. In this way they keep each other informed. Thus DZH is in the final stages of the compensation process. The area needs to be managed and developments need to be monitored to study the progress that is being made in the nature area. In the end DZH and the province work together and profit together too if it produces a couple of plusses. It works on both sides.

6.3.3 Effectiveness and acceptance of compensation policy

In the end it is of interest to gain insights of how compensation policy is experienced by the compensators. Do compensators accept the compensation policy and how effective was the appliance it? Experiences can involve the clarity and consistency of compensation policy. Besides, does compensation policy have a role in their daily activities? The dedication towards the policy objectives is also of importance. All these aspects of acceptance and effectivity together can give an overview of how compensation policy was experienced by compensators all through the compensation process, and even after the accomplishment of compensation duties. Nunspeet and DZH had different experiences. Both compensators accept the consequences of the compensation policy. However Nunspeet did not always experience the compensation process as that effective. While DZH is only positive about the compensation process and the results that were accomplished through it. More information on these topics is given next, per case.

The respondent of the **municipality of Nunspeet** indicated the following on acceptance:

"Their acceptance is mainly connected to the removal of the Generaal Winkelmankazerne, which was added as nature to the Natura 2000. If this compensation project did not include the removal of the Generaal Winkelmankazerne, then it would be very obvious. Everyone understands that if nature is taken away, it needs to be compensated. This would not have resulted into

discussions. The content of compensation duties would be discussed at the very most then. In Nunspeet the past history of the agreement from 1993 played a role, through which 80 hectares was added to the Natura 2000. The extra compensation that was required due to the new Nb-wet was of no proportion to the very large area that was already brought back to nature, according to the respondent. It comes down to experts who say it involves habitat of certain species. This is very vague, personal and depends on insights. They have missed the scientific support of compensation. The municipality experienced it to be quite unclear and it is based on a lot of premises and vagueness.”

Especially the situation of endangered bird species that were not present in the area caused some discussion. The respondent noted about this:

“Isn’t the policy used in a very strict sense? While the policy is not explained very structurally. That is the main point, because this policy does not describe everything of what should happen in De Kolk project. In this case the explanation of the ‘no, unless’ rule includes the largest shortage, according to the respondent. Thus their acceptance is connected to such measures.”

It becomes clear the respondent is quite critical about the policy that needs to be sufficed. Policies do not really prescribe what to do in certain cases. It seems Nunspeet does not experience the compensation policy to be effective. Although the respondent also stated:

“Implementing officers at the municipality are supportive of the compensation policy, if it involves cases without such a prehistory. The policies are taken into account and applied as accurately and flexible as possible. In doing so problems are tried to be avoided.”

This shows compensation policy can be accepted and efficiently applied, if not such a prehistory is present. It seems that Nunspeet is trying to avoid situations like what happened with De Kolk, which is natural. How this discussion affected people of the municipality became visible when the respondent mentioned “there are still politicians who say they will only compensate if it is really necessary and they will not compensate spontaneously.” The enthusiasm for creating new nature seemed to have decreased, because everything is enforced so much. This shows how deep these problems go. It is quite a sensitive topic. In the end acceptance of the policy was necessary to go forward with the project. The plans have been approved, but the process leading to this approval have not always been experienced as very effective.

A total different case involves the Hertenkamp project of **DZH**. It appears DZH totally accepts the compensation policy and the consequences of it. The province and DZH are in close contact, which resulted in the possibility of applying additional measures to improve the Hertenkamp. That is DZH received grants for taking over provincial compensation duties, which were connected to a land dividing road. Open communication with the province and other parties was mentioned over and over again during the interview. This provided an environment in which the compensation policy was experienced as clear and consequent. Practical use was made of the compensation measures, from which not only nature profited, but also DZH. The respondent noticed:

“Compensation policy has a role in daily activities. It does not apply for everyone, but certainly people who are working on projects (i.e. leading and planning projects) are in contact with compensation policy. Perhaps we do not work with it every day, but it is certainly ingrained.”

Their dedication to the policy objectives becomes visible in what has been reached with the Hertenkamp. The nature company wanted to reach the maximum. This produces plusses for nature and for the water production. DZH took many steps to involve everyone and support was gained. Positive reactions were generally given on the plans

in the Hertenkamp. In the end it resulted in a quick proceeding of this project. It seems the elements connected to the effectiveness of a policy are met in this compensation project. DZH is nothing but positive about the Hertenkamp, and how compensation resulted in plusses for this area.

At last it could be noticed that the effectivity of compensation procedures, and the satisfaction with the whole compensation process differs, probably since it involved two different projects. The municipality of Nunspeet and DZH found themselves in completely different situations. This influenced their opinions about the compensation process and the provincial compensation policy.

6.3.4 Contentment with compensation policy

Finally both cases also differ in their opinion about the compensation policy. The municipality of Nunspeet indicates improvements to the compensation policy can be desirable, while DZH seems to be content with the compensation policy as it is. More information on the difference between these cases is given next.

The respondent of the ***municipality of Nunspeet*** indicated the following on this policy:

“More unequivocality is desired. The arbitrariness of custom made measures should not take place, because than you do not know what you’re dealing with (i.e. in their case vagueness existed around the protection of certain bird species). More clarity is desired on how compensation should take place, and to which extent compensation is required. This is quite vague now. It costs so much time and consultations. It can strongly influence the costs.”

These statements from the respondent are very interesting, since Gelderland is one of the province that has implemented a quite extensive provincial compensation policy. Gelderland is ahead in implementing the provincial compensation policy. Still it seems the municipality would prefer more practical information on how the deal with this concept of nature compensation. Although consultations on the shape and content of compensation duties will always remain necessary.

On the other hand the respondent of ***DZH*** had no problems with the content of the current compensation policy. While Zuid-Holland has an older and briefer provincial compensation policy in place than Gelderland. From experiences of DZH the compensation policy of Zuid-Holland apparently seems to work very well. The connection with the province is essential in this process. The respondent mentioned:

“The Hertenkamp could have been implemented differently, but they wanted to reach the maximum. This was possible because the openness within the province is so large and the communication is very good. Finally consultations with the province (i.e. Harry Smit) take place and plans are inspected on their attainability. It is examined if the plans are conform the policy requirements.”

It is clear how DZH deals with the compensation policy. DZH seems to be content with the compensation policy, and has a good understanding of it (i.e. also through the good relation with the province). It seemed no changes in content of the compensation policy were desired.

6.4 Throughput legitimacy

Throughput legitimacy focuses on how legitimate the compensation process was experienced. Standard procedures could create a righteous environment that provides

equal opportunities for compensators. Guidelines were present on national level, which were processed by the separate provinces, and local authorities implements the compensation policy in practice. It was possible for provinces to differ in their implementation of compensation policy, but could it mean a standard procedure exists behind the concept of nature compensation if certain provinces have similar procedures? The idea behind standard procedures is to bring on equal treatment between compensators, specifically regarding burdens/costs connected to compensation duties. This involves the rule of equity. In first instance the polluter (compensator) needs to pay. Then the question remains if an economic framework is in place that guarantees equal treatment. Economic equity can be discovered if the compensation obligations of two different compensators in roughly similar situations, concerning their intervention plans and compulsory compensation measures, would meet certain requirements that represent equal treatment. It could be considered legitimate if these requirements involve: equal costs, same duration, equal availability of suitable ground, and accomplishment of the compensation duty entirely. Thus standard procedures and equal treatment are studied in this section, while focusing on how the procedures were experienced. First the awareness of the compensation policy is discussed in chapter 6.4.1. Then the experiences with the compensation procedures are covered in chapter 6.4.2, and how interests of the compensator were kept in mind is mentioned in chapter 6.4.3. In the end it is of interest to discover if an financial framework is present behind the concept of nature compensation, and this is described in chapter 6.4.4.

6.4.1 Awareness of compensation policy

In first instance compensators need to be aware of the compensation policy and understand the content to be able to apply it. A difference in awareness of the compensation policy occurred between the municipality of Nunspeet and DZH, since Nunspeet had to get acquainted with in-depth knowledge on the new Nb-wet, because otherwise the project could not proceed. In the end it became visible that both Nunspeet and DZH emphasized the essence of contacts and a network through which information can be obtained, which is shown next per case.

The **municipality of Nunspeet** noticed the following about their awareness of this policy:

“He was not that familiar with every detail, because he is the project manager and overlooks the mainline. Only the Forest policy was in place when the agreement was registered in 1993 and during the start of the development plan. The new Nb-wet came into force in 2005 and the municipality needed to gain more in-depth knowledge. During this time the municipality needed to pay attention to the re-determining of the Natura 2000 limits as well.”

The municipality had to deal with quite an amount of new information. Nunspeet gained insights about the new Nb-wet by calling around and asking questions, like what to keep in mind. Visits to the LNV took place and the province had a supervising role. The respondent of the municipality indicated “you are depended on the advisor of the Ministry when it involves questions like: how should compensation be applied exactly and in which shape/size.” From this statement it appears the provincial compensation policy does not really provide enough practical information, but advisors of the LNV seem to be necessary to provide answers on how it should be applied and to which extent. Again this is quite interesting, because Gelderland appeared to have an extensive compensation policy, but Nunspeet appears to indicate otherwise. However consultations about the shape of compensation will always remain necessary. In the end the municipality had to gain knowledge on the Nb-wet in connection to their project. This was processed in the plans, which have been approved in 2008.

The respondent of **DZH** was aware of the provincial compensation policy and noted:

“The provincial environmental ordinance was also of importance. It was all about the bulb cultivation in a water collection area (i.e. affecting the water quality), and finally the removal of bulb farming also made improvements to the NEN. Besides the dehydration policy required improvements to the hydrological ground water quality.”

The respondent was well aware of all the policies DZH needs to suffice. The respondent also mentioned the following on activities during the breeding season:

“DZH has always applied a certain behavioural rule, involving no work to be executed during the breeding season. This was even before the FF-wet came into being. Thus the FF-wet is being kept in mind and from the first of March till the first of September no activities are executed in the area, which is essential to process in the planning of projects.”

Next to this the respondent indicated the following on keeping updated:

“DZH keeps updated on local/provincial developments, regarding the status of their dune area. They like to stay informed on the policy aspects. DZH does not only do this for their own grounds, but also developments in neighbouring areas are closely followed. Besides DZH also has close contact with the province and hears from the contact person, which developments are taking place on provincial level. Also including developments of where we are heading in a political sense, and visions are shared. Then DZH can share these visions with for instance Stichting Duinbehoud, and they can tell it to others etc. This is making use of the existing network.”

Thus certain channels are used to gain information on the compensation policy, and again good relations with different contacts are essential.

6.4.2 Experiences with the compensation procedures

The experiences of the municipality of Nunspeet and DZH differ quite much. The compensation procedures of Nunspeet included a prehistory that caused confusion and discussion. While DZH did not have such a prehistory influencing the compensation process. In the end both cases have been referred to their compensation duties by the provinces. At a certain point both cases realized how to proceed and work with the compensation duties, which led to approved plans. DZH already booked results and can look back on how the procedures passed by, while Nunspeet is only starting activities recently. Next some experiences have been summarized per case.

During the interview with the **municipality of Nunspeet** it became clear:

“A lot of meetings took place and decisions were made. As municipality they have accepted it, because they had only one interest involving the realization of the business area De Kolk with the necessary infrastructure. There was not much point in resisting the policy (otherwise nothing could be realized). At the very most conversations were possible (e.g. on how reasonable certain decisions were, how it should be done, and in which term). So finally the amount of hectares was known, and the way how compensation should take place came into being through dialogue (e.g. during workshops).”

This led to the approval of the plans. Of course there was a lot of confusion during the implementation of the new Nb-wet. In the section of output legitimacy it appeared the logic, legitimacy, and fairness have not always been detected, but Nunspeet acknowledges that it had no point to resist the compensation policy. Nunspeet indicated certain situations that needed quite some attention. In first instance the municipality needed to prove the necessity of this project to the LNV (while it was already registered

in an agreement with the province back in 1993). Next to this the municipality needed to convince the LNV and other parties of a certain route, concerning the beltway, that would be optimal. Several studies have been carried out on how the beltway should be constructed. Another situation involved a delicate example of damage to the habitat of the Black Woodpecker and the Honey Buzzard. The respondent thought it was quite heavily explained and enforced. However the municipal authorities indicated that their interests are so big that they do not want to fight it, but just want to reach their goal. This project of De Kolk certainly has two sides to it, and it involves a quite sensitive topic. This is understandable, since Nunspeet already added 80 hectares of nature to the Natura 2000, and because the new Nb-wet was not in place when the agreement on the new business area of De Kolk with its compensation was made. At a certain point it became quite clear for the municipality on how to proceed with the compensation process, in order to reach their goals. Research was performed and decisions were made from the gathered data. During the whole compensation process the province offered guidance and advice to the municipality. Nunspeet just tried to go into the process very thoroughly. This can, for instance, be noticed from the extensive report of the 'Ontwikkelingsplan Schaarweide' and many other reports that have been published for De Kolk project. Custom made measures were designed and the balance, concerning nature, seems to remain positive. It remains to be seen how the projects are executed in the future.

DZH also experienced a certain degree of pressure in the beginning when the IB came into force. The respondent noted "the province indicated that infiltrating every year has a certain effect and this needed to be compensated". As the respondent called it 'the polluter pays'. It is quite interesting the respondent mentioned the polluter pays principle. DZH seems to accept the consequences that are connected to this principle and agrees with it. Next in the initiative stage preconditions of plans are discussed with the province, according to the respondent. It finally comes down to this according to the respondent:

"(A) do you suffice the preconditions of the compensation policy, and (B) if you suffice the preconditions than you go into the permit circuit and you want to inform people in an early phase."

The respondent indicated the following on informing involved parties:

"DZH wanted to show what they were planning with the goal behind it. This is done to receive the acceptance of involved parties and to gain support for the plans. By doing this it becomes visible if the plans will not cause problems."

This shows how DZH took preparations before applying for the permits, and that support for plans is of importance in the compensation process (i.e. resistance can hold up projects like in the De Kolk case). Finally the respondent noted:

"Ultimately the improvements, concerning nature, need to be conform the guidelines/policy objectives. The Hertenkamp sufficed the compensation policy, including: the arrangement of the hydrological system (dehydration policy), plusses for nature and the removal of pollution. It all corresponded with the provincial plans."

From these statements it appears that the procedures were clear and DZH did not seem to have any problems with it.

6.4.3 Taking the interests of compensators into account

The municipality of Nunspeet and DZH were both able to put their interests forward in the design of the plans. Other parties also got the chance to show their interests during the initiative phase of both cases. In the end it seems that interests of DZH were taken into account to a greater extent, since a special collaboration between the province of

Zuid-Holland and DZH was made possible. Such an opportunity did not occur in the Nunspeet case. An example of how interests were kept in mind is given next per case.

The **municipality of Nunspeet** could for instance process their interests during the plans of the beltway. Custom made measures involved decisions behind the choice of lanes, regarding this beltway. Two separate narrow lanes with a broad roadside would possibly cause less damage. Studies have shown how the beltway should be constructed optimally, while limiting damage. Quite some effort was put into the design of the road, since the beltway was essential for the construction of the business area De Kolk (i.e. without a proper dilatation no business area would be possible). Basically the interests of Nunspeet could be processed in the plans they designed. Besides not only the interests of the municipality needed to be taken into account during the design of the dilatation, because several other parties were involved in this matter.

The interests of **DZH** were taken into account by the province. This became visible when the province approached DZH about taking over provincial compensation duties (i.e. connected to the land dividing road the province was planning). By doing this the province had arranged their compensation duties, and DZH was given the opportunity to compensate a couple of more hectares in de Hertenkamp. Additionally grants were available for these covered compensation duties of the province, which made further compensation possible in the Hertenkamp. The province kept the interests of DZH in mind, and when both parties were in a position to help each other a special collaboration occurred. It could be seen as a win/win situation.

6.4.4 Presence of a financial framework behind the compensation policy

Both practical cases did not notice the presence of a financial framework. It could be experienced as more legitimate if a financial framework would be present, because everyone will need to follow the same financial guidelines instead of custom made measures that decide the amount of costs (which differ per case). However both respondents did mention it was an interesting question and shared insights on this topic.

The respondent of the **municipality of Nunspeet** indicated the following:

“The municipality has only calculated the costs for realizing compensation at the Schaarweide. They have not really paid attention to the fact if a financial framework could be in place.”

When the respondent was asked if a financial framework would be desirable he answered that “it would be useful, and the costs could be known in the beginning of a compensation process.” Besides the respondent mentioned that “a compensation bank would be useful (perhaps on national level).” It seems Nunspeet does think about measures to make the financials more structured. The municipality described to have built in a sort of compensation bank concept into the Schaarweide, through which it wants to build up a positive balance by mitigating. Then they could fall back on it when something occurs for which ground is needed for compensation (see Ontwikkelingsplan Schaarweide). It is interesting to monitor how this will get its shape in the future.

The respondent of **DZH** did give an example that might show a financial guideline in a certain way. This involved:

“Applications for grants, which require plan specifications with information on the activities and related costs. This needs to suffice preconditions set by the province. These specifications involves a report from the contractor, with information divided in themes and showing price per unit and sizes of surfaces. This results in a total

amount, which is the estimated sum. The estimated sum is indicative for DZH and the province.”

The respondent noticed that this could possibly be seen as guideline. In the end the financial preconditions are gathered in a report, which should suffice the provincial guidelines and this is approved or not. The respondent indicated:

“It needs to be shown if the money is actually spend according to the rules of the game. Often with these cases (concerning finances related to grants) progress reports need to be written every quarter of a year. Possible problems can be described and if the project is delayed.”

DZH had to do this with the 3 hectares that was realized by taking over compensation duties of the province. This financial background behind the Hertenkamp and DZH compensation projects is very interesting, but it will still differ per case and a general guideline behind the costs cannot be detected. The respondent was asked if a financial framework was desired and he answered:

“It would be really nice if you could see how much costs should be paid per hectare on a basis of compensation projects. A couple of years ago DZH worked on such financial guidelines with Kiwa, situated in Nieuwegein. They wanted to design a model that could make financial calculations, like for instance, you have 12 hectares of a certain area with certain ecological parameters + other parameters, and if everything is accurate, what will the managing costs involve and the project costs per hectare. It would be nice for the manager to have a model that you can fill with data, and that hands over which kind of plusses are possible. It is like a blackbox in which you can put several measures, the surface, and in the end this framework could tell in which area compensation is possible with the related costs. It could be a kind of reference, but they have not succeeded in designing such a model.”

So many factors have a role. The respondent of DZH noticed it depends on the terrain, and so many parameters are needed in such a calculation. It is a pity no financial framework was possible yet, although it is quite interesting people are looking into this matter. Perhaps in the future an extensive/comprehensible model can be designed, which could be used to predict compensation costs, and possibly be useful as a reference.

Finally it is not very surprising that no tangible financial framework was discovered by the compensators of these two cases, since financial compensation has not been implemented in a very extensive way on provincial level. Although both practical cases do seem to have their thoughts about this topic and are working with it.

6.5 Final comparative analysis

This chapter shows how different the two practical cases are, but also resemblances could be noticed. The similarities and differences will briefly be outlined in this comparative analysis. An brief overview about the municipality of Nunspeet and DZH, in relation to the three levels of legitimacy, is presented in table 7 on the next page.

General information		Municipality of Nunspeet	Dune Water Company Zuid-Holland
	Background	Governmental authority	Privatized company, divided into a water production company & nature company
	Compensation	Nature Protection Act (Dutch acronym: Nb-wet)	Infiltration Decision (Dutch acronym: IB)
	Phase	The plans have been approved and the projects can start	Compensation is realized and results are monitored, while an evaluation is planned
	Role province	Restored relation with province (i.e. old debts needed to be discussed) The province has supervising role	Close connection with the province and a good relation exists, which resulted in a special collaboration from which both profited
Input legitimacy	Influence in negotiations	Could process interests into the plans, and the agenda was mainly shaped by the requirements set by forced policies	Could process interests into the plans, and could add several topics to the agenda
	Involving parties in plans	Involved key actors and information was distributed in the initiative phase	Involved key actors and information was extensively distributed in the initiative phase
	Support / Resistance	Needed to prove their dedication (still old debts present). Old and new debts are processed in the Schaarweide project	No real resistance was experienced. Open communication and supply of information led to a smooth process
Throughput legitimacy	Awareness	An agreement was made in 1993, while the municipality needed to suffice new compensation guidelines in 2005 (new Nb-wet)	Well aware of the compensation policy and everything connected to it
	Interests of compensator	Interests of municipality could be processed in certain plans (e.g. beltway)	Interests of DZH were kept in mind through a collaboration (i.e. DZH received grants for taking over provincial compensation duties)
	Presence of Financial framework	Detected no financial framework, but was interested in a compensation bank (perhaps on a national level)	Detected no financial framework, however they worked on a framework that could calculate compensation costs, but did not succeed
	Compensation process	Long compensation process with problems	Relatively quick compensation process without complications
Output legitimacy	Acceptation	Prehistory of project influenced the acceptance, but compensation is accepted to reach goals (i.e. realizing the business area)	Acceptation of compensation policy and compensation did not only strengthen nature, but DZH also benefitted
	Results	Approved plans and activities just started	Compensation is realized according to plans
	Contentment compensation policy	More unequivocal and clarity is desired on how compensation should take place and to which extent compensation is required. This is quite vague now	Seems to be content with the current compensation policy and no changes were desired

Table 7. Differences and similarities of practical cases in relation of the three levels of legitimacy

Next explanations are given about how the mainlines of the practical cases (i.e. municipality of Nunspeet and DZH) can be related to certain degrees of legitimacy. The question remains how legitimate the compensation practices were for the compensator, while focusing on input-, output- and throughput legitimacy. Ultimately it appeared that the Hertenkamp project of DZH reached higher levels of legitimacy than De Kolk business area and Schaarweide project of the municipality of Nunspeet. How this conclusion is formed is described next.

It becomes visible both compensators needed to accept the compensation duties in order to proceed with the projects. And it became clear both cases acknowledge the polluter pays principle. There was no point in resisting the compensation policy, but the design of the plans was discussable. Both compensators included key actors in the designing phase, and informed other parties (even giving them an opportunity to participate to a certain degree). During the interview with DZH it appeared how much preparations were taken before they went into the permit circuit. Information was distributed to a large extent and by doing so people knew what to expect. The Hertenkamp project brought so much plusses for everyone that no real resistance existed. With Nunspeet this was different. During the interview the focus was not so much on how parties were informed, but rather how problems have been overcome. How key actors and other involved parties needed to be convinced by the municipality, regarding the necessity of several elements of De Kolk project and Schaarweide project.

This shows a difference in the degree of input legitimacy. It seems that DZH reached a greater extent of input legitimacy than Nunspeet, because less problems were present during the negotiation phase. However the main difference between DZH and Nunspeet is how the compensation processes passed. The difference specifically involves the duration of the compensation process and the existence or non-existence of problems that influence the duration. In both cases the provinces had an essential role of supervising the whole process. The province offered advice and guidance all through the compensation process. The relation of DZH and the province of Zuid-Holland seemed to be really excellent. DZH could take over provincial compensation duties, which resulted into grants that could be used for the Hertenkamp project. This proves a high level of input legitimacy is reached, since DZH was involved in important decision-making. Both the province and DZH profited from this collaboration and it showed how the province took the interests of DZH into account, which caused a higher degree of throughput legitimacy. The respondent of DZH frequently mentioned that open communication and good contacts are very important to them and played a large role in this project. On the other hand the relation between Nunspeet and the province had to be restored, because the municipality still needed to settle old debts. Resistance against the projects existed from several different involved parties (varying from the province, organizations to neighboring citizens etc.). Nunspeet had to prove their dedication to these projects. Through the resistance perhaps a lesser degree of input legitimacy was visible, but Nunspeet worked on this and took away the resistance. The plans of the Schaarweide showed dedication, and relations improved again with the province and other involved parties. The supervising role of the province was often mentioned during the interview. The municipality was able to shape the plans, and consultations and meetings with the province and state were essential in this process.

Finally DZH seems to be very pleased with how the Hertenkamp project proceeded, while the municipality more often pointed out the problems connected to their projects. This seemed to left its mark on the degree of throughput- and output legitimacy. The prehistory of the De Kolk project strongly influences the experiences of the municipality. An agreement from 1993 indicated a new business area could be constructed, when barracks were removed and this (i.e. 80 hectares) needed to be added to the Natura 2000. This happened and the agreement of 1993 was sufficed, but still more compensation needed to be fulfilled, because in 2005 the new Nb-wet brought along stricter regulations. This is an interesting fact because the compensation policy does not seem to anticipate the rising of new policies. How to deal with agreements that have been made in past and new policies coming into force that are of influence to these agreements? Anyway it caused quite a disturbance in the compensation process. The municipality had to deal with many parties during these projects, and even within the municipality different perspectives were present. In the end an extensive project plan of the Schaarweide was approved, just as the development plan of De Kolk. The long desired implementation of projects can finally start. In the case of DZH the compensation has already been realized. DZH did not experience such a prehistory as Nunspeet did. This should probably be kept in mind when comparing the different mentalities of both cases. It is of interest to mention how DZH is structured, since the water production company brings in money, and the nature company is focused on how to maximally improve nature and with this the water quality. This is quite an exquisite situation, since a part of DZH is especially focused on nature development, which is of course a plus with implementing compensation. This is a difference with the municipality of Nunspeet, because they did not have just one division especially focused on nature development alone. In the end it comes down to the difference between a governmental authority and a privatized company.

Yet how effective was the compensation policy with its procedures for both of the compensators? This involved an element that represented output legitimacy. How do the compensators look back on the whole situation and the possibly achieved end results? In the end the effectiveness and acceptance of compensation policy differs between different projects. This is also visible with Nunspeet and DZH. Different compensation processes occurred and this influenced their opinions about the compensation policy, and the degree of consensus that was shown with the compensation policy. The difference between compensation projects was also emphasized during the interviews with the provinces. It comes down to the fact that every case is different. Does every project need a different working method then, and are only custom made measures possible to compensate? Standard procedures and equality represented throughput legitimacy. During interviews with DZH and Nunspeet it did not become clear if standard procedures were present, but it mainly appeared that custom made measures were applied in the projects. How can equal treatment (i.e. economic equity) be guaranteed if no standard procedures exist? For instance in the Nunspeet case it was known how many hectares of damage occurred and how much hectares was required to be compensated. It seems a link is present between these amounts, but the municipality sometimes missed the scientific support behind the compensation policy. Nunspeet experienced the policy as vague and not always legitimate since the policies did not always prescribe what to do in certain cases but consultants of the LNV were required for that. The municipality indicated improvements in the compensation policy would be desirable, which indicates a lower degree of output legitimacy was experienced. As Boedeltje *et al.* indicated "the extent that citizens are satisfied with the content of governmental policy depends on the fact if people reach their own goals and recognize their preferences in political decisions" (Boedeltje, M. & Cornips, J., 2004:6). It is possible Nunspeet experienced the compensation policy as less usable, since they do not recognize their preferences in it. Their goals were quite unattainable as well due to all the problems connected to the new Nb-wet. While DZH could reach their own goals with the compensation policy, which proves a higher level of output legitimacy. Nature was improved and they were able to profit from it themselves, because the water quality improved too by their actions. This involved a win/win situation (in which even the province profited). This again shows how the proceedings of the compensation process can influence the compensators and their contentment with the compensation policy. It can also be detected in the fact that Nunspeet desires a clearer (unambiguous) compensation policy, while DZH indicates to desire no changes in the compensation policy.

At last it comes down to how the local compensation practices sufficed the three levels of legitimacy, with its connected concepts. It appears to be quite clear-cut since the Hertenkamp project of DZH proceeded so well, while the projects of Nunspeet took so long and so much effort. When both cases are separately inspected, then DZH suffices the three levels of legitimacy extremely well. Nunspeet appears to experience a lesser degree of legitimacy, because certain criteria that represent legitimacy were not met during the De Kolk and Schaarweide projects. The levels of legitimacy could only be connected to the projects that have been discussed in this research. When comparing the legitimacy of both Nunspeet and DZH it becomes clear many differences exist. In first instance a difference exists between the compensators, as them being a governmental authority and privatized company. And they both found themselves in totally different situations. The projects also differ and different requirements were asked from the compensators (due to differing compensation policies, that is the new Nb-wet and IB). The duration of the compensation processes differed as well. In the end elements that represent equality can involve equal costs, same duration, equal availability of suitable ground, and accomplishment of the compensation entirely. These elements cannot be compared between Nunspeet and DZH, because these compensators find themselves in completely different situations. To prove equal

treatment one expects the elements that show equality to be the same when compensators find themselves in nearly the same situation. All the differences contribute in the extent that Nunspeet and DZH vary in the way they suffice of the levels of legitimacy. It remains difficult to say if the compensation process of DZH was more legitimate than the compensation process of Nunspeet. It still needs to be awaited how the end results are accomplished with the projects of Nunspeet. In the end every time it comes down to the fact that both projects differ greatly and they find themselves in different situations, which has consequences for the degree of legitimacy.

6.6 Relating levels of conformity to levels of legitimacy

It becomes even more interesting when the local compensation practices that become visible in this chapter are connected to the results gained from interviews with the provinces that have been described in chapter 5. Gelderland appeared to have implemented a more extensive provincial compensation policy than Zuid-Holland (i.e. the extent in which national compensation guidelines were processed). The compensation principle of Zuid- Holland still originates from 1997 and a lot has changed ever since (e.g. Nota Ruimte and 'EHS-spelregels' came into force). It is interesting to see that Nunspeet, situated in Gelderland, desires more practical information is worked out in the compensation policy. While DZH, situated in Zuid-Holland, has no problems with the compensation policy (which is remarkable since the compensation policy is described very briefly). Apparently the negotiation model in Zuid-Holland worked very well in the compensation project of the Hertenkamp. Ultimately the Hertenkamp seems to be an exemplary compensation project, and the projects of Nunspeet show how a project can be delayed by several factors. Although the municipality of Nunspeet also shows the cooperation between all involved parties that resulted into the approval of the plans after years had passed. The main point is that they succeeded in the end, and the process towards the approval is quite interesting to view.

Ultimately the large range of differences between the municipality of Nunspeet and DZH make it difficult to recognize a link between the levels of legitimacy and the levels of conformity. The legitimacy was sufficed more with DZH, but Zuid-Holland sufficed the levels of conformity to a lesser extent. While Nunspeet appeared to have sufficed the levels of legitimacy to a lesser degree, but the levels of conformity were sufficed quite well. It could have been expected that Gelderland would suffice the levels of legitimacy more since the levels of conformity were high, but the Nunspeet case proved otherwise. And the Hertenkamp of DZH proved that the compensation policy works very well in Zuid-Holland (while the levels of conformity were lower). However this only involved one practical case per province, which makes it impossible to generalize. The findings of one practical case cannot give an idea about how all compensation projects are implemented in a province (i.e. when connected to the levels of legitimacy). It was always obvious more research is necessary to study the levels of legitimacy, regarding the implementation practices of compensation. Although Nunspeet and DZH did give insight into how compensation is experienced, by connecting the projects to the levels of legitimacy. This gave an insider's point of view, which was presumably not studied before in this way.

7. Conclusion / Discussion

Next the finding of this research will briefly be described in the conclusion & discussion.

7.1 Conclusion

The developments surrounding the implementation practices of nature compensation have been viewed during this study. First insights were gained in the provincial implementation practices of the nature compensation policy, to detect similarities and/or differences in implementation of compensation between six Dutch provinces. Next to this, moral criteria are examined by gaining insights of how legitimate the policy implementation practices, regarding nature compensation, are for the actual compensators. These two topics, concerning provincial implementation practices and the legitimacy of these practices, will be explained next. A brief overview will be given of the findings, and this is structured by answering the research questions.

Implementation practices at a provincial level

First the research questions connected to the provincial implementation practices will be discussed. Attention was paid to the national compensation policy and how subsequent decision-making took place at the provincial level. This research was focused on how the Dutch provinces implemented nature compensation, and especially the similarities/differences in implementation practices between the provinces were of interest. Finally it became visible which provinces are ahead with implementing compensation policy and which provinces are following this or falling behind. Explanations are given next per research question.

1. *What are the characteristics of national nature compensation policy that sets the context in which provinces implement compensation policy?*

First of all the national compensation guidelines needed to be inspected in order to study how subsequent decision-making of nature compensation policy took place. The national compensation guidelines were registered in a spatial policy and a nature conservation policy. This concerns the Nota Ruimte and 'EHS-spelregels', which forms the foundation behind nature compensation policy. These documents provided information that was used to study how the national compensation guidelines have been implemented by the provinces.

2. *How is the nature compensation policy implemented at the provincial level and which implementation problems arise?*

The three levels of conformity were used to study the implementation practices of the provinces. This includes plan conformity, conformity of behavior, and final conformity. The finding will be explained next per level.

Plan conformity was studied by paying attention to the implemented area categories in which the compensation policy is in force, and to which extent the procedures of the 'EHS-spelregels' were sufficed. Firstly all the provinces have implemented the required area categories, and sometimes additional area categories were even added. Area categories can differ in descriptions in policy documents. For instance, provinces sometimes registered special guidelines for certain areas of importance (e.g.

Waddeneilanden, Veluwe, Utrechtse Heuvelrug, etc.) or guidelines for certain benchmark species (e.g. meadow birds). The compensation policy can also be adjusted due to scarcity of space, through which for instance qualitative compensation and custom made measures become possible sooner than the 'EHS-spelregels' prescribes. In the end all the areas with certain nature protection regimes that are connected to nature compensation were implemented, while among the provinces small differences exist. Differences also appeared with the implementation of the procedures from the 'EHS-spelregels'. Often the 'no, unless' rule is literally copied for the larger part or elements of it. Just as components of certain types of compensation are largely taken from national guidelines. Compensation is always adjusted to the larger framework behind the regional plans. This sometimes causes for certain elements to be assigned differently, but usually the main idea behind it is the same. The big difference between provinces is the extent in which the compensation policy was implemented. Some provinces preferred abstract and compact compensation policies, while other provinces have worked out compensation policies extensively. Generally the provinces with a more detailed compensation policy sufficed the criteria of plan conformity to a greater extent. The provinces with briefer or older compensation policies often missed procedures that have been described in the 'EHS-spelregels'. Finally it appeared that certain instruments to guarantee compensation fulfillment were implemented in provincial compensation policies. All the provinces acknowledge the need for embedding compensation in spatial planning, but not all the provinces require bank warranties or penalties for when the realization date is exceeded. It appeared that none of the provinces have ever applied penalties when a compensator exceeded the final realization date. Besides the monitoring and evaluating of compensation projects has not been implemented by all the provinces. Certain provinces do not see the need for evaluations, while other provinces indicate work is still needed on this, and other provinces have a registration/monitoring system in place. Besides the realization of compensation projects in the field needs to be verified to discover the correspondence to the actual plans. This brings us to an obscurity of who is responsible for verifying the realization of compensation in the field. Should municipalities verify if projects are being fulfilled as agreed on, or should the province have the total overview of the compensation projects with insights on how far a project is? It can also involve a correlation between a province and municipalities, because it is possible for provinces to make the overview of data received from the municipalities. Verification in the field does not occur in a structured way and all the provinces can work on this, although certain provinces are further with this than others. During this research on plan conformity it appeared that this last part of the compensation process mainly needs attention from all the provinces. Ultimately insights in the progress and accomplishment of compensation duties can only be obtained through monitoring/evaluating compensation projects and verifying the results in the field.

During the study on plan conformity it was also of importance to focus on the influences that new policies could possibly have on the existing provincial compensation policies. The implementation of the new Wro in 2008 will strengthen the position of lower authorities (i.e. province and municipalities) due to the decentralization of responsibilities and tasks. It did not become clear which consequences this will have for the provincial compensation policies. Certain nature protection regimes can be registered in an ordinance now, and through this the compensation policy will probably be added as well since it is connected to these regimes. But the question remains how the decentralization of tasks and responsibilities will influence the compensation process and the fulfillment of compensation duties.

By studying **conformity of behavior** insights were gained about if and how compensation policy contributes to a change in behavior. Which behavior is to be considered as in

accordance with the provincial compensation policy, and which behavior is not in accordance to those decisions? From plan conformity it appeared that provinces differed in their implementation of the national compensation guidelines, which could lead to differences in appliance of compensation, which leads to differences in behavior. Some provinces have detailed compensation policies while others prefer short and abstract compensation policies, or it is indicated compensation policies still need elaborations. In the end all the provinces have the possibility to apply custom made compensation measures, because the provincial compensation policy documents leave space open to process the large range of different compensation projects. This is also a reason why the provinces will likely show behavior in accordance of compensation policy, because the framework was set up rather broadly. During this research it appeared that collaborations on compensation conditions are sometimes perhaps more valued than detailed guidelines from the regional plan. Creative solutions can even arise when parties know the compensation policy. For instance, values can be added to an area through nature compensation. However the initiative takers will always look for the boundaries, involving what is accepted as compensation and what is not accepted. During the compensation process information supply remains essential, for both the initiative taker as for involved municipalities. Finally it comes down to how usable the intended users experience the compensation policy. The usability degree was used to find out to which extent involved parties know of the content of the compensation policy, and to which degree it was applied. The provinces indicated nowadays everyone is aware of the compensation policy, but explanations and consultations remain necessary about the content of the compensation policy and the appliance of it. However it is a known fact that compensation can no longer be avoided.

However, behavior that was not in accordance to the provincial compensation policy was detected as well. In the past it appeared that projects are not always embedded in spatial plans, and private law agreements are sometimes missing too. Not to speak of bank warranties and penalties. During this research it became clear that bank warranties and penalties were not forced by municipalities when compensators exceed their final realization date. Or at least it was never heard of. How should the fulfillment of compensation duties be secured when the instruments are not used? Is compensation policy a paper policy or is it part of daily policy practices? It seems that the juridical requirements connected to compensation duties does not always guarantee the fulfillment of compensation. Who will force the fulfillment of compensation duties? In the end a lot is registered in plans, but the execution of it often deviates in practice. The registration and monitoring of projects, and evaluating the whole process, should provide more insights. In the end behavior changes/adjusts due to evolving compensation policy. The compensation policy can be influenced by several factors. For instance the implementation of new policies can affect the compensation policy, and through this influences the behavior connected to it. Another example can involve the presence or lack of public and political support for certain compensation projects. This can strongly influence the behavior towards the implementation practices since it can start/delay/stop a project. Thus influences on provincial implementation practices should be kept in mind while studying a change in behavior, concerning the implementation practices of nature compensation.

Ultimately **final conformity** is focused on how the initial plans (i.e. varying from national guidelines of the Nota Ruimte and EHS-spelregels to the provincial compensation policy to the actual agreements/compensation plans) have been followed up by sufficing it during the realization of compensation duties in the field. Final conformity is not just a simple sum of the other levels of conformity (i.e. plan conformity and conformity of behavior), but it also includes in which circumstances decisions were taken and/or in which context a compensation procedure took place. It appeared that studying final

conformity is quite difficult since only a small portion of compensation projects is finished by now that can be looked back on, while the majority still exists of ongoing compensation projects. Besides not every province had monitoring data, evaluations, and verifications in the field, that could be used to compare the realization of compensation to the initial plans. To overcome these difficulties the effectiveness criteria of Sabatier and Mazmanian were used to gain more insights on the implementation of compensation policy and the realization of it in the field. Furthermore these criteria could be connected to plan conformity, conformity of behavior and the context, which resulted in a framework to inspect experiences with accomplishing compensation according to the plans. The provinces shared their experiences about: the clarity and consistency of policy objectives, the structure of the implementation process, commitment of implementing officers, support of interest groups and (executive/legislative) sovereigns, and the possible existence/influence of detrimental changes in the socio-economic framework conditions. But the main question remains if the goal behind nature compensation of no net loss of values, regarding acreage, cohesion, and quality, is actually reached. However it can be difficult to say something on this, since the development duration of compensation can take from five years to a hundred years. The compensation policy came into force quite recently then (i.e. in 1995), and it is difficult to estimate the progress of compensation projects that are still being executed in the field due to a longer development time. So many factors are related to successfully or unsuccessfully realizing compensation projects. Just as the Minister of Agriculture, Nature and Food Quality confirms:

“The effectivity of legislation on nature is not easily measured. Although she indicated, in a letter to the Lower House, that nature policies can have a preventative effect, regarding the protection of areas in which negative influences can be warded off. Another positive consequence of nature policies is the effect on decision-making and planning processes with both the government as companies. A more conscious consideration is made on the possible effects that intended interventions have on flora and fauna. The Milieu- en Natuurplanbureau (Dutch acronym: MNP) indicated nature policies contribute to an ecological gain in this way.” (Verburg, G., 2008)

Although previous studies of Gijsen *et al.*, the VROM-Inspection, and the Rekenkamer showed compensation duties have not always been realized in practice. The Natuurbalans 2008 (nature balance) even indicated the compensation policy for nature in the NEN was not coming from the ground (Planbureau voor de Leefomgeving, 2008:26). Constantly it comes down to the monitoring and evaluations of compensation projects, and how to force the proper realization of compensation duties. Nowadays there are several ways to legally register compensation duties, and when necessary instruments are in place to force compensation to be fulfilled. How come proper fulfillment of compensation is rarely forced? In the end the question remains: ‘Is compensation policy a paper policy?’ Compensation policy scores good on paper, but apparently this is not a guarantee for the fulfillment of compensation duties. To which degree are compensation duties completed nowadays? It comes down to the last part of the compensation process, which in a way means the provinces have already come long way, and generally implemented the larger part of the national guidelines. Although the parliament “decided more unity and consistency is necessary in the division of authorities, concerning legislation of nature”(Verburg, G., 2008). The ‘EHS-spelregels’ could possibly lead to this, since it should bring more unequivocalty. Not all the provinces have entirely processed the ‘EHS-spelregels’ into their provincial compensation policy yet, which is understandable since the ‘EHS-spelregels’ is from 2007.

To close with a notion on the **degree of conformity**. After a careful analysis of the subsequent processes of decision-making it appeared conformity was found, since national compensation policy can be recognized in provincial compensation policy and this structures how municipalities bring compensation into practice with the initiative

takers. Although when conformity is found, it is not possible to automatically speak of use and performance of that policy (De Lange, 1995:60). The last part of the compensation process (i.e. the guarantee of compensation fulfillment, monitoring and evaluation of compensation projects) does not always occur as the national and/or provincial compensation policies prescribe. But provinces are working on this last part of the compensation process, or provinces have consciously decided to leave their provincial compensation policy as it is. Ultimately the question remains if a higher level of conformity leads to more sufficiently realized compensation projects? For instance does a higher level of plan conformity (i.e. detailed compensation policies) lead to more realized compensation projects through which a higher degree of final conformity is reached? It appeared that the provinces with a higher level of plan conformity also assembled more information on the monitoring of compensation projects and cooperated with evaluations in which certain projects were verified in the field. This shows that the provinces with a higher level of plan conformity are further ahead in discovering which results are booked with the implementation of nature compensation, which could lead to information on where improvements are necessary (e.g. Noord-Brabant and Gelderland improved their compensation policies after collaborating on an evaluation of the VROM-Inspection in 2006). However it remains difficult to judge if a higher level of plan conformity and conformity of behavior lead to a higher level of final conformity. In the end compensation projects need to be monitored and evaluated in order to get insights about how plans correspond to the actual realization of compensation in the field.

3. Which differences and similarities exist, regarding the implementation practices of six provinces?

Differences and similarities between the implementation practices of the six provinces were quite extensively mentioned in the elaboration of the previous research question on the levels of conformity. The main difference between provinces includes the contrast between compact/abstract compensation policies and extensive compensation policies. Besides provinces differ in their experiences with applying the different types of compensation. For instance Friesland gained most experiences with forest compensation, and Zuid-Holland had several experiences with red list species, while other provinces more frequently experienced measures of the NEN. However all the provinces gave similar statements on the implementation of the new Wro, since it was not clear yet which consequences this would have for the compensation policy. Another similarity between the provinces involved their notion about the difference between large and smaller projects, and even differences between municipalities. Since the projects differ so much they need to be viewed per project. Additionally it was indicated that you always have to inspect in which framework a project fits and proceed from there on. The difference between past and current compensation procedures and practices became quite obvious too. A lot has changed since the compensation policy came into force for the first time in 1995. However improvements to the last quarter of the compensation process seem to be desirable, since the monitoring and evaluations of compensation projects can produce valuable information from which improvements for further implementation practices of nature compensation can be made.

4. How can provinces be distinguished, in terms of forerunners, followers and laggards?

Finally, it was possible to distinguish provinces into forerunners, followers and laggards, by comparing how the provinces sufficed the three levels of conformity. Noord-Brabant and Gelderland were ahead with implementing compensation policy. Evaluations are available and they are the only provinces with registration systems. Then Utrecht and Zeeland followed, because they have worked out the national guidelines quite well but no registration system is in place yet. Finally Friesland is still in the early phases of implementing compensation, and Zuid-Holland has a brief compensation principle in

place that originates from 1997. This shows one difference to the research of Kuindersma *et al.* in 1999, which involves a shift between Zuid-Holland and Utrecht (i.e. back then Zuid-Holland was a follower and Utrecht was lacking behind). In ten years the national compensation guidelines were elaborated, while certain provinces did the same with their provincial compensation policies. Yet it is possible that the processing of national guidelines does not directly lead to more realized compensation projects. The provinces can differ in how extensively they want to work out the compensation policy (i.e. some describe it in detail, while others prefer it more abstractly). The working method that is applied, concerning compensation, is essential. Ultimately the results in the field can only tell which provincial implementation practices are most effective and results in the most realized compensation projects.

Legitimacy of implementation practices

Apparently provinces differed in their implementation practices of nature compensation, but how legitimate are these implementation practices for the actual compensator? Next two research questions are connected to discovering the legitimacy of nature compensation policy.

5. *How legitimate are different provincial implementation practices for nature compensators?*

Two cases were viewed to inspect the legitimacy of implementation practices. It involved a governmental authority and privatized company. The municipality of Nunspeet was studied with their project of a new business area De Kolk and the compensation project of the Schaarweide. Next to this the Dune Water Company Zuid-Holland (acronym: DZH) was required to compensate due to a infiltration decision (Dutch acronym: IB) and this resulted in the Hertenkamp compensation project. The three levels of legitimacy (i.e. input-, output- and throughput legitimacy) were used to study how legitimate the current implementation practices are for these compensators. Ultimately it appeared that the Hertenkamp project of DZH reached higher levels of legitimacy than De Kolk business area and Schaarweide compensation project of the municipality of Nunspeet. How this conclusion is formed is described next.

With **input legitimacy** attention was paid to how the compensators could contribute to the compensation process and how they were able to influence the negotiations. Firstly it became clear both the municipality of Nunspeet and DZH acknowledge the polluter pays principle. There was no point in resisting the compensation policy because it is inevitable, but the design of the plans was discussable. This was also a way in which the compensators could contribute, since they were able to shape the plans. Both compensators included key actors in the designing phase, and informed other parties (even giving them an opportunity to participate to a certain degree). DZH indicated that not much resistance existed against the Hertenkamp project, since everyone noticed the advantages this project would bring along. While the municipality of Nunspeet had to deal with quite some resistance. It seemed that Nunspeet had to put more effort in convincing certain parties of the necessity of the new business area. This shows a difference in the degree of input legitimacy, because DZH had no problems during the compensation process and Nunspeet had to overcome quite some difficulties during the negotiation phase. However in both cases the provinces had an essential role of supervising the whole process. The province offered advice and guidance all through the compensation process. The relation of DZH and the province of Zuid-Holland seemed to be really excellent. DZH could take over provincial compensation duties, which resulted into grants that could be used for the Hertenkamp project. This proves a high level of

input legitimacy is reached, since DZH was involved in important decision-making. On the other hand the relation between Nunspeet and the province had to be restored, because the municipality still needed to settle old debts (in which compensation duties had not yet been fulfilled). Due to resistance of several different parties (varying from the province, organizations to neighboring citizens etc.) perhaps a lesser degree of input legitimacy was visible. In the end the plans of the Schaarweide showed the dedication of Nunspeet for these projects, and relations improved again with the province and other involved parties.

Next **output legitimacy** showed how Nunspeet and DZH looked back on the whole compensation process and the accomplished results. The main difference between DZH and Nunspeet is how the compensation processes passed. The difference specifically involves the duration of the compensation process and the existence or non-existence of problems that influence the duration. The prehistory of the De Kolk project strongly influences the experiences of the municipality of Nunspeet. An agreement from 1993 indicated a new business area could be constructed, when barracks were removed and this (i.e. 80 hectares) needed to be added to the Natura 2000. This happened and the agreement of 1993 was sufficed, but still more compensation needed to be fulfilled, because in 2005 the new Nb-wet brought along stricter regulations. This is an interesting fact because the compensation policy does not seem to anticipate the rising of new policies. How to deal with agreements that have been made in past and new policies coming into force that are of influence to these agreements? Should policy always be applied as it was registered in official policy documents. Or should exceptions be possible, because what is otherwise the value of previously made agreements then? Anyway it caused quite a disturbance in the compensation process, which could have led to a lesser degree of output legitimacy. The municipality had to deal with many parties during these projects, and even within the municipality different perspectives were present. In the end an extensive project plan of the Schaarweide was approved, just as the development plan of De Kolk. The long desired implementation of projects can finally start in 2009. In the case of DZH the compensation has already been realized according to the plans. Flora and fauna species are inventoried and developments in the Hertenkamp area are observed. Next to this an evaluation is planned by applying air photography. This was not possible the last three years due to bad weather and traffic at Schiphol. Furthermore DZH had no problems during the compensation process, and only looks back on it in a positive way. The open communication and the good contact were essential. In the end DZH could reach their own goals while implementing the compensation policy, which proves a higher level of output legitimacy. Nature was improved and they were able to profit from it themselves, because the water quality improved too through their actions. This involved a win/win situation (in which even the province profited). Finally it becomes clear that DZH did not experience such a prehistory as Nunspeet did. This should probably be kept in mind when comparing the different mentalities of both cases. For example Nunspeet indicated more unequivocality and clarity is desired on how compensation should take place and to which extent compensation is required. This is experienced as quite vague now, and improvements in the compensation policy can possibly give more direction. While DZH is content with the compensation policy as it is, and did not seem to desire improvements in this policy. It becomes visible that the compensation processes of both cases differ very much, which is of influence on the degree of legitimacy that is experienced. This is not only applicable for output legitimacy, but it is also of influence on input- and throughput legitimacy.

Lastly **throughput legitimacy** involves how legitimate the compensation procedures were experienced. In first instance compensators need to be aware of the compensation policy and understand the content to be able to apply it. A difference in awareness of the compensation policy occurred between the municipality of Nunspeet and DZH, since the

new Nb-wet forced Nunspeet to get acquainted with in-depth knowledge of this new policy. Otherwise the project could not proceed if the municipality did not suffice the new criteria of the Nb-wet. Another aspect of throughput legitimacy involves equal treatment of compensators. For instance financial equity can be arranged by implementing a financial framework, because then every compensator needs to suffice the same financial guidelines that results in equal costs for compensators in similar situations. But both Nunspeet as DZH had not really detected a financial framework behind the compensation process. Although DZH studied how finances could be structured, by using a model that can calculate the costs for certain compensation duties. It appeared such a financial framework was not possible yet, due to the large range of factors that are involved. Although it is quite interesting people are looking into this matter. Perhaps in the future an extensive/comprehensible financial model can be designed, which can be used to predict compensation costs, and possibly be useful as a reference. Next to this Nunspeet indicated to be interested in a compensation bank (and perhaps at national level). This also involves financial considerations for dealing with compensation duties. Another example of how equal opportunities can be created for compensators is through applying standard procedures. During the interviews with DZH and Nunspeet it did not become clear if standard procedures were present, but it mainly appeared that custom made measures were applied in the projects. For instance the province and DZH both profited from a collaboration, concerning the land dividing road. Provincial compensation duties were covered by DZH and this resulted into grants that could be used for compensation in the Hertenkamp. This example showed how the province took the interests of DZH into account, which caused a higher degree of throughput legitimacy. Such an opportunity did not occur with the Nunspeet case. Although in 1993 an opportunity was created when an agreement made it possible for the municipality to develop a new business area, if the Generaal Winkelmankazerne was removed through which 80 hectares was added to the Natura 2000. This agreement would have been sufficed if the new Nb-wet hadn't come into force with stricter legislation. Some members of the municipality experienced the extra compensation as compensating twice. It has not always been experienced as legitimate, since sometimes the municipality missed scientific background (e.g. compensating for endangered bird species that are not present in the area). It was indicated that this policy is quite strictly forced, while the content of that compensation policy does not clearly prescribe what to do in these circumstances. This process shows a lesser degree of throughput legitimacy was experienced. Finally the compensation procedures in the Nunspeet case were long and troublesome, but cooperation and much effort have led to the approval of the plans in 2008 and activities can start now. While DZH had a relatively quick compensation process without any complications, and the Hertenkamp has already been realized according to plans (which has only resulted into positive reactions).

To close with a notion on the **degree of legitimacy**. Finally DZH seems to be very pleased with how the Hertenkamp project proceeded and it appears to be an exemplary compensation project. While the municipality of Nunspeet more often pointed out the problems connected to their projects. The projects of Nunspeet give an indication of how several factors can influence the progress of the compensation process, and how difficulties in the compensation process can be overcome. It becomes clear that DZH experienced higher levels of legitimacy than the municipality of Nunspeet. How the compensation process proceeded strongly influenced the degree of legitimacy. But do higher levels of input- and throughput legitimacy lead to a higher level of output legitimacy? It appears that DZH scores higher for input-, throughput-, and output legitimacy. It seems that the three levels of legitimacy are so interrelated that when one level of legitimacy is experienced to a lesser extent, the other levels of legitimacy will be experienced to a lesser extent as well. This also counts the other way around. In the end only two local compensation practices were studied to determine the legitimacy of the implementation

of nature compensation. It is of interest to study more local compensation practices in order to gain more insights on the legitimacy of compensation policy.

6. How are the provincial implementation practices related to the legitimacy of compensation policy for nature compensators?

Ultimately the large range of differences between the municipality of Nunspeet and DZH make it difficult to recognize a link between the levels of legitimacy and the levels of conformity. The legitimacy was sufficed more with DZH, but Zuid-Holland sufficed the levels of conformity to a lesser extent. While Nunspeet appeared to have sufficed the levels of legitimacy to a lesser degree, but the levels of conformity were sufficed quite well. It could have been expected that Gelderland would suffice the levels of legitimacy more since the levels of conformity were high, but the Nunspeet case proved otherwise. And the Hertenkamp of DZH proved that the compensation policy works very well in Zuid-Holland (while the levels of conformity were lower). However this only involved one practical case per province, which makes it impossible to generalize. The findings of one practical case cannot give an idea about how all compensation projects are implemented in a province (i.e. when connected to the levels of legitimacy). It was always obvious more research is necessary to study the levels of legitimacy, regarding the implementation practices of compensation. Although Nunspeet and DZH did give insight into how compensation is experienced, by connecting the projects to the levels of legitimacy. This gave an insider's point of view that can be interesting to study the impact compensation policy has.

Final remarks

Eventually it is not only about what provinces have not implemented yet, but the progress that has already been made with implementation practices is just as important. Differences and similarities are of interest when detecting patterns between provinces. This research shows provinces are generally similar in implementing the main concepts of compensation, but differ quite much in the extent that is registered in official policy documents. It seems this also influences the working method that is being applied in practice with the implementation of compensation. More in-depth research on provincial implementation practices, and achieved results, can be of interest in order to study which implementation practices are most effective. With this it is of interest to study how the municipalities operate and the separate compensation projects can add valuable information on how compensation policy is realized/experienced in the field. A start was made in this research by studying two practical cases on legitimacy. These two cases showed many differences, just as the provinces had already indicated that no compensation project seems to be the same. The insider's point of view can be valuable during the progress of implementation practices, and this can possibly be studied by looking into compensation projects on a larger scale, while focusing on legitimacy.

I would like to close with a quote of Mahatma Mohandas Ghandi, since this quote is quite relevant to the implementation of all policies. Especially in this case, with the implementation practices of compensation policy (in which custom made measures seem to be central). In the end the implemented compensation measures express how the Netherlands prioritizes the conservation of nature and precious landscapes.

“Action expresses priorities”

7.2 Discussion

The discussion is divided into four sections, including thoughts on the applied theories, methods, results and finally suggestions are made for future research.

Theories

The question remains how the analytical framework contributed to this research. First of all two sections could be detected, focused on provincial implementation practices and the legitimacy of implementation practices for the actual compensator. The theory that was used to research how implementation practices took place at a provincial level involved the three levels of conformity. This was used to detect patterns (i.e. differences and similarities) between six Dutch provinces. During this study information was gained on: the key actors in the compensation process, the resources that were used, and the rules of the game. It appeared that another analytical perspective could have been chosen instead of the levels of conformity of Maurice de Lange. The Policy Arrangement Approach (PAA) which was designed by B.J.M. Arts; P. Leroy and J.P.M. van Tatenhove describes four dimensions that are all interrelated, including: actors/coalitions, rules of the game, resources/power and policy discourses. This approach could also have shown how subsequent decision-making took place, regarding the national compensation policy. It would have been of special interest to view how these four dimensions connect the key actors (i.e. the province, municipalities and compensators) and the rules of game (i.e. the Nota Ruimte and the 'EHS-spelregels'). The implementation practices could be inspected in a very detailed way, while the behavior of involved parties is also studied, and the end results could be connected to the four dimensions as well. Although through the PAA so many connections can become visible, due to the four dimensions. The levels of conformity is divided in three elements, which were exactly covering what needed to be verified. Another reason for choosing the levels of conformity involves a former research of Kuindersma *et al.* from 1999, who already applied this method. The results from this research were meant to be compared with results from the report of Kuindersma, in order to view developments that took place in 10 years.

Thus this research on the levels of conformity can produce interesting insights in the appliance of conformity. De Lange applied the levels of conformity on spatial policy, while in this research the focus is on nature policies. In 1999 Kuindersma *et al.* studied plan conformity, concerning implementation practices of nature compensation. While this current research also studies conformity of behavior and final conformity. It appeared to be difficult to inspect final conformity, since this involves the comparison between accomplished compensation duties in the field and the initial plan. Final conformity is not just the sum of the other levels of conformity, but the context in which decisions are made is also of importance. Currently not many compensation projects have been finished yet, since the majority still exists of ongoing compensation projects. The correspondence between results of compensation fulfillment and the initial plans can best be compared when projects have finished. Besides, frequently monitoring data and evaluations on the progress and/or accomplishment of compensation projects are not available. Such information is so very useful when studying final conformity, because it gives an overview of the results that are booked in practice. These difficulties complicate the research into final conformity, which is the reason for adding the effectiveness criteria of Sabatier and Mazmanian. The effectivity of compensation policy can give insights on how this policy is implemented and which results are booked until now. It was possible to connect plan conformity, conformity of behavior and the context to certain effectiveness criteria. Finally these criteria were studied by focusing on the examples

that were given during the interviews with the provinces. Although extra information from the practical cases, situated in Zuid-Holland and Gelderland, were used as well. In those two cases an insider's point of view of compensators was used while examining the effectiveness criteria. With the other provinces only their experiences were used to study the effectiveness criteria. In the future it might be interesting to expand the research on effectiveness criteria to other involved parties since these criteria are also focused on interest groups, sovereigns, and implementing officers in general. Now only the experiences of the provinces were used, but the experiences of other parties connected to the effectiveness criteria are also of interest.

Next theories connected to the levels of legitimacy are discussed. Concepts like the polluter pays principle and rule of equity were added to the levels of legitimacy in order to study the experiences of the actual compensator. This all lead to a more detailed framework in which the legitimacy of current local implementation practices could be examined. The effectivity and satisfaction with compensation procedures was also inspected to get insights into how the compensator experiences the end results and the whole process towards this accomplishment. It might be confusing that effectivity is also discussed in this section, but the effectivity of compensation policy is also an experience through which the compensator can express their thoughts about this policy and the results it brings. The effectiveness criteria of Sabatier and Mazmanian were not specifically used in this section, but the interviews with the compensators do give insights on how they were sufficed in their cases. Altogether the concepts connected to the levels of legitimacy give a detailed overview of how the legitimacy of implementation practices can be studied. This gives the opportunity to gain an insider's point of view on the implementation of compensation policy, which can be helpful in determining the impact nature compensation has and where improvements are desirable.

Methods

This research involved literature studies and interviews. First of all previous studies on nature compensation were viewed to gain knowledge on this research topic. Then the section on the provincial implementation practices included interviews with six provinces and the policy documents in which these provinces had worked out their compensation policy. And finally the section on the legitimacy of local implementation practices included interviews with two compensators and information on their interventions and compensation projects. The internet was used to find information on the plans of the two practical cases and the media coverage was of importance as well. Besides internet was also used to find more information on the provincial implementation of compensation policy. In the end the question remains if this combination of gathering information for this research was useful? The combination of interviews and policy documents to determine how implementation practices were taking place at a provincial level was sufficient enough to gain insights that could answer the connected research questions. The combination of interviews and media coverage was also useful to find out how legitimate compensation practices are for compensators. Although it is was quite difficult to find a link between the levels of conformity and the levels of legitimacy, since only two practical cases (i.e. one per province) were not enough to make real connections. Although the comparisons did lead to interesting findings. From the start it was known that two practical cases was quite limited to formulate conclusions from, but to gain insights and an insider's point of view would possibly result in valuable information about how compensation is implemented in practice. It can also be argued that only interviewing the compensator is limited, because many other parties are involved in the compensation process. To gain a more complete overview it would be interesting to study how other connected parties of a certain compensation project experience the

legitimacy of the implementation practices. It is definitely advisable to study more compensation projects on the levels of legitimacy in order to gain a more complete overview of how the compensation policy is experienced by compensators. This could possibly lead to desirable improvements in the provincial compensation policies.

Finally the last discussion points connected to the applied methods include some points that are specifically focused on the interviews, which is described next:

- Interviews with two practical cases may be limited, due to limited time, but this was a conscious decision. It was of interest to gain an insider's point of view on the legitimacy, concerning implementation practices of nature compensation.
- Dutch interviews needed to be translated to English. The interpretation and choice of words can possibly differ from what the respondent meant with it.
- Only interviews with provinces were chosen to study the implementation practices. Provinces have a key role in implementing the provincial compensation policy. However municipalities execute this policy in practice. It can also be of interest to study how municipalities suffice the three levels of conformity.
- It was difficult to find two compensators, who wanted to participate in this research on legitimacy. And it was especially difficult to find a private owner. From the interviews with the provinces it appeared a comparison between a large company and an individual private owner would be interesting, since the larger compensation projects usually proceeded better than the individual compensators. However the provinces were never really asked if they could introduce small cases, because this idea appeared during the interviews. In the end a comparison between a governmental authority and a privatized company could be made. Before that some cases declined to participate:
 - Amersfoort Zoo indicated to have no interest in such a research. Their relation with the province is good and no problems were experienced, thus they did not see the purpose of participating in this research.
 - The Efteling indicated that no one was available to participate in this research, and the contact person was only indirectly involved. It was also noted that they thought legitimacy was connected to how the law was sufficed, instead of how fair something went. Besides they did not think they could use this report, and the Efteling only participates in studies that can be useful for them.
- Thus results from the two practical cases is not enough to make generalizations about how the levels of legitimacy are sufficed in certain provinces. It was not possible yet to detect a real link between the levels of conformity and the levels of legitimacy, because of the limited amount of practical cases. The consequences that higher/lower levels of conformity have on implementation practices was not completely known either. However results from these two cases are informative, because presumably compensation policy has not been studied yet by using the three levels of legitimacy. It is recommended to repeat this research with more compensators, in order to gain a more complete view of how the three levels of legitimacy are sufficed. Compensation projects within a province can be compared, but before provinces can be compared on legitimacy many compensation projects should be studied within a province. Otherwise the legitimacy is influenced by too many different factors (as shown in the results of the two studied practical cases).

When the interviews were taken it was indicated that mainly compensation measures connected to the NEN were discussed (i.e. Zuid-Holland and Utrecht brought this up). The forest policy, flora and fauna policy, nature protection act were mentioned to a lesser extent. Perhaps the NEN was discussed more, because the emphasis was on how the 'EHS-spelregels' were sufficed. Although in the beginning of the interviews it

was requested to talk about all the types of compensation. This also differed per province, since Friesland had more experiences with forest policy and Zuid-Holland mentioned the flora and fauna policy several times. In the end it depends on the experiences that the provinces have gained through the years.

Results

Are the results of this research similar to the results of previous studies, or does it provide new insights, or are former results contradictory to this research? Firstly the provincial implementation practices are discussed in relation to the three levels of conformity. In advance it was known that plan conformity has frequently been researched before in other studies, like for instance Kuindersma *et al.* in 1999, Gijsen *et al.* in 2003, VROM-inspection in 2006, Rekenkamer in 2007. Those studies, just like this report, indicate more attention is necessary for the last part of the compensation process (i.e. the monitoring, evaluating and verifying of compensation projects). For instance Gijsen *et al.* indicated: “in theory the authority responsible for providing the permission, license or exemption is also responsible for checking if the compensation is actually applied (Gijsen *et al.*, 2003:5.2). This is confirmed in this report. Usually municipalities provide the permission, license or exemption, but the verification of compensation projects in the field does not occur structurally. Besides not all the provinces keep track of monitoring data or evaluate the progress. Gijsen *et al.* also showed that “information on projects, concerning nature compensation, are scattered under different organizations and persons” (Gijsen *et al.*, 2003:5.2). It appeared that no central institution exists for the registration of nature compensation. This was also the case in this research, while only two of the six provinces had a registration system in place. And rarely actions are taken to still force the accomplishment of compensation, if compensation duties are not fulfilled before the final realization date exceeds. In the end the Nota Ruimte (2006) and ‘EHS-spelregels’ (2007) have quite recently been implemented. That is also why it was of interest to study plan conformity yet again, while several studies have done this before (but not since the ‘EHS-spelregels’ have been implemented). However since these policies are quite recent it has not given the provinces much time to fully implement all details given in these frameworks. This became visible since some provinces suffice the procedures of the ‘EHS-spelregels’ to a larger extent than others. Finally the ‘EHS-spelregels’ notes that “in 2008/2009 the central government and provinces will consult municipalities to see which results are booked” (LNV, 2007:41). This should give a closer insight on how the ‘EHS-spelregels’ are being implemented.

Another recent development involved the implementation of the new Wro in 2008. During the interviews with the provinces it often did not become clear how the new Wro would be implemented, and which consequences this could have for the compensation policy. It seemed provinces could be waiting on what the central government will expect from them. Or were provinces waiting on each other to see how the new Wro is shaped? It remains to be seen how this will proceed in the provinces. It can be of interest to research which effects the new Wro has on implementation practices of compensation. This research was also focused on conformity of behavior and final conformity, which is an addition to former studies. It appeared that people are becoming more aware that nature compensation is required when interventions are planned in protected nature areas. Compensation cannot be avoided any more. The effectiveness criteria of Sabatier & Mazmanian were used to inspect final conformity, but only after using these criteria it appeared that weights should have been given to certain criteria. For instance proving the causal theory (i.e. no net loss of values) is of great importance, since it is a way to examine the success of this policy.

Next it became clear that legitimacy, concerning implementation practices of nature compensation, was presumably not studied before. This part of the research is limited since only two cases could be examined, but it did give an insider's point of view. For instance it was very interesting to see which influence the implementation of new policies can have. The municipality had to deal with stricter regulations of the new Nb-wet in 2005. An agreement of 1993 involved the removal of the Generaal Winkelmankazerne through which 80 hectares were added to the Natura 2000, and in return a new business area De Kolk would become possible. This agreement was sufficed because 80 hectares of ground was added to the Natura 2000, but extra compensation on top of that was still obligatory due to the stricter Nb-wet. This is an interesting fact, because the compensation policy does not seem to anticipate the rising of new policies. How to deal with agreements that have been made in past, and new policies coming into force that are of influence on these agreements? Should policy always be applied as it was registered in official policy documents (like in this project of Nunspeet). Or should exceptions be possible, because what is otherwise the value of previously made agreements then? An example in which compensation was not that strictly required was given by Friesland during the interview on provincial implementation practices. A farmer chopped down trees for which the Forest policy required compensation. However those trees were an experiment in the past, and caused implementing officers to differ in opinion. Some think forest policy is forest policy, which needs to be followed. While other implementing officers thought the trees should not be forced to be compensated, since it was an experiment anyway. In the end a judge decided that compensation of those trees was not necessary in this case, since it involved trees that were planted during an experiment. This proved that exceptions exist in the way compensation is implemented. In the end the two practical cases differed quite much, which resulted in a wide range of experiences, although similarities could be detected on certain important topics. Problem areas could be detected in the local implementation practices of nature compensation, by gaining the insider's point of view. However it also became visible how well a compensation process can proceed. It appeared that the two practical cases were extremes on certain elements, while other aspects were experienced the same.

Future research

Future research can yet again be divided into two sections, focused on the implementation practices and the legitimacy of these implementation practices. It became clear that follow-up studies could add value to this research. The range of the results can be increased by using the sources of this research to a greater extent or by using other sources. Firstly the implementation practices can be studied more extensively by approaching all the municipalities that bring compensation into practice. Even within the province more implementing officers that deal with compensation policy could be approached, since only one provincial representative was interviewed per province during this research. Besides an overview, concerning the progress of all the separate local implementation practices of compensation, is still not present at the national level and still regularly missing with the provinces. This makes it difficult to determine the impact of the compensation policy and it is unknown if the compensation policy is actually causing no net loss of values. Another topic for future research can be directed on the implementation of the new Wro, and which consequences this has for the compensation policy. Finally it is of interest to verify the legitimacy of compensation projects on a larger scale. Perhaps not only the compensator should be approached to study the levels of legitimacy, since many other parties are involved in the compensation process as well. Ultimately it could become possible to make an connection between the levels of conformity and the levels of legitimacy when a large range of projects is studied.

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- De Boswet in praktijk (Forest policy in practice), brochure, province Friesland, 2007
- Handleiding gemeentelijke plannen (manual of municipal plans) 2000 and was replaced by the new regional plan
- Finally the website of the province Friesland has frequently been visited (www.fryslan.nl).
- * "Friese streekplan voldoet aan nieuwe wet ruimtelijke ordening" (regional plan suffices new Wro), 2007
- * "Friese 'gedraglijn' invoering nieuwe Wet ruimtelijke ordening" (implementation new Wro), 2008

Gelderland

- Veel instrumenten, één compositie. Nieuwe Wet ruimtelijke ordening (Dutch acronym new Wro) – Agenda 2008 (Policy on Spatial Arrangement);
- Streekplan (regional plan) Gelderland from 2005 and the digital version;
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- Finally the website of the province Gelderland has frequently been visited (www.gelderland.nl).

Noord-Brabant

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- Beleidsregel natuurcompensatie (2005);
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- Handreiking Ecologische Bouwstenen (2006) - Voor de GHS en AHS in het Streekplan Noord-Brabant 2002. (Ecological building stones, concerning GHS and AHS);
- Natuurcompensatie regeling, Onderzoek naar de organisatorische vastlegging (2008) (Research on the organizational documentation of the nature compensation, performed by Sander de Boer (HAS))

- Finally the website of the province Noord-Brabant has frequently been visited (www.brabant.nl)
- * Information on the Nature Protection Act
- * Information on the structuurvisie and new Wro, including the articles:
 - Aan de slag met de nieuwe Wet ruimtelijke ordening
 - Tijdsbalk totstandkoming Structuurvisie en Verordening Ruimte
 - De gemeentelijke structuurvisie en de nieuwe Wet op ruimtelijke ordening
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 - Verordening Ruimte

Utrecht

- Streekplan 2005-2015 (regional plan);
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 - Beleidslijn nieuwe Wet ruimtelijke ordening vastgesteld
 - Streekplan Utrecht 2005-2015 en de beleidslijn nieuwe Wro juni 2008

Zeeland

- Omgevingsplan Zeeland 2006-2012 This document includes a combination of plans: the regional plan, environmental policy plan (in Dutch: milieubeleidsplan) and the water balance plan (in Dutch: waterhuishoudingsplan)
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- * Natuurgebiedsplan Zeeland (2005) – Nature area plan of Zeeland

Zuid-Holland

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- Zuid-Holland is divided in four areas, including separate regional plans for Zuid-Holland West (2003-2015), Zuid-Holland East (2003-2015), Zuid-Holland South (2000-2010), Zuid-Holland Rijnmond (2005-2020). These regional plans mainly refer to the compensation principle of 1997;
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- Bestemmingsplan Natuurcompensatie bedrijventerrein De Kolk (2007) Development plan for the new business area De Kolk
- Workshop 2 Ontwikkelingsplan Schaarweide (presentation from the province)
- www.nunspeet.nl (website municipality of Nunspeet)
- www.destentor.nl with following articles:
 - * Nunspeet legt nieuwe natuur aan (2006)
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Dune water company (DZH)

- Bestuursovereenkomst Vermindering Waterkwaliteit gerelateerde effecten (IB) Voortgangsrapport (2004) Progress report IB
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Glossary

AHS	Agrarische Hoofdstructuur (agrarian main structure in Noord-Brabant)
DLG	Dienst Landelijk Gebied (Agency connected to the Ministry of Agriculture, Nature and Food Quality)
DNA	Digitale Natuur Atlas in Friesland
DZH	Duinwaterbedrijf Zuid-Holland – Dune water company Zuid-Holland
EHS	Ecologische Hoofdstructuur, see NEN
EHS-spelregels	Rules of the game, concerning the NEN
FF-wet	Flora and Fauna policy
GHS	Groene Hoofdstructuur (green main structure in Noord-Brabant)
HSL	Hogesnelheidslijn
IB	Infiltratiebesluit (Infiltration decision)
IUCN	International Union for Conservation of Nature
LNV	Ministry of Agriculture, Nature and Food Quality
MNP	Milieu- en Natuurplanbureau (Environment and Nature Planning Department)
Nb-wet	Natuurbeschermingswet / Nature Protection Act
NEN	National Ecological Network / Dutch acronym: EHS - Ecologische Hoofdstructuur
NGO	Non-Governmental Organization
PEHS	Provinciale Ecologische Hoofstructuur (Provincial Ecological Network in Zuid-Holland)
SBZ	Speciale Beschermingszone (Special Protection zones in Friesland)
SGR	Structuurschema Groene Ruimte
SOVON	Bird research in the Netherlands
VHD	VHR:Vogels en Habitat Richtlijn / Birds and Habitat Directives
VHR	Vogel and Habitat Richtlijn, see VHD
VNB	Vereniging van Nederlandse Gemeenten / Union of Dutch Municipalities
VROM	Ministry of Housing, Spatial Planning and the Environment
Wro	Wet op ruimtelijke ordening (Policy on spatial arrangement)

Appendix I Semi-Structured Interview - Provinces

Interview: Uitvoeringspraktijken van Natuurcompensatie

- Toestemming gebruik memorecorder
- Inhoud onderzoek

(overzicht interview: introductievragen/ uitwerking, ervaringen, evaluatie: compensatiebeleid/ effectiviteit/ overeenkomsten plan & uitkomst, paar slotvragen)

Introductievragen

- 1) Welke **functie** heeft u? (Aandachtspunt: aantal jaren werkzaam, plaats in de organisatie (afdeling, team, etc.), enz)
- 2) Op welke manier speelt **compensatiebeleid** daarin een **rol**? (Aandachtspunt: is iemand coördinator, of aanspreekpunt voor andere partijen, of ...)

Gezien te tijd, een beetje vlot door de vlg 2 vragen:

- 3) In die tijd heeft u wellicht veel ervaring op kunnen doen. Hoe **succesvol** is het compensatiebeleid in uw ogen (cijfer schaal 0-10)?
- 4) Wat waren mogelijke **knelpunten** bij de uitvoering van compensatiebeleid? (Aandachtspunt: praktische problemen→uitwerking provincie, uitvoering gemeenten)
- 5) Wat zijn nu **voorbeelden van compensatie cases** die u heel interessant vond en/of waarbij u nauw betrokken was?
 - A. Is dit een goed voorbeeld van hoe compensatiebeleid wordt uitgevoerd in uw provincie? Waarom wel of niet?
 - B. Wanneer dit niet het geval is: Kunt u een voorbeeldcase geven van hoe compensatiebeleid over het algemeen wordt uitgevoerd in uw provincie?

Uitwerking van compensatiebeleid in plannen, notities etc. (PC)

- 6) Ik heb het streekplan bestudeerd en ben geïnteresseerd in uitwerkingsnotities, compensatieplannen en plannen van de ingreep. Welke **andere documenten** zijn relevant voor het uitwerken van het compensatiebeleid op provinciaal niveau?
- 7) Wet op de Ruimtelijke Ordening 1 juli 2008 (1965) wettelijk kader overheden
- 8) Kuindersma *et al*/ geeft aan dat “de **vergunningverlenende instantie** van een ingreep ook het bevoegd gezag is die erop toeziet dat de initiatiefnemer daadwerkelijk compenseert”. Kunt u iets meer vertellen over hoe gemeenten er op dit moment op toe zien dat compensatie volbracht wordt? Hoe gaat dit in zijn werk?
- 9) Hebben naar uw mening gemeenten **voldoende instrumenten** voorhanden om de voltooiing van de compensatie plicht af te dwingen? (Waarom? Voorbeeld?)

(**Streekplan**: Welke ervaringen zijn hiermee opgedaan? Gewenste effect opgeleverd?)

Wie neemt deel aan het compensatieproces & ervaringen (GC)

- 10) **Welke betrokkenen** spelen een belangrijke rol in het proces rond de uitvoering van het natuurcompensatie beleid? (overheid, provincie, gemeenten, compenserende partijen, betrokken organisaties, agr sector etc). Kunt u hierover iets vertellen? (Aandachtspunt: Welke partijen verschillen het meest in mening over compensatiebeleid? Is er weerstand bij bijvoorbeeld natuurorganisaties of uit de agrarische sector?)
- 11) Hoe kunnen medewerkers in het provinciehuis **zich vinden in** het huidige compensatiebeleid? (Aandachtspunt: Speelt het huidige compensatiebeleid een belangrijke rol in het dagelijkse handelen? Betrokken partijen toegewijd aan beleidsdoelen?)
- 12) Kunt u beschrijven hoe **bruikbaar** het compensatiebeleid wordt bevonden door de betrokken partijen die in aanraking komen met dit beleid?
- A. Toepassing van compensatiebeleid Wordt er gehandeld naar de voorgeschreven beleidsdocumenten gerelateerd aan natuurcompensatie/ Gedrag conform plannen?;
 - B. Op de hoogte van de inhoud van het compensatiebeleid.

Evaluatie van compensatie uitvoeringspraktijken

- 13) Hoe wordt de uitvoering van compensatie **bijgehouden en geëvalueerd**? (Aandachtspunt: Hoeveel mensen in uw provincies zijn hiermee bezig? Hoe verloopt de coördinatie van het evaluatieproces? Centraal registratiepunt aanwezig? Nodig?)
- 14) Er zijn een paar vragen over hoe **mitigatie** en **compensatie** plaats vindt:
- A. Kunnen de negatieve effecten van een ingreep vaak geneutraliseerd worden door mitigerende maatregelen? Het streekplan geeft hier de nadruk op..
 - B. Of moet er vaker fysieke compensatie plaats vinden om nadelige effecten van de ingreep op te heffen? Kwantiteit boven Kwaliteit?
 - C. Financiële compensatie: Hiertoe wordt niet eerder overgegaan dan nadat alle andere mogelijkheden maximaal zijn benut. Hoe vind dit plaats in de praktijk? (voorbeelden?) Zijn er gevallen bekend waar men niet alle andere mogelijkheden maximaal benut zijn, dus eerder overgegaan naar financiële comp.?(gedeeltelijk mogelijk is en/of wanneer fysieke compensatie leidt tot onaanvaardbare procedurele vertragingen) Bij financiële compensatie staat de gemeente garant voor de fysieke compensatie op termijn. Kunt u hier voorbeelden van noemen?
 - D. Hoe vaak komt financiële compensatie voor in vergelijking met mitigerende maatregelen en de andere vormen van compensatie? 1 tot wat?
 - E. Kunt u iets vertellen over de toepassing van de EHS-saldobenadering, sinds het in 2006 is opgenomen in de Nota Ruimte en in 2007 in de EHS-spelregels?

Effectiviteit van compensatiebeleid (FC)

- 15) Hoe **gestructureerd** wordt het uitvoeringsproces van compensatie over het algemeen ervaren?
- 16) Waaruit blijkt dat de beleidsdoelstellingen, van het compensatiebeleid, als **duidelijk en consequent** bevonden worden door betrokken partijen? Aandachtspunten: is er wel eens bezwaar aangetekend over de inhoud van het compensatiebeleid?
- 17) De uitvoering van het compensatiebeleid moet tot gevolg hebben dat er **geen netto-verlies** aan waarden plaats vind. Dragen de getroffen mitigerende en compenserende maatregelen in uw compensatiebeleid bij aan een situatie waarin geen nettoverlies aan waarden plaatsvindt? (Zijn er ondersteunende gegevens aanwezig?)

- 18) Kunt u vertellen of er wel eens een gebeurtenis op een **ander niveau** heeft plaats gevonden dat grote gevolgen had voor de provincie, met betrekking tot het uitvoeren van het compensatiebeleid? (Aandachtspunt: op **sociaal-economisch vlak**)

Uiteindelijke effecten van het compensatiebeleid (FC)

- 19) Vervolgens zal ik een paar vragen stellen over hoe plannen **overeenkomen** met wat er werkelijk wordt uitgevoerd in het gebied?
- A. Kunt u iets vertellen over: of de meeste plannen worden uitgevoerd zoals afgesproken en hoe dit bereikt wordt?
 - B. Wordt er wel eens afgeweken van de plannen & waarom?
 - C. Hoe is het compensatiebeleid aangepast door deze praktijkervaringen?

Slotvragen

- 20) Tot slot: het tweede deel van mijn onderzoek is gericht op hoe **compenserende partijen** het compensatieproces ervaren. Kunt u situaties beschrijven waarvan u denkt dat de compenserende partijen meer hebben moeten compenseren dan andere partijen, wanneer ze zich in vergelijkbare situaties bevonden. (Of kunt u compensatiepraktijken aangeven waarvan u denkt dat het niet helemaal eerlijk is verlopen? Of wanneer het niet volledig volgens regels is gegaan?)
- 21) Zou u **praktijkcases**, met betrekking tot de uitvoering van compensatie, kunnen aanraden die over het algemeen voldoen aan de volgende eisen:
- Waar iets interessant gebeurt met betrekking tot de voltooiing van compensatie door de compenserende partijen
 - Redelijk gedocumenteerd is zodat ik mijn onderzoek kan uitvoeren.
 - Wellicht afgerond zodat de uitkomst van het compensatieproces vergeleken kan worden met de plannen die alvorens afgesproken zijn.

Sluitende vraag:

- 22) Zijn er nog **belangrijke onderwerpen** niet aan bod gekomen naar uw mening? Wilt u nog op iets **terugkomen**? (afspraken opnamen & verwerking van interview, toestemming om citaten te gebruiken?)

- Einde -

Appendix II Semi-Structured Interview - Compensators

Municipality of NUNSPEET

Hoe legitiem is compensatiebeleid voor compensators?

Ten eerste onder compensator versta ik de persoon, bedrijf, instelling etc die aan compensatieverplichtingen moet voldoen vanwege een geplande ingreep met negatieve gevolgen in een beschermd gebied.

Het onderzoek richt zich op hoe eerlijk / legitiem compensatie is voor de compensator? Ik hoor graag de kant van de compensator om een beeld te vormen over hoe deze het compensatieproces heeft doorstaan. Ik heb op provinciaal niveau het compensatiebeleid bekeken en nu wil ik graag op lokaal niveau bekijken hoe legitiem dit beleid wordt ervaren door degenen die werkelijk aan de compensatieverplichtingen moeten voldoen.

De interviewvragen zijn onderverdeeld in drie fases, namelijk de inbreng (dit gaat over de invloed en de mate waarin de compensator (Gemeente Nunspeet) in staat is geweest om voor hem of haar belangrijke punten op de agenda te krijgen, **dan** een gedeelte over procedures (de procedures die gedurende het hele compensatieproces gevolgd zijn) **en** de uitkomst, de werkelijke compensatieregeling ter compensatie getroffen voor het bedrijventerrein De Kolk. Definities van legitimiteit zal ik per fase weergeven, dus eigenlijk welke criteria ik versta onder eerlijkheid.

1. Inbreng

Wat betreft de eerste fase, inbreng, begint met of er een mogelijkheid was voor de gemeente Nunspeet een bijdrage te leveren in het begin stadium van de compensatieplannen, heeft de gemeente punten op de agenda kunnen zetten etc.

1. In hoeverre heeft gemeente Nunspeet het proces rond natuurcompensatie gerelateerd aan het bedrijventerrein De Kolk kunnen **beïnvloeden**?
(Wie deden dat ook? & Waar heeft de gemeente rekening mee moeten houden?
Hoe is dat gegaan? Wat waren belangrijke momenten in dat beïnvloedingsproces?)
2. Met **wie** heeft gemeente Nunspeet rond de tafel gezeten?
(Provincie Gelderland, LNV-Dienst Landelijk Gebied, Staatsbosbeheer Arcadis etc. / met Prov. & DLG overleg gehad over mitigerende & compenserende maatregelen & op basis van studies ontsluiting van bedrijventerrein naar A28 heeft intensief overleg plaatsgevonden met al deze partijen)
3. Welk **standpunten** hadden deze partijen? (steun, sterke invloed, weerstand?)
4. Waar hebben deze overleggen toe **bijgedragen**? Wat is eruit gekomen?
5. Heeft gemeente Nunspeet punten op de **agenda** weten te zetten tijdens onderhandelingen over de compensatieregelingen? (Punten verwerkt in masterplan (belangrijkste stedenbouwkundige uitgangspunten), wat de basis vormde voor het bestemmingsplan?)
6. In hoeverre heeft provincie Gelderland de gemeente Nunspeet zelf **actief betrokken** bij belangrijke beslissingen in het compensatieproces?

7. Heeft u het idee dat de gemeente Nunspeet een **bijdrage heeft kunnen leveren of invloed heeft kunnen uitoefenen** op hoe de huidige compensatieregeling er nu uitziet? Waaruit blijkt dit?
8. Hoe is er **rekening gehouden** met de **voorkeuren** die gemeente Nunspeet had mbt het bedrijventerrein De Kolk? Gingen de onderhandelingsgesprekken over onderwerpen waar de gemeente Nunspeet het ook over wilde hebben?
9. Zijn er **bezwaren** aangetekend tijdens het ontwerp van de compensatie-plannen vanwege de ingrepen in de EHS en Natura 2000? (& later mt inzage)

2. Procedures

Vervolgens zullen we de legitimiteit van het toegepaste compensatiebeleid beoordelen op welke procedures zijn opgevolgd tijdens het compensatieproces mbt het Bedrijventerrein De Kolk. Criteria waarmee legitimiteit aangetoond kan worden vind ik bijvoorbeeld: wanneer er standaard procedures opgevolgd worden, de compensator weet van tevoren waar deze aan toe is & aan welke eisen voldaan moet worden. En compensators zouden door een standaard procedure gelijk behandeld moeten worden, wanneer je dus in vergelijkbare situaties zit dan zou je verwachten dat je een vergelijkbare hoeveelheid moet compenseren, maar is dit ook het geval? Compensatie wordt per provincie geïmplementeerd en het beleid verschilt per provincie. Eigenlijk is ieder compensatieproject anders, zelfs binnen een provincie. Er is vaak maatwerk vereist per compensatieproject, hier zullen we straks op door gaan.

Huidig compensatiebeleid zou een standaard procedure kunnen weergeven in de vlg documenten:

- De Nota Ruimte & de EHS-spelregels beschrijven compensatie
 - De Nota Ruimte & EHS-spelregels zijn weer verwerkt in het streekplan.
 - Daarnaast is compensatie vaak nog in andere wetgevingen beschreven (Boswet, Natuurbeschermingswet en de Flora en Fauna wet etc.)
- Heb ik nog documenten over het hoofd gezien?

10. Was u destijds **op de hoogte** van het provinciaal natuurcompensatiebeleid en de fasen die in een compensatieproces worden doorlopen? waar informatie mbt natuurcompensatiebeleid te verkrijgen was? Zijn er naast deze documenten nog andere kanalen gebruikt om verheldering te krijgen over het toe te passen compensatiebeleid?
11. Is het compensatiebeleid ook **toegepast** volgens deze documenten en mogelijk andere kanalen bij het opstellen van het bestemmingsplan bedrijventerrein De Kolk. **Of** is er **afgeweken**?
12. Was er naar uw mening een **duidelijke procedure** die gevolgd kon worden om het compensatiebeleid toe te passen? (Genoeg info beschikbaar?)
(Was u op de hoogte van deze procedure of is erop gewezen? Hoe ervaarde u deze procedure?)

Het zou een mate van legitimiteit waarborgen wanneer een standaard procedure toegepast wordt. Hierbij kunt u ook denken aan mogelijke richtlijnen voor de kosten. Wanneer compensators zich in redelijk dezelfde situatie bevinden, zelfde type gebied,

zelfde regelgeving van toepassing, grondprijs verrekend is, dan zou je verwachten dat ze dezelfde kosten hebben.

13. Als dit opgaat dan zouden er **financiële richtlijnen** aanwezig moeten zijn voor de mitigerende en compenserende maatregelen, heeft u hier ervaring mee gehad tijdens het opstellen van de compensatieplannen?

(Dezelfde hoeveelheid compensatie / Dezelfde duur project & hele compensatieproces / Gelijke beschikbaarheid grond / alle compensators compensatie volledig moeten volbrengen) Zou zoiets gewenst zijn? Hoe vormgeven?

Bij het opstellen van een compensatieplan komt vaak maatwerk te pas. Veel onderzoek is toegevoegd bij het bestemmingsplan om hiermee te kunnen beoordelen hoe en waar compensatie mogelijk toegepast kon worden, wat heeft kunnen bijdragen aan maatwerk.

14. Kunt u een beschrijving geven van hoe naar uw mening **maatwerk** heeft plaatsgevonden om aan de compensatieplicht te voldoen? (welke gebieden? Hoe verlopen? Wie waren hier een belangrijke rol in?)

15. Hoe is hierbij rekening gehouden met **individuele belangen** van Gemeente Nunspeet?

3. Uitkomst

Vervolgens een paar vragen over het eindresultaat. Een criterium voor legitimiteit zou hier bijvoorbeeld kunnen zijn of de gerealiseerde compensatie daadwerkelijk overeenkomt met wat er in de plannen is besloten. Bij dit onderdeel kun je ook kijken naar hoe het proces is verlopen achteraf, hoe effectief het compensatie beleid nu uiteindelijk ervaren werd tijdens de uitvoering ervan voor het bedrijventerrein De Kolk. Uiteindelijk is de gemeente Nunspeet tot de vlg compensatieregeling gekomen:

- 80 ha toegevoegd binnen de begrenzing van Natura 2000 (sluiting kazerne)

Twee verschillende extra maatregelen:

- 10 ha monotoon naaldbos omgevormd naar gevarieerd loofbos
- 5,55 ha Verbetering EHS & Natura 2000 door omvorming naar bloemrijk (en uiteindelijk heischraal) grasland, schaarweide in Elspeer

(Aantasting: 5,54 ha door aanleg van zuidelijke ontsluitingsweg van De Kolk)

16. Hoe denkt de gemeente Nunspeet over dit **eindresultaat**? (Tevreden? Bereikt wat de gemeente wilde? Moeilijk proces? Samenwerkingen? Lang traject? Te veel tijd, werk en geld gekost? Waaruit blijkt dit?)

Er zijn al acties ondernomen voor de natuurcompensatie in de Schaarweide...

17. In hoeverre komt deze **gerealiseerde compensatie overeen** met wat er besloten is in de volgende plannen: 'Bestemmingsplan bedrijventerrein De Kolk' en 'Bestemmingsplan Natuurcompensatie bedrijventerrein De Kolk'?

Maar uiteindelijk is de vraag hoe **effectief** was het compensatiebeleid nu tijdens de uitvoering hiervan, volgens de gemeente Nunspeet?

Als iets geaccepteerd is, dan zou dat ook invloed kunnen hebben op hoe iets uitgevoerd wordt, in positieve zin.

18. Denkt u dat het compensatiebeleid **geaccepteerd** is door de gemeente Nunspeet? (De Stentor, sept. 2006, twee artikelen)

In het verleden, 2006, verscheen Nunspeet namelijk in het de media. Hier gaf de gemeente Nunspeet aan “met de Rug tegen de Muur te staan”. Vlak daarvoor is er zelfs openlijk getwijfeld door provincie Gelderland aan de geloofwaardigheid van gemeente Nunspeet als het gaat om het nakomen van in het verleden gemaakte afspraken (enkele claims mbt natuurcompensatie stonden nog open..). Was toch best een heftige discussie!

- Kunt u hier iets meer over vertellen? **let op:**
 - Waren beleidsdoelstellingen van het compensatiebeleid **duidelijk en consequent**?
 - Speelt het huidige compensatiebeleid een belangrijke **rol in het dagelijkse** handelen van collega's op het gemeentehuis?
 - Zijn de betrokken partijen bij het compensatieproces **toegewijd** aan beleidsdoelen?
 - **Steunen** belangengroepen het compensatiebeleid en de projecten?
- Hoe is de relatie tussen de gemeente en de provincies nu?
- Accepteert gemeente Nunspeet het compensatiebeleid en de nodige gevolgen hiervan? (Het compensatiebeleid is een democratisch vastgesteld beleid)

19. Is gemeente Nunspeet **tevreden** met het huidige compensatiebeleid? Of zijn er naar uw mening essentiële veranderingen nodig om het beleid meer bruikbaar te maken?

Dune Water Company Zuid-Holland (DZH)

Hoe legitiem is compensatiebeleid voor compensators?

Ten eerste onder compensator versta ik de persoon, bedrijf, instelling etc die aan compensatieverplichtingen moet voldoen, vanwege een geplande ingreep met negatieve gevolgen in een beschermd gebied.

Het onderzoek richt zich op hoe eerlijk / legitiem compensatie is voor de compensator? Ik hoor graag de kant van de compensator om een beeld te vormen over hoe deze het compensatieproces heeft doorstaan. Ik heb op provinciaal niveau het compensatiebeleid bekeken en nu wil ik graag op lokaal niveau bekijken hoe legitiem dit beleid wordt ervaren door degene die werkelijk aan de compensatieverplichtingen moeten voldoen.

De interviewvragen zijn onderverdeeld in drie fases, namelijk de inbreng (dit gaat over de invloed en de mate waarin de compensator (Duinwaterbedrijf Zuid-Holland - DZH) in staat is geweest om voor hem of haar belangrijke punten op de agenda te krijgen, **dan** een gedeelte over procedures (de procedures die gedurende het hele compensatieproces gevolgd zijn) **en** de uitkomst, de werkelijke compensatieregeling ter compensatie getroffen voor de gevolgen die oppervlakte-infiltratie van rivierwater veroorzaakt in het duingebied Meijendel, in specifiek wordt aandacht geschonken aan het compensatieproject 'De Hertenkamp'. Definities van legitimiteit zal ik per fase weergeven, dus eigenlijk welke criteria ik versta onder eerlijkheid.

1. Inbreng

Wat betreft de eerste fase: "inbreng" begint met of er een mogelijkheid was voor het Duinwaterbedrijf Zuid-Holland om een bijdrage te leveren in het begin stadium van de compensatieplannen, heeft het duinwaterbedrijf punten op de agenda kunnen zetten etc.

1. In hoeverre heeft het Duinwaterbedrijf Zuid-Holland het proces rond natuurcompensatie kunnen beïnvloeden, in specifiek: in hoeverre heeft DZH het proces kunnen **beïnvloeden** rond compensatie van de waterkwaliteit-gerelateerde effecten dat oppervlakte-infiltratie heeft op natuur en milieu? En dan gericht op het compensatieproject 'De Hertenkamp'? (Wie deden dat ook? & Waar heeft DZH rekening mee moeten houden? Hoe is dat gegaan? Wat waren belangrijke momenten in dat beïnvloedingsproces?)
2. Met wie heeft DZH rond de tafel gezeten? (Provincie Zuid-Holland, LNV-Dienst Landelijk Gebied, etc.)
3. Welk **standpunten** hadden deze partijen? (steun, sterke invloed, weerstand?)
4. Waar hebben deze overleggen toe **bijgedragen**? Wat is eruit gekomen?
5. Heeft DZH punten op de **agenda** weten te zetten tijdens onderhandelingen over de compensatieregelingen? (Bestuursovereenkomst Vermindering waterkwaliteit gerelateerde effecten of bijbehorende ruimtelijke plannen zoals een compensatieplan / bestemmingsplan?) Mogelijkheid om IN TE KIJKEN?
6. In hoeverre heeft provincie Zuid-Holland DZH zelf **actief betrokken** bij belangrijke beslissingen in het compensatieproces?

7. Heeft u het idee dat DZH een bijdrage heeft kunnen leveren of invloed heeft kunnen uitoefenen op hoe de huidige compensatieregeling er nu uit ziet? Waaruit blijkt dit?
8. Hoe is er rekening gehouden met de **voorkeuren** die DZH had mbt de compensatie van de effecten dat oppervlakte-infiltratie van rivierwater heeft gerelateerd aan het compensatieproject 'De Hertenkamp'? Gingen de onderhandelingsgesprekken over onderwerpen waar DZH het ook over wilde hebben?
9. Zijn er **bezwaren** aangetekend tijdens het ontwerp van de compensatie-plannen in De Hertenkamp om de schadelijke gevolgen van oppervlakte-infiltratie van rivierwater te compenseren? (& later met inzage bestemmingsplan wellicht?)

2. Procedures

Vervolgens zullen we de legitimiteit van het toegepaste compensatiebeleid beoordelen op welke procedures zijn opgevolgd tijdens het compensatieproces mbt de te compenseren schadelijke effecten doormiddel van het project 'De Hertenkamp'. Criteria waarmee legitimiteit aangetoond kan worden vind ik bijvoorbeeld: wanneer er standaard procedures opgevolgd worden, de compensator weet van tevoren waar deze aan toe is & aan welke eisen voldaan moet worden. En compensators zouden door een standaard procedure gelijk behandeld moeten worden, wanneer ze dus in vergelijkbare situaties zitten dan zou verwacht kunnen worden dat een vergelijkbare hoeveelheid gecompenseerd moet worden, maar is dit ook het geval? Compensatie wordt per provincie geïmplementeerd en het beleid verschilt per provincie. Eigenlijk is ieder compensatieproject anders, zelfs binnen een provincie. Er is vaak maatwerk vereist per compensatieproject, hier zullen we straks op door gaan.

Huidig compensatiebeleid zou een standaard procedure kunnen weergeven in de vlg documenten:

- De Nota Ruimte & de EHS-spelregels beschrijven natuurcompensatie
 - De Nota Ruimte & EHS-spelregels zijn weer verwerkt in het streekplan.
 - Daarnaast is compensatie vaak nog in andere wetgevingen beschreven (Boswet, Natuurbeschermingswet en de Flora en Fauna wet etc.)
- Heb ik nog documenten over het hoofd gezien?

10. Was u destijds **op de hoogte** van het provinciaal natuurcompensatiebeleid en de fasen die in een compensatieproces worden doorlopen? Waar informatie mbt natuurcompensatiebeleid te verkrijgen was? Zijn er naast deze documenten nog andere kanalen gebruikt om verheldering te krijgen over het toe te passen compensatiebeleid?
11. Is het compensatiebeleid ook **toegepast** volgens deze documenten en mogelijk andere kanalen bij het opstellen van het compensatieplan / bestemmingsplan om schadelijke effecten te compenseren, in specifiek in 'De Hertenkamp'. **Of** is er **afgeweken**?
12. Was er naar uw mening een **duidelijke procedure** die gevolgd kon worden om het compensatiebeleid toe te passen? (Genoeg info beschikbaar?) (Was u op de hoogte van deze procedure of is erop gewezen? Hoe ervaarde u deze procedure?)

Het zou een mate van legitimiteit waarborgen wanneer een standaard procedure toegepast wordt. Hierbij kunt u ook denken aan mogelijke richtlijnen voor de kosten. Wanneer compensators zich in redelijk dezelfde situatie bevinden, zelfde type gebied, zelfde regelgeving van toepassing, grondprijis verrekend is, dan zou je verwachten dat ze dezelfde kosten hebben.

13. Als dit opgaat dan zouden er **financiële richtlijnen** aanwezig moeten zijn voor de mitigerende en compenserende maatregelen, heeft u hier ervaring mee gehad tijdens het opstellen van de compensatieplannen?

(Dezelfde hoeveelheid compensatie / Dezelfde duur project & hele compensatieproces / Gelijke beschikbaarheid grond / alle compensators compensatie volledig moeten volbrengen)

Zou zoiets gewenst zijn? Hoe vormgeven?

Bij het opstellen van een compensatieplan komt vaak maatwerk te pas. Er heeft waarschijnlijk veel onderzoek plaats gevonden om te kijken waar en hoe compensatie mogelijk toegepast kon worden, wat heeft kunnen bijdragen aan maatwerk.

14. Kunt u een beschrijving geven van hoe naar uw mening **maatwerk** heeft plaatsgevonden om aan de compensatieplicht te voldoen?

(welke gebieden? Hoe verlopen? Wie waren hier een belangrijke rol in?)

15. Hoe is hierbij rekening gehouden met **individuele belangen** van DZH?

3. Uitkomst

Vervolgens een paar vragen over het eindresultaat. Een criterium voor legitimiteit zou hier bijvoorbeeld kunnen zijn of de gerealiseerde compensatie daadwerkelijk overeenkomt met wat er in de plannen is besloten. Bij dit onderdeel kun je ook kijken naar hoe het proces is verlopen achteraf, hoe effectief het compensatie beleid nu uiteindelijk ervaren werd tijdens de uitvoering ervan, voor het compensatieproject De Hertenkamp in dit geval.

De schade die ontstaat door oppervlakte-infiltratie van rivierwater dat milieuvreemde stoffen met zich meebrengt in de duingebieden Meijendel, Berkheide en Solleveld moeten gemitigeerd en gecompenseerd worden. De compensatieprojecten kunnen onderverdeeld worden in: compensatie van schade aan vegetatie in kwelplassen OF in de oevers van infiltratieplassen & compensatie van schade aan de bodem.

Het compensatieproject “De Hertenkamp” bestaat uit het compenseren van schade aan vegetatie (in kwelplas OF oever van infiltratieplas?). (Waarvoor compenseert dit project precies? Hoeveel compenseert het, getallen... zoveel schade, aan wat, zoveel compensatie, wijze waarop gecompenseerd? Compensatieplan aanwezig? Uiteindelijk is ‘De Hertenkamp’ wat voorheen gebruikt werd voor bloembollenteelt heringericht en ontwikkeld tot een natuurlijke duinzoom in 2003. De Bollenschuur is ook verwijderd in 2005 (asbest aanwezig..)

16. Hoe denkt DZH over dit **eindresultaat**? (Tevreden? Bereikt wat DZH wilde? Moeilijk proces? Samenwerkingen? Lang traject? Te veel tijd, werk en geld gekost? Waaruit blijkt dit?)

17. In hoeverre komt deze **gerealiseerde compensatie overeen** met wat er besloten is in de volgende plannen? (compensatieplan bestemmingsplannen? is er een verslag van wat er uiteindelijk gerealiseerd is? Evaluaties?)

Maar uiteindelijk is de vraag hoe **effectief** was het compensatiebeleid nu tijdens de uitvoering hiervan, volgens DZH?

Als iets geaccepteerd is, dan zou dat ook invloed kunnen hebben op hoe iets uitgevoerd wordt, in positieve zin.

18. Denkt u dat het compensatiebeleid geaccepteerd is door DZH? En de nodige gevolgen van dit compensatiebeleid? (Hoe is de relatie tussen DZH en de provincies?)

- Kunt u hier iets meer over vertellen? **let op:**

- Waren beleidsdoelstellingen van het compensatiebeleid duidelijk en consequent?
- Speelt het huidige compensatiebeleid een belangrijke rol in het dagelijkse handelen van collega's bij DZH?
- Zijn de betrokken partijen bij het compensatieproces toegewijd aan beleidsdoelen?
- Steunen belangengroepen het compensatiebeleid en de projecten?

19. Is DZH **tevreden** met het huidige compensatiebeleid? Of zijn er naar uw mening essentiële veranderingen nodig om het beleid meer bruikbaar te maken?

Appendix III List of Respondents

Province	Respondent
Friesland	Wim Oostra
Gelderland	Gert Pannekoek
Noord-Brabant	Fred Panjer Suzanne de Geus Inge Slippens Jos van de Staaij
Utrecht	Jaap de Pater
Zeeland	Roel Mooij
Zuid-Holland	Harry Smit

Practical Case	Respondent
Municipality Nunspeet	Sietze Kooistra
Dune Water Company Zuid-Holland	Hans Lucas

Appendix IV Processing of data per province

Gradually I became more experienced with the processing of data, and it could catch the eye of the reader that this caused minor differences in the following elaborations. It may have led to more extensive elaborations, however all the provinces were studied on the same topics and in the same extent. Step by step the processing of this information evolved, but it had no consequences for the results that were gained from processing the data of provinces. In the end all the sources were pointed out, in which more information could be found. The following tables show how the provinces sufficed the formulated criteria.

Friesland

1. Plan Conformity

Plan conformity is largely examined by using provincial policy documents on compensation. A list of these documents is provided. Besides if and how national compensation policy is translated into provincial compensation policy is explained next. A table is used, which gives a description of how compensation is registered in the provincial policy documents. First the areas are mentioned in which compensation is supposed to be applied. Then the standards are covered by looking at the seven steps to implement compensation, taken from the 'EHS-spelregels'. These topics in the table are taken from national guidelines, and can be used to determine how standards are being applied by provinces.

1.1 List of documents concerning nature compensation

- a) Om de kwaliteit fan de romte' streekplan Fryslân (regional plan Friesland) 2007
 - b) De Boswet in praktijk (Forest policy in practice), brochure, province Friesland, 2007
 - c) Handleiding gemeentelijke plannen (manual of municipal plans) 2000 and was replaced by the new regional plan
 - d) Finally the website of the province Friesland has frequently been visited (www.fryslan.nl).
- * "Friese 'gedragslijn' invoering nieuwe Wet ruimtelijke ordening" (implementation new Wro), 2008
- * "Friese streekplan voldoet aan nieuwe wet ruimtelijke ordening" (regional plan suffices new Wro), 2007

References to these documents will be made in the following scheme in which a description on the compensation policy is given. Next to these documents an interview took place with a representative of the province (specialized in nature compensation) in 2008 to gain insight in the compensation policy.

1.2 Description of how compensation policy is registered in documents

Application	Plan Conformity	Comments
Areas in which the compensation principle is in force		
1. National Ecological Network (NEN) areas & robust ecological connections;	Yes	Nature also exists in several smaller nature areas outside the NEN. The regional plan states that: "elements of landscape like for instance: wooded banks, alder grove, ditches, channels (slenken) and dobben are important nature features outside the NEN" (a:140). Also joined use of agrarian areas can include nature outside the NEN. The

		manual of municipal plans (c) also mentions the NEN.
2. Birds and Habitat Directive (BHD) areas;	Yes	Assigned as Special Protected Zones (Speciale BeschermingsZones - SBZ's) (a) & (c)
3. Nature Protection Act (Dutch acronym: NB-wet) areas;	Yes	Assigned as Special Protected Zones (Speciale BeschermingsZones - SBZ's) (a) & (c)
4. Compensation registered in other policy documents:		
a. Forest policy;	Yes	(a), (b), (c)
b. Flora and Fauna policy (Dutch acronym: FF-wet);	Yes	(a), (c)
c. New policy of spatial planning (Dutch acronym: Wro).	Yes	The province noted on their website that the new regional plan from 2007 has been declared 'Nota Ruimte' proof by the Minister of Housing, Spatial Planning and the Environment (d, 2008). Besides the regional plan also fits as the spatial structure vision (in Dutch: structuurvisie) within the new Wro, according to an inspector from the Ministry of Housing, Spatial Planning and the Environment, who confirmed that incompatibilities are not shown between the new Wro and the regional plan (d, 2007). This does not mean that Friesland approves of everything that the new Wro brings along. For instance the province noted in 2008 that "a provincial ordinance does not fit in the administrative culture of Friesland, which is characteristic for the aim concerning spatial quality through governmental and formal preliminary consultations on spatial plans and projects (so called: operations focused on development). As Anita Andriesen (Members of the Provincial Executive) noted: The province Friesland aims to book consensus and results through good consultation, with a shared basic assumption that involves the strengthening of spatial quality of Friesland (d, 2008)" Besides the province also indicated that "through an ordinance less custom made measures can be provided, and this decreases the spatial quality. The regional plan offers many possibilities for spatial quality and custom made measures within the general provincial framework. According to the province this is also already applied in practice. When consultation does not lead to consensus, then the province can submit a notion to gain insight (in Dutch: zienswijze) with the municipality or if necessary bringing the plan or project to a halt through a certain decision (in Dutch: aanwijzingsbesluit). (d, 2008)" An evaluation should provide clarification on how the regional plan is implemented, with its connections to the Nota Ruimte and the new Wro. In 2010 Friesland will evaluate the policy concerning the regional plan. Additionally results of the implementation and subsequent decision-making of policy will be evaluated. If it appears that the method, aimed at operating while focusing on development, is not effective, then the province can force the subsequent decision-making by accentuating policy and specifically through making use of provincial ordinances (d, 2008). This evaluation, that is taking place in 2010, is crucial for inspecting how policy is implemented in Friesland. It should give an overview of the booked successes and where improvements are necessary. It must be awaited which effects the new Wro will have on existing policies.
Compensation procedure in seven steps		Friesland incorporated nature compensation into the regional plan, and it additionally developed special guidelines for the Waddeneilanden and forage areas designed for meadow birds and geese. In the regional plan the province also indicates that further elaborations are necessary for these guidelines.

1) Testing the 'No, unless rule' consideration framework		
No formula (interventions are basically not allowed), unless formula:	Yes	The regional plan notes that: "new spatial plans in or near the EHS are not permitted according to (inter)national regulations, if the essential characteristics or values of the area are significantly damaged, unless no realistic alternatives are present and it is a case in which reasons of great social interest are proven (no, unless principle). When a new spatial plan can be considered inevitable on ground of the above mentioned and if it suffices these criteria, then damage is limited through mitigative measures. Remaining damage is compensated. (a: 144)"
a. Prove considerable social importance;	Yes	(a)
b. Research the alternatives;	Yes	(a)
Compensation principle (No net-loss of values):	Yes	The regional plan notes that no net-loss of values concerning acreage, quality and cohesion of the EHS should arise (a: 146). But if monitoring is not arranged how can no net-loss of values be inspected? If no evaluations are present then it becomes difficult to verify if no net-loss of values occurs.
1. Integration operations of landscapes and mitigation;	Yes	(a)
2. Physical compensation including:	Yes	(a)
a. Compensation of surface (direct effects);	Yes	Primary quantitative compensation takes place next to or close by the nature area. When this is not possible qualitative compensation occurs or quantitative compensation takes place somewhere else, under the condition that it creates a sufficient cohesion of the EHS. Compensation of acreage does not apply when it's a case of one on one enclosed management areas (in Dutch: één op één begrensde beheergebieden) (a: 146)
b. Compensation of quality loss (quality addition, in Dutch: kwaliteitstoetslag);	Yes	The regional plan mentions 'quality additions' but it does not describe how quality addition is applied. When looking in the brochure of the Forest policy it becomes visible how quality addition is arranged with that policy. (a)
3. Financial compensation	Yes	When physical compensation is not possible financial compensation becomes an option. The amount is deposited in the national environmental trust (in Dutch: Groenfonds), and it remains connected to the involved intervention. (a: 146) There is no description on how financial compensation is arranged.
Measures specifically designed for NEN areas:	Yes / No	The regional plan covers the NEN-balance approach but indicates that further elaborations are necessary (a: 146).
4. NEN –balance approach	Yes	Briefly mentioned (a)
5. NEN re-determining the limits	Yes	Briefly mentioned, but does not include a description of how to apply it. (a)
2) Compensation plan according to standards	Yes / No	Further elaborations are necessary in order to suffice the requirements made on the content of compensation.
- Compensation plan, independent document according to standards	Yes	(a)
- Requirements on the content of compensation	Yes / No	National requirements on the content of compensation is not totally processed in provincial compensation policy. But provincial requirements on compensation are present in Friesland, which should be met by the compensator. (a)
3) Decision authorized authority on intervention and compensation	Yes	(a)

4) Embedding intervention and compensation into spatial plans	Yes	(a)
5) Private law agreement initiative taker and authorized authority	Yes	The respondent of the province noted that an agreement is made between the initiative taker and the authorized authority.
Legal binding agreements on the execution of the compensation plan:		
- Bank warranty	No	Not indicated in regional plan. One can use a bank warranty, but the representative of the province did not make use of this yet. He also noted that perhaps others made use of it (possibly colleagues involved with the Wro).
- Final realization date	-	Unknown
- Penalties when exceeding final realization date	-	Unknown
6) Monitoring implementation by authorized authority	No	Monitoring of compensation projects is not described in the regional plan. The representative of the province indicated that this still needs to be worked out. This respondent also thought that there is not much to evaluate yet, regarding nature compensation.
- Authorized authorities yearly report to the province	No	
- Provinces verify these reportages and collect these inspected reports	No	
- These provincial findings are reported to the state	No	
7) Authorized authority takes over execution when final realization date expires	-	Unknown
- The executing costs are for the initiative taker, including:		
- Bank warranty	No	
- Penalty	-	Unknown
(Money is situated in the Green trust (Groenfonds) linked to the project)		

To start with Friesland has incorporated all the area categories. For instance the Forest policy is processed quite extensively, and the representative of the province indicated that they mostly have experienced compensation projects related to the Forest policy. It is an interesting fact that Friesland does not have many experiences with compensation projects, other than compensation projects connected to the Forest policy and the reason behind this would be valuable to find out.

The next step in the table covers how the compensation procedure is described in policies. Initially, Friesland appears to have processed all the types of compensation (including 'no, unless' rule, mitigation, physical- and financial compensation, NEN-balance approach and re-determining the limits of the NEN). The province admits in the regional plan that elaborations are necessary for the NEN-balance approach and other topics related to compensation (e.g. Forest compensation, Waddeneilanden and meadow birds/geese). Two of these examples, for which elaborations have been developed, are described next:

- The specially designed guidelines for the NEN areas at the Waddeneilanden were of importance because there is a limited scale on which developments on the islands are possible (e.g. lacking of alternative locations). The regional plan notes a couple of guidelines that are specifically suitable for compensation procedures at the Waddeneilanden, including possibilities when for instance quantitative compensation appears impossible and then qualitative compensation can possibly be applied.

- The regional plan includes guidelines for the protection and management of meadow birds outside the NEN. About 30% of black-tailed godwits from West-Europe nest in Friesland and therefore Friesland has a (inter)national responsibility to preserve this meadow bird species (a: 140). In Friesland 30.000 to 40.000 ha is indicated forage area for geese on a voluntary basis (a: 150). No planning limitations are connected to it (a: 148). The province puts effort in providing replaceable geese forage areas, when the intervention still seems inevitable after considering the damage of geese forage areas. Herewith it is tried that the total surface of geese foraging areas of about 30.000 ha remains the same amount (a: 150). With the Digital Nature Atlas (in Dutch: Digitale Natuur Atlas - DNA) certain vulnerable areas are presented.

It remains remarkable that Friesland frequently indicates that further elaborations are needed for certain elements in the regional plan. During this research indications for further elaborations have not regularly been seen in Dutch regional plans. The respondent of the province also indicated that the compensation principle is still in the early stages and needs to be worked out more extensively. The next question is when Friesland is able to process elaborations on these topics? The regional plan is quite recently implemented. The regional plan even sufficed the requirements connected to the Nota Ruimte and the new Wro (spatial structure vision). But the regional does not suffice the guidelines, which are mentioned in the 'EHS-spelregels'. The regional plan of Friesland was implemented just before the 'EHS-spelregels' were presented, therefore the regional plan does not suffice all the guidelines provided by the 'EHS-spelregels'. In 2010 the regional plan is evaluated, thus by then the compensation principle must be worked out more extensively. Perhaps through the years more experiences are gained with compensation projects.

But which elements of the 'EHS-spelregels' are not met? There was no scheme in which the steps to take, concerning nature compensation, become visible. Next to this quality addition and financial compensation are not described very extensively. How should these types of compensation be applied in practise? Or are custom made measures always in place when these types of compensation come into force. Besides the last part of the compensation procedure is not clear yet. Is the actual implementation of compensation secured and does monitoring take place? It is not described when, how and who executes these steps. Evaluations still need to be set into motion and the outcome needs to be awaited. Points of improvement can become visible through evaluations of compensation projects and this could possibly lead to the extension of the compensation principle.

2. Conformity of behavior

How do actions of involved actors in a compensation process correspond with the national and/or provincial compensation policy statements? The following table includes components like the role of parties involved, experiences & appliance of compensation, the guarantee of compensation fulfillment and a usability degree. An overview of the parties involved, their relations and their involvement is sketched out, which is of importance when researching the provincial compensation policy and the appliance of this policy. In this case the experiences of the province are captured. All these elements are related to the fact: if behavior of the parties involved in the compensation procedure act according to the national and/or provincial compensation policy.

To start by giving an overview of the key actors in the compensation process, as perceived by the province:

- Government
- Province
- Municipalities
- Initiative taker
- And many other involved parties, e.g. recreation sector (Rekron), agriculture, LTO, Nature Monuments (in Dutch: Natuurmonumenten), State Forestry Service (in Dutch: Staatsbosbeheer), Fryske Gea (Landscapes of Friesland) etc. The provincial representative noted that anyone can be involved in the compensation process.

Application	Conformity of Behavior	Comments
Role of parties involved		
Are the key actors in the compensation process, as perceived by the province, involved in the compensation procedure?	Yes	Friesland indicated that it "aims to book consensus and results through good consultation, with a shared basic assumption that involves the strengthening of spatial quality of Friesland" (d, 2008). The province also noted that custom made measures can contribute to spatial quality. These are important elements of how Friesland deals with the key actors of for instance the compensation process. Preliminary consultations are of importance to inform involved parties and together they try to come to an agreement. This is actually also what the provincial representative described during the interview.
Which relationships exists between the key actors in the compensation process, as perceived by the province?	Yes	During the interview with the province it became clear that most experiences were connected to forestry compensation projects. Thus most experiences and relations, until now, exist between the province and involved parties connected to forest compensation. Involved parties that initiated compensation projects varied from individuals, companies to municipalities. The fact remains that relations exist between the province and for instance the government, municipalities and the initiative taker. In a preliminary consultation the province informs the initiative taker and together they need to come to a consensus and register this in an agreement.
Experiences & appliance of compensation (did compensation policy contribute to a change in behavior?)		
Do parties agree on the compensation policy?	Yes / No	The provincial respondent gave an example of "two types of entrepreneurs. One type of entrepreneurs would rather not compensate while the other type of entrepreneurs acknowledges that compensation can be of interest (e.g. add value to an area)." Thus to find out if involved actors agree on the compensation policy depends on which initiative taker is approached.
Do parties act according to the compensation policy?	No	It is difficult to judge if parties act according to the provincial compensation policy, because no monitoring data or evaluations are available in which one can verify if involved actors act according to the compensation requirements.
Guarantee of compensation fulfillment		

Is a sufficient amount of instruments available to guarantee the fulfillment of compensation duties?	Yes	As mentioned before the province aims to reach consensus. In the interview it became clear that the province and compensators sit together to discuss what the compensator wants and what the compensator needs to do in return. When consensus is reached then it is registered in an agreement. The provincial representative mentioned that "they think they can convince municipalities, without using force." From the interview it appeared that there are no other instruments needed/wanted to guarantee the fulfillment of compensation duties.
Are these instruments applied to guarantee compensation?	Past: Not always Present: Yes	The provincial respondent gave an example from the past "in which a municipality did not want to fulfill their compensation duties and the province could not make this municipality compensate because there was no agreement to which they could fall back to." The provincial representative recommended a couple of times that compensation plans be registered in an agreement, and more instruments than this are not needed in his opinion.
Usability degree (compensation procedures)		
- To which extent is compensation policy known by the intended users?	Yes / No	The representative of the province noted that "people still need to be informed a lot. This respondent noticed that sometimes initiative takers do not immediately think of compensation, which is connected to certain interventions. Thus information distribution is essential. For instance the municipality of 'Oostellingerwerf, Appelscha' has the misunderstanding that when this municipality is not assigned as 'Natura 2000' area that all difficulties with spatial planning disappear. But then the municipality still has to deal with external impacts on 'Natura 2000' areas, which has effect on spatial planning." This is an example in which the proper information supply can clarify certain situations. In preliminary consultations knowledge is gained by intended users.
- To which extent is compensation policy applied by the intended users?	Yes / No	Compensation policy is being applied, connected to the NEN and the Forest policy. But no evaluations are present yet. It is difficult to formulate conclusions on how compensation policy is being applied because no evaluations or monitoring data is available in which spatial plans are compared with results booked in the field.

It appeared to be difficult to research conformity of behaviour, since the provincial respondent already noted that nature compensation does not play a major part yet in daily operations. Friesland has few experiences with compensation projects and the implementation of the provincial compensation policy is in its early stages. Though the provincial compensation principle is processed in the regional plan and these guidelines need to be taken into account by everyone (e.g. from the government, province, municipalities to the initiative takers and other involved parties). The regional plan is quite new, from 2007, and this could have given the province the opportunity to more extensively work out the compensation principle in that regional plan. It is a pity that the 'EHS-spelregels' was presented after the regional plan was designed, which is why Friesland does not suffice all of the national guidelines on nature compensation yet. Elaborations on the provincial compensation policy are expected. It is often indicated in the regional plan that elaborations are needed on certain topics, and this will probably bring along more changes in behaviour, because more guidelines need to be followed then.

The next step includes how the compensation process is connected to changes in behaviour. The province is quite involved in the compensation process and that collaborations on compensation conditions are perhaps more valued than detailed guidelines from the regional plan. The province does not want to use force, according to the respondent, but wants to convince municipalities. Central in the compensation procedures is the collaboration between the province, municipalities and initiative takers. When consultations take place a consensus is required in order to be able to create custom made measures and the province tries to think along in this process. Information distribution is essential in this phase. The province also tries to help in finding suitable grounds. But when it comes down to guaranteeing fulfilment of compensation duties, Friesland has not worked out anything in the regional plan. There are no evaluations available and therefore it is difficult to make a conclusion about: if involved parties act accordingly to the compensation policy and to which extent compensation policy is applied by intended users. The respondent said that there is not much to evaluate here yet, concerning nature compensation. Although nature compensation policy was introduced in 1995. One would expect that since then evaluations have been carried out. Without evaluations it becomes quite hard for the province to judge if compensation plans are fully applied. Without monitoring data and evaluations it also becomes quite difficult to say much about changes in behaviour.

3. Final conformity

Final conformity involves if reality corresponds to the intentions of the initial plan. During the interview with the provincial representative a couple of experiences with nature compensation were mentioned. These examples of compensation being applied in practice are taken into consideration while assessing the effectiveness of nature compensation policy. The practical situations are compared with plan conformity (initial plan) and conformity of behavior (change in behavior), which have been discussed previously. But final conformity does not solely involve these characteristics only. It is also of importance to view in which context the compensation process takes place. In the end the question remains: How effective compensation policy is currently? The effectiveness criteria of Sabatier and Mazmanian can be categorized by plan conformity, conformity of behavior and the context, which can be found back in the following table. A short summary will be given next on how the criteria of effectiveness (from Sabatier and Mazmanian) are used in this research on nature compensation:

- 1) ***Policy objectives are clear and consistent, Plan Conformity & Conformity of Behavior:*** This criterion is researched by looking into how compensation is processed in policy statements (comparing national guidelines to provincial compensation policy and how this policy is applied on local level). This criterion also involves how aware the involved parties are of the compensation policy and how well they understand it (usability degree). This includes questions like: can involved actors find themselves in the compensation policy and do they act according to this policy? All these factors influence the outcome.
- 2) ***The program is based on a valid causal theory, Plan Conformity:*** This criterion is examined by researching if no net-loss of values occurs, which is the goal behind nature compensation. Do the areas in which an intervention is planned & takes place and the compensated areas result in the fact that no net-loss of values occurs?

- 3) **The implementation process is structured adequately, Plan Conformity:** This criterion is researched by looking into which standards are in place. Do the compensation guidelines/policy statements (set on national and/or provincial level) structure the compensation procedure adequately? This also involves experiences of involved actors with the implemented standards.
 - 4) **Implementing officers are committed to the program's goals, Conformity of Behavior:** This criterion is researched by looking into how implementing officers act according to the compensation policy. How is compensation applied within the province?
 - 5) **Interest groups and (executive & legislative) sovereigns are supportive, Conformity of Behavior:** This criterion is researched by looking into how key actors, concerning interest groups and sovereigns (as perceived by the province) are supportive regarding the compensation procedure. Do they act according to the compensation policy?
 - 6) **There are no detrimental changes in the socio-economic framework conditions, Context:** This criterion is researched by looking into the context surrounding the compensation procedure. External / internal events can have influences on the compensation procedure. This can for instance include: currently the international/national financial crisis, changes in legislation (accentuating the Nb-wet in 1998, implementation of the new Wro in 2008), the province can possibly influence the procedure for social-cultural, economical, spatial, agricultural and/or natural (etc.) reasons, a change in Members of the Provincial Executive or a change in members of a municipality can influence the implementation of compensation policy, natural disasters (floodings, earthquakes etc.), and so on. Which context and how this context influences the compensation procedure is examined by applying this criterion in this research.
- * **Final Assessment** on how effective the compensation policy has been, taking into account all the criteria of effectiveness (designed by Sabatier & Mazmanian). When is the compensation policy effective? Only if all effectiveness criteria are met concerning final conformity or if the greater part of the effectiveness criteria suffice the requirements of final conformity? The question remains if people are aware of the compensation policy, are informed of all the elements of the compensation policy and act according to the compensation policy. Where do bottlenecks possible appear in these phases? There is a difference between the past, present and future. This can possible become visible in this last part of inspecting the final conformity.

Application	Final Conformity	Comments
Criteria of effectiveness (Sabatier & Mazmanian)		
1) Policy objectives are clear and consistent; (Plan Conformity & Conformity of Behavior)	-	If policy objectives are clear and consistent is unknown. The representative notes that "this still needs to be seen. It became clear from the interview that information distribution is valuable. For instance in the case of 'Oostellingerwerf, Appelscha' information supply could clarify the situation surrounding the boundaries of the Natura 2000 areas. Oostellingerwerf is part of the Natura 2000 and not much is possible according to this municipality due to restrictions, brought along through the status of a protected nature area. Oostellingerwerf thought this problem would be solved by moving the boundaries of the Natura 2000 area. Only this is not the case because if the boundaries are moved then the municipality can still cause external effects on the Natura 2000 area, and this for instance still makes spatial planning difficult." From this practical case it can be noticed that the policy objectives are not clear yet, otherwise such a suggestion would not have been made. Through

		distributing information such misunderstanding could possibly be prevented.
2) The program is based on a valid causal theory; (Plan Conformity)	No	It is difficult to answer this criterion, since Friesland is still in the early phase of working out nature compensation. According to the provincial representative not much can be evaluated yet. If no evaluations are available then it becomes difficult to examine this criterion. No data is present in which the plans are compared to what has been realised in the field. This is interesting to inspect in future research. Although the provincial representative did say that “you should hope so (that what is taken is replaced). He also noted that whatever you arrange, it still decreases over time. As the respondent noticed it only have to be small things, but when this is all added together then it goes backwards quite fast. It all decreases, and besides you cannot compensate everything, because only a limited amount of space is available”. The provincial respondent also shared a couple of other thoughts like: “it remains the question when you take away something here, if the animals of this area think we have to go there (to the compensated area)”. It also became clear in the interview that “sometimes species are not where you expect them to be. For instance it can be possible that certain (bird) species are not present in an area in which they were located, or on the other hand that certain (bird) species are found in areas in which they were never observed.” Of course these are difficulties that are hard to overcome (by all provinces). In the end Friesland does think about this criterion, but has not worked it out yet, just as other elements that still need to be elaborated.
3) The implementation process is structured adequately; (Plan Conformity)	Yes / No	As stated before it is difficult to research if the compensation policy is structured because it is still in the beginning stages of being worked out. The provincial representative mentioned that “it is still difficult to find everything from the regional plan and that people still need to be informed. Next an example, connected to meadow birds, is given in which structuring of the compensation policy can be useful, according to the provincial respondent. In ‘Sextierum’ compensation was required due to interventions of greenhouse cultivation. A certain amount of money needed to be deposited as compensation. The municipality ‘Franekeradeel’ asked for the reasons behind this amount, what was it based on? The point of this practical situation is that the finances need to be based on something, according to the respondent. Perhaps registered in an ordinance.” The foundation behind financial compensation can be a way of structuring an element of the concept nature compensation. In the end it remains to be seen how the compensation policy is worked out in Friesland and which consequences this has on structuring the implementation process.
4) Implementing officers are committed to the program’s goals; (Conformity of Behavior);	Yes	The implementing officers are committed to the goals behind compensation. The provincial representative had an interesting example “in which the commitment of implementing officers became visible. The practical case was situated south of Leeuwarden, where a farmer was required to compensate for trees that he cut. This farmer had bought ground and the trees were in the way (i.e. in the middle of a meadow). The ground was meant for applying agriculture. So the farmer cut the trees, not knowing that those trees fell under the Forest policy. But an interesting fact behind these trees is that they were actually a provincial experiment to see if certain tree species would do well in Leeuwarden and the intent was never to keep them permanently. To come back to the implementing officers. Certain officers thought compensation was required, because the trees fall under the Forest policy. While other implementing officers disagreed because those trees belonged to an experiment and compensation would have cost the farmer a fortune. Finally this case was processed by a judge who agreed with the farmer.” This case is so interesting because the

		implementing officers are divided in two groups. Both were right in a way. Trees fall under the Forest policy so they need to be compensated. On the other hand, those trees belonged to an experiment, without the intent to permanently keep them. Thus the division is between the interests connected to preservation of trees or the interests of the farmer. This practical case shows that the province of Friesland has a variety of implementing officers in place, through which a variety of interests are valued.
5) Interest groups and (executive & legislative) sovereigns are supportive; (Conformity of Behavior)	Yes / No	As mentioned before Friesland does not want to use force to implement policy but tries to inform involved parties, with as a goal to convince them and work together. This working method can have it's consequences. During the interview it was not mentioned if there was much resistance. The example of 'Oostellingerwerf, Appelscha' showed that interest groups like the LTO and Rekron were involved. Although it did not became clear if this situation was resolved and how these interest groups interact with the province. Thus the interview did not show strong resistance of interest groups but it also did not show how supportive they are.
6) There are no detrimental changes in the socio economic framework conditions. (Context)	Yes / No	The representative of the province gave one example connected to this criterion. This involves a road from Leeuwarden to Dokkum, named the Centrale As. This road was not forced from the government but the province itself wanted the Centrale As. The road would bring along beltways and would be good to improve infrastructure, solve traffic jam problems. On the other hand for this project ground needed to be purchased, but that needed to be compensated because it goes right through national landscapes and a lot of protests were against it. In the end this road would be of economical interest but from the social perspective it brought along a lot of resistance. This is only one example that passed by during the interview. Only one example did not suffice this criterion, which does not mean that this criterion is not met, since other examples, given during the interview, sufficed this criterion.
Final assessment on the effectiveness of nature compensation, by using the outcomes of all the effectiveness criteria that are mentioned above (ratings between 1 and 5 points, see chapter 5.5 for explanations behind ratings per province).	■ ■	It becomes clear that Friesland is still in the beginning of the implementation process, concerning nature compensation. The provincial representative also noted that they haven't gained much experiences with nature compensation, other than compensation connected to Forest policy. Of course the Nb-wet and NEN areas cause cases in which compensation is required, but it isn't on a large scale. All these elements influence the effectivity of compensation policy. When viewing plan conformity the regional plan already frequently notes where elaborations are needed, and when viewing conformity of behavior only the examples given by the provincial respondent can be used. There is no other data available, including for instance monitoring data or evaluations, to research conformity of behavior or final conformity. Overall the conclusion is that compensation policy still needs to evolve in Friesland.

In the end it becomes clear that Friesland wants to work out nature compensation more extensively. This still needs to be awaited. How soon elaborations are made is not clear yet. At least in 2010 an evaluation of the regional plan will take place and this could possibly lead to improvements of the provincial compensation policy. When the compensation policy is extended it becomes interesting to see how this influences behavior connected to nature compensation. Conformity of behavior needs to be researched again when the extended compensation policy is implemented and when more experiences are gained, in order to have a better look into how behavior changed. It is a pity that no monitoring data was available or that no evaluations are present. Friesland has not registered anything on how to evaluate the compensation projects. Now I could only use experiences of the respondent in order to

research how the plans relate to what is happening in the field. If evaluations are present then it could become visible how several compensation projects were executed, including their end results. Finally it comes down to this:

- * Plan conformity: national guidelines like the 'EHS-spelregels need to be processed, the overall compensation process needs to be worked out more extensively (regional plan shows where elaborations are needed, as did the provincial respondent). Perhaps by gaining experiences the compensation policy can be shaped into a policy that suffices the national guidelines and that is also usable in the administrative culture of Friesland. Next to these needed elaborations Friesland also has processed additional features in the regional plan, concerning nature compensation. This includes guidelines for the Waddeneilanden and meadow birds situated outside the NEN. The future will show which effects these guidelines have in relation to the implementation of nature compensation.
- * Conformity of behavior: it is good that Friesland realizes that compensation needs to be worked out more. But for instance instruments to force compensation being fulfilled are not needed according to the provincial representative. The province thinks they are able to convince involved parties and reach consensus. In the past this was not always recorded in an agreement, but nowadays this is necessary. According to the respondent no bank warranties are used to secure compensation being fulfilled. These are important elements of the compensation process, which in their way influence the behavior of involved parties. From the interview it appeared that not much experiences were gained, other than with compensation due to the Forest policy. This is quite remarkable. Every province had the opportunity to gain experiences, because the compensation principle was introduced in 1995 (SGR). Are there less compensation projects in Friesland, and if this is the case what is the reason behind this? Through previous experiences and fulfilled compensation projects it can be researched how behavior changed through time, but this was not really possible during this research. Only experiences of the province were used in this research and perhaps it is interesting to also approach other involved parties like municipalities or the actual compensators.
- * Final conformity: the effectiveness criteria (connected to plan conformity, conformity of behavior & the context) were difficult to research, as mentioned above. The criteria were not always met, but does this mean that the compensation policy is not effective in Friesland? When evaluations are available or further research is performed on the effectiveness criteria, then more can be said about the final conformity.

Gelderland

1. Plan Conformity

Plan conformity is largely examined by using provincial policy documents on compensation. A list of these documents is provided. Besides if and how national compensation policy is translated into provincial compensation policy is explained next. A table is used, which gives a description of how compensation is registered in the provincial policy documents. First the areas are mentioned in which compensation is supposed to be applied. Then the standards are covered by looking at the seven steps to implement compensation, taken from the 'EHS-spelregels'. These topics in the table are taken from national guidelines, and can be used to determine how standards are being applied by provinces.

1.1 List of documents concerning nature compensation

- a) Veel instrumenten, één compositie. Nieuwe Wet ruimtelijke ordening (Dutch acronym new Wro) – Agenda 2008 (Policy on Spatial Arrangement);
- b) Streekplan (regional plan) Gelderland from 2005 and the digital version of this regional plan;
- c) Natuur & bos – Evaluatie richtlijnen compensatie, 2002 (evaluation of compensation guidelines);
- d) Finally the website of the province Gelderland has frequently been visited (www.gelderland.nl).

References to these documents will be made in the following scheme in which a description on the compensation policy is given. Next to these documents an interview took place with a representative of the province (specialized in nature compensation) in 2008 to gain insight in the compensation policy.

1.2 Description of how compensation policy is registered in documents

Application	Plan Conformity	Comments
Areas in which the compensation principle is in force		
1. National Ecological Network (NEN) areas & robust ecological connections;	Yes	(b)
2. Birds and Habitat Directive (BHD) areas;	Yes	(b)
3. Nature Protection Act (Dutch acronym: NB-wet) areas;	Yes	(b)
4. Compensation registered in other policy documents:		

a. Forest policy;	Yes	(b)
b. Flora and Fauna policy (Dutch acronym: FF-wet);	Yes	(b)
c. New policy of spatial planning (Dutch acronym: Wro).	Yes	Agenda of the new Wro has been published by the province Gelderland (a). This document describes in which cases an ordinance can be expected. The municipalities will have more freedom to act since the function of approval of the province elapses with the new Wro. Although it is known that NEN areas and valuable landscapes still have to pass the province. The Wro-agenda has an important function in the spatial policy of the province. It must be awaited how the new Wro will be applied and implemented with its new functions.
Compensation procedure in seven steps		
1) Testing the 'No, unless rule' consideration framework		
No formula (interventions are basically not allowed), unless formula:	Yes	In Gelderland the actual characteristics of the NEN are portrayed as: essential qualities (kernkwaliteiten) and environmental conditions (omgevingscondities). These concepts have been worked out. Spatial interventions for which the regional plan needs to be revised are considered as a significant damage to the above mentioned characteristics (kernkwaliteiten & omgevingscondities). This can have certain effects on the land, which has been described by the province. (b)
a. Prove considerable social importance;	Yes	Members of the Provincial Executive decide what involves considerable public importance (taking into account: only interests that are still present in the long run can be of considerable social importance & considerable social importance does not involve interests of only a few individuals). Natura 2000 areas have a different consideration framework. It involves compelling reasons of considerable social importance and the Members of the Provincial Executive are responsible to decide on this matter or the Minister of Agriculture, Nature and Food Quality. (b)
b. Research the alternatives;	Yes	
Compensation principle (No net-loss of values):	Yes	No net-loss of values (e.g. area, quality and cohesion). Also including the rule that compensation and the intervention are applied simultaneously, or in advance. (b) In the end the polluter pays principle counts. Gelderland has monitoring data available and evaluations have been published, which can give insight if no net-loss of values occurs. Apparently compensation is not always realized in the field, but Gelderland looks to it that compensation duties are still being met.
1. Integration operations of landscapes and mitigation;	Yes	Mitigative measures take place for all kernkwaliteiten and omgevingscondities that are damaged by an intervention. It does not only involve the damage to the location itself, but also external effects on the kernkwaliteiten and omgevingscondities need to be mitigated (e.g. groundwater level) (b)
2. Physical compensation including:	Yes	
a. Compensation of surface (direct effects);	Yes	Again taking into account: that no nett loss of values takes place (thus not only compensation of surface) and also external effects are taken into consideration. (b)
b. Compensation of quality loss (quality addition, in Dutch: kwaliteitstoetslag);	Yes	Next to physical compensation of 100% an extra physical compensation is in place, which depends on the development time of the concerning nature goal type

		(natuurdoeltype): =< 25 years: extra physical compensation of 20% 25 – 100 years: extra physical compensation of 30% => 100 years: extra physical compensation of 40% The EHS-spelregels prescribes: 1/3, 2/3 and depending on the circumstance. This will be viewed when the EHS-spelregels is processed in Gelderland. (b)
3. Financial compensation	Yes	Financial compensation can only take place if the initiative taker has proved no other possibilities to compensate exist (including expropriation). In each situation the extent of the financial compensation is determined, taking into account: - Location where physical compensation needs to be applied; - Development period in which the compensation needs to take place; - Costs of arranging the location and the costs of the management that will realize the nature goal types (natuurdoeltypen); - The future management situation. (b) These points are also mentioned in the EHS-spelregels.
Measures specifically designed for NEN areas:	Yes	
4. NEN –balance approach	Yes	
5. NEN re-determining the limits	Yes	
2) Compensation plan according to standards	Yes	Assessment scheme of compensation largely resembles the scheme from the EHS-spelregels. Extra feature include: if mitigative measures neutralize the significant damage. (Assessment scheme is given in the regional plan (b))
- Compensation plan, independent document according to standards	Yes	(b)
- Requirements on the content of compensation	Yes	All the requirements seem to been worked out in the regional plan of Gelderland.
3) Decision authorized authority on intervention and compensation	Yes	(b)
4) Embedding intervention and compensation into spatial plans	Yes	(b)
5) Private law agreement initiative taker and authorized authority	Yes	(b)
Legal binding agreements on the execution of the compensation plan:		
- Bank warranty	Yes	(b)
- Final realization date	Yes	(b)
- Penalties when exceeding final realization date	-	Unknown
6) Monitoring implementation by authorized authority	Yes	Monitoring takes place (c), but it is not yet applied every year or in the way as described by the following characteristics, assessed next. Although Gelderland does not suffice all the elements of this step 6, it is still a forerunner in monitoring compensation (including an evaluation, digital maps of forests & compensation, praised in other studies of for instance the VROM inspectie and Rekenkamer). The new Wro offers the opportunity to sharpen the compensation policy (including a monitoring notion which will be processed).
- Authorized authorities yearly report to the province	No	Authorized authorities do not report to the province every year, according to the provincial representative.
- Provinces verify these reportages and collects these inspected reports	Yes / No	Not all cases are verified in the field, but several projects with their plans have

		been compared to their realization in the field. (See the evaluation of 2002 (c))
- These provincial findings are reported to the state	-	It is unknown how often and how extensively the provincial findings are reported back to the state.
7) Authorized authority takes over execution when final realization date expires	-	Unknown
- The executing costs are for the initiative taker, including:		
- Bank warranty	Yes	(b)
- Penalty	-	Unknown
(Money is situated in the Green trust (Groenfond) linked to the project)		

It becomes clear that the province Gelderland suffices most of the criteria set in this table. Firstly it should be noticed that it is not yet clear which consequences the implementation of the new Wro will have for the provincial compensation policy. It can go both ways. The compensation policy may be sharpened due to the establishing of this new spatial policy, but on the other hand municipalities receive more power and perhaps certain cases that should compensate are overlooked since the approval of the province is not necessary anymore in certain circumstances. Secondly a critical note that is focused on the methods of applying compensation. Most methods like the no, unless rule, mitigation and physical compensation have been worked out into guidelines, but the implementation of financial compensation is less clear. The reason for this is that financial compensation is viewed per situation, which means that this type of compensation is made less visible in policy statements. Although Gelderland does indicate what to keep in mind with financial compensation. And thirdly the last part of the compensation procedure still needs some attention, since the monitoring and the guarantee of compensation fulfillment does not completely suffice the national guidelines. Evaluations are taking place and have been published but reports on this are not yet published every year as the 'EHS-spelregels' requests. To summarize most aspects related to compensation suffice the national guidelines.

2. Conformity of behavior

How do actions of involved actors in a compensation process correspond with the national and/or provincial compensation policy statements? The following table includes components like the role of parties involved, experiences & appliance of compensation, the guarantee of compensation fulfillment and a usability degree. An overview of the parties involved, their relations and their involvement is sketched out, which is of importance when researching the provincial compensation policy and the appliance of this policy. In this case the experiences of the province are captured. All these elements are related to the fact: if behavior of the parties involved in the compensation procedure act according to the national and/or provincial compensation policy.

To start by giving an overview of the key actors in the compensation process, as perceived by the province:

- Government

- Province
- Municipalities
- Initiative taker
- And many other involved parties, e.g. adviesbureau's - consultancy agencies (Arcadis, Bureau Beheer Landbouwgronden), rentemeester kantoren – offices of interest masters, landschappen (The Gelderland Trust), environmental organizations, agriculture, Recron (recreation), etc.

Application	Conformity of Behavior	Comments
Role of parties involved		
Are the key actors in the compensation process, as perceived by the province, involved in the compensation procedure?	Yes	Many key actors have been mentioned in the interview. Their involvement in the compensation procedure differs and relations between these key actors are essential in the involvement that comes along with it (especially taking into account the relation between the province, the municipality and the initiative taker).
Which relationships exist between the key actors in the compensation process, as perceived by the province?	Yes	Evident relations between parties involved. Mostly covered the relation between national, provincial, municipal level and the initiative taker.
Experiences & appliance of compensation (did compensation policy contribute to a change in behavior?)		
Do parties agree on the compensation policy?	Yes	The province supports the compensation policy but the support can sometimes be less with lower authorities and civilians, according to the respondent.
Do parties act according to the compensation policy?	Yes	"In the past the compensation policy looked good on paper, but the realization of compensation in the field was often not sufficiently applied", as the respondent observed. The representative stated that "in Gelderland some municipalities/civilians only act when they are reminded of compensation duties while others have great problems in finding suitable ways to compensate and creating surplus value with it. Next to this problems exist in finding suitable ground. Simultaneously applying the intervention and the compensation (or compensation required in advance) is a difficult task to fulfil and the respondent indicates that the province is flexible on this requirement (this requirement can cause severe delays)." The province is currently looking into running pilots where the province acts as a compensationbank. The respondent said that "then the province can directly act on a demand. It can shorten the period of the compensation procedure and the compensation could be fulfilled more easily. Compensation can also be used as a financial source. For instance creating nature can increase the value of a land, thus by taking over compensation duties one can also increase the value of a property." The executing of agreements remains an important element to monitor. The legal documents behind the intervention and compensation plan is a way to force the fulfilment of compensation, which was not applied in the past. It becomes clear that there are ways to guarantee/encourage parties involved to act according to the compensation policy, which were not as clear/or

		present in the past.
Guarantee of compensation fulfillment		
Is a sufficient amount of instruments available to guarantee the fulfillment of compensation duties?	Yes	Gelderland has published a report on the evaluation of nature and forest compensation in 2002, also maps of compensation regarding forests were created and the province collaborated with the VROM Inspection on a research regarding the execution of the compensation principle in 2006. Gelderland also participated in a research of the Rekenkamer in 2007, in which the implementation of compensation policy was viewed. These products show how instruments were being applied and these outcomes were actually instruments by itself because they show where problems occur. During the interview with the provincial representative it became clear that in the past the realization of compensation in the field was insufficiently applied. Perhaps because the guarantee of compensation fulfillment was insufficiently forced. Regularly agreements were not met. The respondent states that "the province makes sure that the agreements are still being met." Nature compensation can be forced. Due to the legal document behind an intervention with the belonging compensation plan gives it a legal status. This can be used when it is necessary to force the compensation to be arranged as planned in the document.
Are these instruments applied to guarantee compensation?	Yes	Giving an area a certain function, like nature, valuable landscape, agriculture etc. does not mean that this area is managed as that function (goal type) implies, according to the respondent. By means of legal documents connected to certain areas it can be forced to be managed in a suitable manner related to the goal type of such an area.
Usability degree (compensation procedures)		
- To which extent is compensation policy known by the intended users?	Yes / No	The regional plan includes information on nature compensation and includes a scheme that can be of use. If this is unclear it is of course possible to address the province for additional information on the compensation procedure. The respondent of the province indicates that "extra information to make the compensation procedure clear can be necessary." Thus information supply and informing involved parties is desirable. For instance at municipalities the composition of people working there often changes. Often spatial planners have to learn more about nature compensation, since they are not familiar with it, when being new to the topic. By providing information on the topic this process of getting acquainted accelerates.
- To which extent is compensation policy applied by the intended users?	Yes	In the past compensation duties were often not or insufficiently fulfilled. The province checks that the agreements are still met. Currently there are ways to insure that compensation will be executed. For instance due to preliminary consultations the initiative taker and municipalities are informed on the compensation procedure. It is clear that the province can always be approached when something is unclear. Thus parties involved are informed and know what is expected from them. How well the compensation policy is applied and which results are booked in the field should become clear from future evaluations. The realization in the field is an important element to look into since in the past this part was often overlooked.

As becomes clear from the table the behaviour concerning nature compensation changed. Nature compensation is processed into policy and this compensation policy is being applied, monitored and evaluated. Through the years improvements have been made. In the past the plans did not always correspond with the realization of compensation in the field. Compensation duties need to be fulfilled and when this is not accomplished then the province will make sure agreements are still being met. Monitoring/evaluations are essential when judging if compensation is applied according to the implemented provincial compensation policy and if parties involved act accordingly. It is important to remember this is a process that will remain to evolve through time. Although Gelderland is ahead with it's monitoring and published evaluations (as reported in previous research by Kuindersma, VROM Inspection and the Rekenkamer) the system of monitoring and evaluating will always show points for improvement. As became obvious with plan conformity, and also in this section on conformity of behaviour, monitoring and evaluating the compensation procedure (with it's outcomes) is essential. The respondent mentioned that improvements/additions to current compensation policy can occur when the 'EHS-spelregels' is fully processed into provincial policy and when the new Wro is completely established. How is it possible for the province to evolve the compensation policy and the procedures surrounding it. Gelderland is thinking ahead by participating in the development of a compensationbank (running pilots), offering possibilities to see compensation as a financial source and by showing that by taking over compensation duties the value of an area can be increased. These are examples of appliance of the compensation policy / procedures that show initiative.

3. Final conformity

Final conformity involves if reality corresponds to the intentions of the initial plan. This includes plan conformity (initial plan) and conformity of behavior (change in behavior), which is compared to practical situations. The actual practical cases, studied in this research while focusing on legitimacy, will be linked with the final conformity (described in chapter 5.3). In this case experiences of the municipality of Nunspeet are taken into consideration while assessing the effectiveness of nature compensation. It can be noticed from plan conformity and conformity of behavior that initial plans are known and behavior certainly changed regarding the implementation of compensation. But final conformity does not solely involve these characteristics only. It is also of importance to view in which context the compensation process takes place. In the end the question remains: How effective compensation policy is currently? The effectiveness criteria of Sabatier and Mazmanian can be categorized by plan conformity, conformity of behavior and the context, which can be found back in the following table. A short summery will be given next on how the criteria of effectiveness (from Sabatier and Mazmanian) are used in this research on nature compensation:

- 1) ***Policy objectives are clear and consistent, Plan Conformity & Conformity of Behavior:*** This criterion is researched by looking into how compensation is processed in policy statements (comparing national guidelines to provincial compensation policy and how this policy is applied on local level). This criterion also involves how aware the involved parties are of the compensation policy and how well they understand it (usability degree). This includes questions like: can involved actors find themselves in the compensation policy and do they act according to this policy? All these factors influence the outcome.

- 2) **The program is based on a valid causal theory, Plan Conformity:** This criterion is examined by researching if no net-loss of values occurs, which is the goal behind nature compensation. Do the areas in which an intervention is planned & takes place and the compensated areas result in the fact that no net-loss of values occurs?
 - 3) **The implementation process is structured adequately, Plan Conformity:** This criterion is researched by looking into which standards are in place. Do the compensation guidelines/policy statements (set on national and/or provincial level) structure the compensation procedure adequately? This also involves experiences of involved actors with the implemented standards.
 - 4) **Implementing officers are committed to the program's goals, Conformity of Behavior:** This criterion is researched by looking into how implementing officers act according to the compensation policy. How is compensation applied within the province?
 - 5) **Interest groups and (executive & legislative) sovereigns are supportive, Conformity of Behavior:** This criterion is researched by looking into how key actors, concerning interest groups and sovereigns (as perceived by the province) are supportive regarding the compensation procedure. Do they act according to the compensation policy?
 - 6) **There are no detrimental changes in the socio-economic framework conditions, Context:** This criterion is researched by looking into the context surrounding the compensation procedure. External / internal events can have influences on the compensation procedure. This can for instance include: currently the international/national financial crisis, changes in legislation (accentuating the Nb-wet in 1998, implementation of the new Wro in 2008), the province can possibly influence the procedure for social-cultural, economical, spatial, agricultural and/or natural (etc.) reasons, a change in Members of the Provincial Executive or a change in members of a municipality can influence the implementation of compensation policy, natural disasters (floodings, earthquakes etc.), and so on. Which context and how this context influences the compensation procedure is examined by applying this criterion in this research.
- * **Final Assessment** on how effective the compensation policy has been, taking into account all the criteria of effectiveness (designed by Sabatier & Mazmanian). When is the compensation policy effective? Only if all effectiveness criteria are met concerning final conformity or if the greater part of the effectiveness criteria suffice the requirements of final conformity? The question remains if people are aware of the compensation policy, are informed of all the elements of the compensation policy and act according to the compensation policy. Where do bottlenecks possible appear in these phases? There is a difference between the past, present and future. This can possible become visible in this last part of inspecting the final conformity.

Application	Final Conformity	Comments
Criteria of effectiveness (Sabatier & Mazmanian)		
1) Policy objectives are clear and consistent; (Plan Conformity & Conformity of Behavior)	Yes / No	Involved parties cannot ignore the compensation policy. It is clear compensation duties need to be fulfilled. If the policy objectives are not understood information can be gathered at the province, since this is the level at which the policy objective were created. The respondent mentioned that providing information to municipalities (and initiative takers) can be useful. For instance at municipalities the composition of employees can change frequently and informing newcomers can improve the compensation process. On the other hand the practical case of Nunspeet shows a

		different situation. When the new Nb-wet was implemented in 2005 confusion existed on what should be compensated and it caused a lot of problems in the compensation process, which delayed it terribly. Currently Nunspeet states that the compensation objectives are clear (consistent can be discussed) and when something is unclear the municipality knows who to contact to gather information.
2) The program is based on a valid causal theory; (Plan Conformity)	Yes	Based on national guidelines (no net-loss of values). Gelderland has compared the plans and the initial areas with the areas in which compensation was realized. Outcomes have been published and are distributed on the provincial website. Thus it has been researched if plans correspond with reality but this still needs to be applied to all compensation projects. The system of monitoring/evaluating can be improved to reach that goal.
3) The implementation process is structured adequately; (Plan Conformity)	Yes / No	The respondent noticed that municipalities more frequently involve the province in early stages of the compensation process and in the preliminary consultation. This is probably done to avoid a lot of trouble in the final stages of the compensation process. This is an example that parties involved understand the policy and try to work with it. Again the practical case of Nunspeet shows a different situation. When the compensation policy changed the process was not structured for them. Currently it can be considered structured in order to work with.
4) Implementing officers are committed to the program's goals; (Conformity of Behavior);	Yes / No	Implementing officers at provincial level are supportive of the compensation goals, according to the respondent. And the support can be less at lower authorities. This is also seen in the Nunspeet case. The province agrees on the policy while the municipality of Nunspeet objects to the new implications caused by the implementation of the new Nb-wet that brought along stricter compensation requirements. In the end this criterion can differ between municipalities.
5) Interest groups and (executive & legislative) sovereigns are supportive; (Conformity of Behavior)	Yes / No	This criterion can differ between interest groups and sovereigns. The province indicated to work with several organisations (for instance Arcadis to establish a compensationbank), which became clear in the examples given during the interview. In the Nunspeet case interest groups have not always been supportive of the interventions and the compensation connected to this. This remains a difficult situations since interests of different parties are involved.
6) There are no detrimental changes in the socio economic framework conditions. (Context)	Yes / No	Examples of detrimental changes in the social-economic framework conditions are: the implementation of the new Nb-wet in 2005 (this meant consequences for the compensation project in Nunspeet), large infrastructural projects and currently the implementation of the new Wro. These are examples that could have an influence on the compensation process. The new Nb-wet is the actual example of a detrimental change in the socioeconomic framework conditions, when looking into the practical case of Nunspeet. Large infrastructural projects and the implementation of the new Wro could lead to detrimental changes in the socioeconomic framework conditions, but this is not the case yet. Although this criteria is not met, due to only one compensation project (Nunspeet) that causes this criterion to fail. This out of many compensation projects that do suffice the criterion. Is this fair to fail this criterion on one case that does

		not suffice it?
Final assessment on the effectiveness of nature compensation, by using the outcomes of all the effectiveness criteria that are mentioned above (ratings between 1 and 5 points, see chapter 5.5 for explanations behind ratings per province).	■ ■ ■ ■	From analysis it appears that in the past the effectiveness criteria was not always met. Through time the compensation policy and the compensation procedures evolved. Currently Gelderland improved their compensation policy and monitors/evaluates compensation projects, which can lead to points of improvement in the compensation policy. There is clearly a difference in past en current implementation practices. The practical case of Nunspeet also shows this. Currently most effectiveness criteria are met, which explains the high rating and it always remains open for improvements.

This section on final conformity indicates that Gelderland appears to moderately suffice the effectiveness criteria from Sabatier & Mazmanian in the past, but currently the province suffices the criteria quite well. Thus there is an important difference between the past and current compensation procedures. When looking at the Nunspeet case it becomes clear that a lot happened when the new Nb-wet was implemented. The province was implementing a new policy that had unfavorable consequences for the municipality of Nunspeet. The collaboration between the province and the municipality was not optimal for a while. But when I took the interview, with a representative of the municipality of Nunspeet, these issues seemed resolved. The plans were still not approved at that time, while this project originates from 1993 but later on in 2008 the plans were approved. To summarise first the municipality of Nunspeet resisted the implication of the new Nb-wet, but they later on worked with the province in order to be able to arrange the compensation plan for the development plan. More information on this practical case can be found in chapter 6. It becomes clear that the compensation process with it's procedures evolved through time. Currently the effectivity criteria seem to be met, but further progress can be made when completely implementing the 'EHS-spelregels' and the new Wro. This could improve the last stages of the compensation process, including the monitoring and evaluations. The plans of all the compensation projects should correspond with what is realized in the field. Gelderland is already advanced in this last step of the compensation process, but even this province can evolve the concept nature compensation more.

Noord-Brabant

1. Plan Conformity

Plan conformity is largely examined by using provincial policy documents on compensation. A list of these documents is provided. Besides if and how national compensation policy is translated into provincial compensation policy is explained next. A table is used, which gives a description of how compensation is registered in the provincial policy documents. First the areas are mentioned in which compensation is supposed to be applied. Then the standards are covered by looking at the seven steps to implement compensation, taken from the 'EHS-spelregels'. These topics in the table are taken from national guidelines, and can be used to determine how standards are being applied by provinces.

1.1 List of documents concerning nature compensation

- a) Streekplan Noord-Brabant 2002, Brabant in Balans (regional plan);
- b) Handleiding bij het Compensatie Registratie Systeem (2004) (Manual on the Compensation Registration System);
- c) Beleidsregel natuurcompensatie (2005);
- d) Natuurcompensatie; registratie en verslaggeving over het jaar 2004, Toepassing van het provinciaal compensatiebeginsel in het jaar 2004. (2004) (Registration and documentation of the provincial compensation principle per year)
This kind of report on registration and documentation was also published over the years 2005, 2006, 2007;
- e) Handreiking Ecologische Bouwstenen (2006) - Voor de GHS en AHS in het Streekplan Noord-Brabant 2002.
(Ecological building stones, concerning GHS and AHS);
- f) Natuurcompensatie regeling, Onderzoek naar de organisatorische vastlegging (2008)
(Research on the organizational documentation of the nature compensation, performed by Sander de Boer (HAS))
- g) Finally the website of the province Noord-Brabant has frequently been visited (www.brabant.nl)
 - * Information on the Nature Protection Act
 - * Information on the structuurvisie and new Wro, including the articles:
 - Aan de slag met de nieuwe Wet ruimtelijke ordening
 - Tijdsbalk totstandkoming Structuurvisie en Verordening Ruimte
 - De gemeentelijke structuurvisie en de nieuwe Wet op ruimtelijke ordening
 - Discussiehandreiking Sturingsfilosofie nWro (mei 2007)
 - Verordening Ruimte

References to these documents will be made in the following scheme in which a description on the compensation policy is given. Next to these documents an interview took place with a representative of the province (specialized in nature compensation) in 2008 to gain insight in the compensation policy.

1.2 Description of how compensation policy is registered in documents

Application	Plan Conformity	Comments
Areas in which the compensation principle is in force		The starting-point involves that lost values of nature and landscapes, as consequence of interventions in the Green Main Structure (Dutch acronym: GHS) and Agricultural Main Structure (Dutch Acronym: AHS), need to be compensated (a: 5). The 'Handreiking Ecologische Bouwstenen' describes everything surrounding the GHS and AHS extensively. The GHS and AHS contain main- and subzones, which are all described and worked out in this document. For instance within the GHS different area categories can be distinguished, with different protection regimes connected to it (a: 8). The regional plan describes that this depends on the type of nature and the character of the (spatial) intervention. Values connected to landscapes and cultural history are respected and used as inspiration to increase the quality of landscapes in built-up areas and undeveloped areas (a: 8). Next the 'Beleidsregel Natuurcompensatie' states that the compensation principle is in force when spatial interventions lead to damage of: actual nature- and landscape values within the GHS and the AHS-Landscape, potential nature values within the GHS, nature- and landscape values within areas that are assigned as forest- or nature area in valid development plans (c: 6). Further explanations on when the compensation principle is in force are given in the 'Beleidsregel Natuurcompensatie'. Finally there is also existing legislation on national and international level in force, like the Forest policy, Flora and Fauna policy and the Nature Protection Act (c: 15).
1. National Ecological Network (NEN) areas & robust ecological connections;	Yes	The regional plan states that the GHS can be considered as an element of spatial policy of the state, which should lead to the realization of the NEN (a: 91). The regional plan also notes that the NEN always falls within the GHS. However the GHS does not only involve NEN areas, but also other areas with an important role in the functioning of the provincial ecological systems (these areas can be viewed on a map in the regional plan). The connection between the NEN and nature compensation can be found back in both the regional plan and 'Beleidsregel Natuurcompensatie'. An exception exists because compensation is generally not allowed in the NEN, but compensation can occur in ecological connection zones. Only if it is an addition for the instrumentation of means that are available for the partial design of the zone (c: 17).
2. Birds and Habitat Directive (BHD) areas;	Yes	The regional plan states that "the protection of the GHS is equal to the requirements of the protection, concerning the BHD. Since 1992 all new development plans are examined on sufficing this main structure. In doing so an situation gradually exists in which the development plans of Noord-Brabant barely permit spatial developments that are contradictory to the BHD." (a: 95) Additionally the concept of 'extern influences', concerning interventions outside the assigned BHD areas, is in force.
3. Nature Protection Act (Dutch acronym: NB-wet) areas;	Yes	The provincial website states the responsibilities of the province for implementing the Nb-wet. This includes authorizing permits, supervising the proper appliance of rules, plan assessment and formulating management plans for (a part of) Natura 2000 areas. (g)
4. Compensation registered in other policy documents:		
a. Forest policy;	Yes	The Forest policy can still be in force, when damage to nature- and landscape values are not situated in the GHS and AHS (c: 15). The provincial website contains more information on this topic.

b. Flora and Fauna policy (Dutch acronym: FF-wet);	Yes	The regional plan states that when development plans involve developments leading to damage or disturbance of protected plants or breeding- or rest places of protected animals, it requires an exemption or dispensation. (a: 95) The provincial website contains more information on this topic.																									
c. New policy of spatial planning (Dutch acronym: Wro).	Yes	<p>The provincial website contains information on the new Wro. For instance it shows a time line, concerning the creation of the spatial structure vision (structuurvisie) and the ordinance Ruimte (g). The scheme below shows the four planned phases.</p> <table><tr><th>2006</th><th>2007</th><th>2008</th><th>2009</th><th>2010</th></tr><tr><td>jan 06-mrt 07 Phase 1</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>apr 07-jul 08 Phase 2</td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>aug-dec Phase 3</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td>jan 09-sept 10 Phase 4</td><td></td></tr></table> <p>- Phase 1: Exploring the new Wro. - Phase 2: Converting current spatial arrangement policy to the new Wro - Phase 3: Orientation of the new spatial structure vision - Phase 4: Formulating the new spatial structure vision and the Ordinance Ruimte (g) These phases are described more extensively on the provincial website. During the interview with provincial representatives it appeared that “they do not really know how everything will be shaped. Probably the provincial interests will be in there 1:1. The interests of nature and landscapes will definitely be processed in the ordinance. For the respondent that means that the whole compensation policy will be in there. He does not know exactly how this will be done, but feels strengthened by it. It will only get a different stamp on it, but the respondent thinks that they can continue with the current compensation policy.” Thus it remains to be seen which influences the new Wro will have on the implementation of nature compensation.</p>	2006	2007	2008	2009	2010	jan 06-mrt 07 Phase 1						apr 07-jul 08 Phase 2						aug-dec Phase 3						jan 09-sept 10 Phase 4	
2006	2007	2008	2009	2010																							
jan 06-mrt 07 Phase 1																											
	apr 07-jul 08 Phase 2																										
		aug-dec Phase 3																									
			jan 09-sept 10 Phase 4																								
Compensation procedure in seven steps		The ‘Beleidsregel Natuurcompensatie’ states that “sometimes the terms of reference of compensation, based on the compensation policy, is confused with the ‘Red for Green’ policy. However nature is not damaged with ‘Red for Green’ and different goals are pursued. It involves the development of new nature in exchange for the permission to develop ‘red’ with the goal to give a quality stimulus to the area.” (c: 14) Nature compensation policy always involves damage to nature/landscape values.																									
1) Testing the ‘No, unless rule’ consideration framework																											
No formula (interventions are basically not allowed), unless formula:	Yes	The regional plan gives the following information on the ‘no’ formula and ‘no, unless’ formula: “the ‘no’ rule is in force in regional nature and landscape units (Dutch acronym: RNLE’n) and in nature pearls (in Dutch: natuurplek) outside these units. Expanding of urban space is excluded, apart from constructing (physical) adjustments to non-recreational infrastructure, in which the ‘no, unless’ rule counts. Limited roundings of city- or village borders that lead to substantial improvement of qualities, concerning the urban structure and landscapes, are permitted in the AHS-landscape. Outside the regional nature- and landscape units and nature pearls the ‘no, unless’ formula counts in the GHS and AHS-landscape. Extensions of urban space is only permissible when considerable social importance exists and after researched																									

		proved that no alternative locations are available outside the GHS and AHS-landscape. And also including research on other solutions through which damage to nature- and coherent landscape values can be prevented. In cases in which it is inevitable it must be assured that the damage to nature values and with that associated landscape values is limited to a minimum and is compensated." (a: 104) Although compensation outside the GHS may not be at the expense of a good agrarian structure (c: 7).
a. Prove considerable social importance;	Yes	The regional plan shows that "considerable social importance involves public interests and not exclusively or mainly private owners or certain small groups of citizens. Safety-, public health and basic environmental interests are without a doubt important. Interests connected to the construction of (inter)national, provincial and regional infrastructure are also of importance, if the purpose and necessity is proven. Social and economical interest can also be of weight. Only financial interests of a governmental body are generally not considered as considerable social importance." (a: 105) More examples of considerable social importance are mentioned in the 'Beleidsregel Natuurcompensatie'.
b. Research the alternatives;	Yes	The regional plan notes it can not be presumed too easily that alternative locations are missing outside the GHS and AHS-landscape or that there are no other solutions. The regional plan also describes certain policy directions connected to researching the alternatives (a: 105).
Compensation principle (No net-loss of values):	Yes	The 'Beleidsregel Natuurcompensatie' states "the goal of compensation is to bring back lost nature values and potentials to develop nature values in a way that the balance of 'no net loss' of values, concerning acreage, quality and cohesion remain. Only the loss of values, which remain after mitigation, are to be compensated." (c: 16) Thus this means that there should be no net loss of values when damages to nature- and landscape values are allowed due to considerable social importance and the missing of alternatives (c:1). But damage to nature- and landscape values need to be presented before it can be determined if compensation should take place, according to the 'Beleidsregel Natuurcompensatie' (c: 18, 19). Insight is required on the following topics: surface that is damaged by the interventions, quality of damaged values, nature of damaged values, disturbance and disintegration caused by the intervention, the affected functionality of an area due to the intervention and the damaged potential nature values caused by the intervention. These element are elaborated in the 'Beleidsregel Natuurcompensatie'.
1. Integration operations of landscapes and mitigation;	Yes	Mitigation is described in the 'Beleidsregel Natuurcompensatie' as "limiting negative effects of an intervention on the location. Mitigation is focussed on reducing negative effects for nature- and landscape values, by taking specific measures. This can be done by for instance applying an environmental arrangement, integration operations or planning activities in the suitable season."(c: 18) More examples are given in the 'Beleidsregel Natuurcompensatie'.
2. Physical compensation including:	Yes	The 'Beleidsregel Natuurcompensatie' states that "the damaged nature- and landscape values in the GHS and AHS-landscape need to be compensated and the extent of compensation depends on: size of damaged acreage, disturbance and disintegration of acreage, the extent of degradation of the functionality of nature- and landscape values. The compensation plan should be focussed on keeping the functionality intact and it should be focussed on restoration when it is degraded." (c: 8)
a. Compensation of surface (direct effects);	Yes	The damaged acreage should minimally be compensated with the same surface (c: 8). The quality addition, which is described in the next criteria, depend on the nature and quality of the

		degraded values.
b. Compensation of quality loss (quality addition, in Dutch: kwaliteitstoelag);	Yes	The 'Beleidsregel Natuurcompensatie' notes that quality addition involves the extra compensation of surface. Noord-Brabant does not require quality addition when the development time is 0-10 years. With qualities that have a minimal development time of 10-25 years one third of the surface is asked additionally. And the development time of 25-100 years demands a quality addition of 2/3 of the surface. Finally the development time of 100 years and more requires custom made measures on top of the quality addition of 2/3 of the surface. (c: 8) Noord-Brabant differs from the 'EHS-spelregels' since the years connected to the quality additions are higher. The 'EHS-spelregels' prescribes development times of: 0-5 years, 5-25 years, 25-100 years and a 100 years or more. Thus the first two development time categories differ.
3. Financial compensation	Yes	<p>The 'Beleidsregel Natuurcompensatie' states that financial compensation is not permitted, unless:</p> <ul style="list-style-type: none"> - after a substantial research it appears that physical compensation within the municipality or in the region is not possible. - if the compensating development plan review can only partially or not at all proceed, as a consequence of validating appeals by a court. - If there are only minimal or insignificant effects on the protected nature values. This is only the case when it involves no endangered biotopes or species and when the damage to nature terrains or elements in landscapes is smaller than 0,25 ha. It should also not have a connection function to endangered species. (c: 9) <p>When financial compensation is applied there should be an agreement between the province and the initiative taker and this should contain information on conditions like how the money is spend to realize the compensation duties (c: 9). The money is deposited in the provincial trust. Although the 'Beleidsregel Natuurcompensatie' mentioned that they are very reserved in financial compensation being a way to buy off compensation. This makes it too easy for initiative takers to dismiss the obligation of searching for adequate compensation possibilities (c: 21). It is of interest that the 'Beleidsregel Natuurcompensatie' shows the costs, which are associated with compensation and on which factors the degree of financial compensation depends.</p>
Measures specifically designed for NEN areas:	No	
4. NEN –balance approach	No	The NEN-balance has not been mentioned in the 'Beleidsregel Natuurcompensatie' and the regional plan. The provincial website showed a document 'Discussion assistance guiding philosophy new Wro, May 2007' in which the appliance of new instruments, including the NEN-balance approach and re-determining the NEN limits, were mentioned. This was a bullet under the topic of 'decentralized directing'. It appears that these concepts have not been worked out in policy documents yet. The respondent mentioned that "the NEN-balance approach was almost applied once, but this did not proceed. They still have questions about the NEN-balance approach. It is something for large scale projects, instead of small-scale compensation. This has not occurred yet in the province." It remains to be seen how these concepts will be shaped.
5. NEN re-determining the limits	No	Not mentioned in regional plan and 'Beleidsregel Natuurcompensatie' (see explanation of NEN-balance approach).
2) Compensation plan according to standards	Yes	Both requirements connected to the compensation plan are generally met, which proves it is

		according to standards. Standards have been processed in policy documents.
- Compensation plan, independent document according to standards	Yes	The 'Beleidsregel Natuurcompensatie' describes everything surrounding a compensation plan. The appendixes include: an action plan, registration form, progress form and a concept of the agreement that should be drawn up. This can be very clarifying when dealing with compensation. The registration form is an obligatory element in the compensation plan, which is necessary for the agreement made between initiative takers and the authorized authority. Simultaneously with the approval of the Provincial Executive about the damaging plan or the request of a declaration of no objection (Dutch acronym: v.v.g.b.) the following should also be provided: development plan in which the compensating destination is arranged and the related compensation plan (c: 20). Additionally maps are established by the Provincial States, which form a consideration framework for compensation plans. Municipalities and the province can have an advantage by using these maps because they can test the compensation plans to it (c: 13). Thus the compensation plan is processed in policy documents as an independent document. It is also according to standards. Finally the municipality, which is ultimately responsible for the formulation of a development plan, has a coordinating role in the realization of the compensation plan (c; 16).
- Requirements on the content of compensation	Yes	As mentioned above, all the requirements that were set for the content of compensation are worked out extensively. Only the NEN-balance approach and re-determining the NEN limits are not concepts that have been registered or applied frequently.
3) Decision authorized authority on intervention and compensation	Yes	Projects and plans are proposed to the Provincial Executive, who will allow it or not.
4) Embedding intervention and compensation into spatial plans	Yes	The intervention and compensation plan are to be embedded into spatial plans (bestemmings-, wijzigings-, en uitwerkingsplannen of verzoeken om verklaring van geen bezwaar ex artikel 19). The embedding of an intervention and compensation is explained more in the 'Beleidsregel Natuurcompensatie' (c: 20).
5) Private law agreement initiative taker and authorized authority	Yes	The province greatly values the securing of the actual execution, concerning the necessary nature compensation. This includes a combination of: - Securing the grounds for compensation in planning. - Guaranteeing the actual implementation through private law (c: 20) The 'Beleidsregel Natuurcompensatie' notes that "in order to guarantee the actual implementation of compensation an agreement should be made between the municipality and initiative taker to register the responsibility of the initiative taker in executing the compensation conform the agreements made in the compensation plan. This agreement is part of the compensation plan. The penalty clause in the agreements should guarantee compensation being fulfilled entirely and in time." (c: 20) When the initiative taker is not in time with applying the agreement or if it is done insufficiently, then a certain amount of money is to be paid to the municipality, and the right of municipalities or the province to still force the fulfilment is undiminished (c: 9).
Legal binding agreements on the execution of the compensation plan:		
- Bank warranty	Yes	The bank warranty has been worked out in the 'penalty clause', mentioned below. The respondent confirmed that a penalty clause was implemented instead of a bank warranty.
- Final realization date	Yes	A time scheme is also part of the implementation agreement (c: 8). The involved parties document when the execution of compensation starts and when this should be finished (c: 19). Thus a final realization date is registered in the agreement.

- Penalties when exceeding final realization date	Yes	The 'Beleidsregel Natuurcompensatie' describes that "a penalty clause prevents procedures, either because parties register the extent of the penalty in advance (damage fixation function of the clause), or because the penalty clause encourages the correct performance (stimulating function). The penalty clause should cover all the associated costs, concerning compensation." (c: 20) This document also shows examples of costs, connected to compensation. Finally the 'Beleidsregel Natuurcompensatie' states that "because of intense governmental relations between authorities there are sufficient opportunities to test the fulfillment of the formulated agreements, and the penalty clause can be dropped." (c:21) Thus the penalty clause is not in force when the initiative taker involves a governmental body (e.g. municipality, province or state) and different agreements can be made between these authorities.
6) Monitoring implementation by authorized authority		<p>The 'Beleidsregel Natuurcompensatie' mentions how registration and monitoring is applied:</p> <ol style="list-style-type: none"> 1 The province registers all projects that are subjected to this policy; 2 Municipalities (or province / state) delivers a progress report on the implementation of compensation every year; 3 The province will monitor the progress of the compensation implementation on basis of the provided progress reports; 4 The province will check in the field randomly; 5 The Provincial Executive will evaluate the framework of this policy after four years at the latest. (c: 10) <p>During the interview it became visible how extensive the registration and monitoring system actually was. Registration forms, progress forms, and an example of an agreement are given in the 'Beleidsregel Natuurcompensatie'. The monitoring is described very clearly/comprehensively in this policy document. During the interview I even received an overview on nature compensation plans from 1997-2003, including the following information: data on the project, date of decision Provincial Executive, extent of damaged nature and required compensation, management, starting date of compensation and the end date and if compensation is realized. Such a list can be very clarifying to get a quick impression on the nature compensation projects in Noord-Brabant. In the 'Handleiding bij het Compensatie Registratie Systeem' the province even shows how registrations of compensation projects can be processed by computer programs. The province also brought me into contact with a student (Sander de Boer), who performed a research for the province on the organizational registration of the nature compensation policy. These are a couple of interesting details from this study, with a connection to this research: to start with the fact that "since 2005 no progress reports have been received by the province Noord-Brabant. Many municipalities also do not know it is compulsory. The province cannot monitor the implementation of compensation solely on basis of the progress reports, since these have not been handed in yet. Next to this it appeared that since 2005 compensation was verified in the field once, through an initiative of the Ministry of Housing, Spatial Planning and the Environment. At this moment it is not clear which department / direction will be working on this. Finally it became clear that the Provincial Executive will evaluate this policy in 2009 at the latest, since this is done every four years." (f, 2008:16) Thus it appears that the forms still have to be used and although compensation is randomly checked in the field, according to the 'Beleidsregel Natuurcompensatie', from these results it appears that currently no projects are verified in the field.</p>
- Authorized authorities yearly report to the province	Yes	The municipalities (province/state) deliver data on the progress of nature compensation

		projects by filling in progress forms every year (example of this form is provided in 'Beleidsregel Natuurcompensatie') (c: 22). During the interview the respondent mentioned that "this has not occurred yet. You work with extern parties. The municipalities often do not perform compensation themselves. The initiative taker implements it so the municipalities have to ask the initiative taker for information on the form, but these can sometimes give it a lower priority. The progress form can also remain at the municipality. And when it is send to the province it still has to be send to the correct person, otherwise it can be put on a pile there. A lot of steps are involved in this process, which makes the chance larger that something lays around." The respondent also thought the filling in of the form was something they have to get used with.
- Provinces verify these reportages and collects these inspected reports	Yes	Next to monitoring by letter the province will also randomly perform research on the execution of compensation duties in the field (c: 23).
- These provincial findings are reported to the state	Yes	Noord-Brabant has published a yearly report on registration and documentation of the compensation principle.
7) Authorized authority takes over execution when final realization date expires	Yes	The 'Beleidsregel Natuurcompensatie' describes what the 'penalty clause' involves quite extensively. The bank warranty is kind of processed in this clause. The penalty clause gives a list of all the costs that are involved. The authorized authority steps in, when the agreement is not met.
- The executing costs are for the initiative taker, including:		
- Bank warranty	Yes	Mentioned above.
- Penalty	Yes	Mentioned above.
(Money is situated in the Green trust (Groenfonds) linked to the project)		

In 2004 the compensation policy was evaluated and this was reason for the Provincial Executive to actualize it with the 'Beleidsregel Natuurcompensatie' (c: 1). The province notes that "in this document the policy is described as clearly and transparent as possible. The Beleidsregel does not contain more rules than the statement from 1997, but some rules have been accentuated more, especially on procedural grounds and concerning the securing of the actual implementation." (c: 1) The 'Beleidsregel Natuurcompensatie' makes a connection between the implementation of compensation and the execution of the disturbing intervention (c: 19). This document also aims to use the compensation instrument in a development focused way. When during the execution of compensation duties links are sought with spatial developments and policy plans, than the use of the compensation instrument can contribute to a better, robust and more sustainable green structure (c: 18). With this the province aims for the possibility that compensation can cause an (extra) contribution to the implementation of existing plans/projects. The 'Beleidsregel Natuurcompensatie' also aims to make it clearer for municipalities and initiative takers of how compensation duties needs to be implemented and which criteria the Provincial Executive uses to examine compensation plans and agreements (c: 11).

The compensation policy is worked out quite extensively in Noord-Brabant. The 'Beleidsregel Natuurcompensatie' is certainly clarifying and gives a good overview of how to proceed, when dealing with compensation. The appendixes with an action plan, registration form, progress form and an example of an agreement are very useful. The processing of the compensation policy is quite like the 'EHS-spelregels'. The area categories are mentioned (somewhat different due to the GHS and AHS). An exceptions includes that compensation can be fulfilled in ecological connection zones, while normally compensation cannot be implemented in the NEN. Next the 'no, unless' rule and no net loss of

values are described. Also the types of compensation have been worked out. The quality addition slightly differed. The first two development time categories differ (N-B: 0-10 and 10-25 / EHS-spelregels: 0-5 and 5-25) to which no quality addition is connected or 1/3 of the surface as quality addition. Financial compensation was worked out remarkable well. The 'Beleidsregel Natuurcompensatie' sketches an image of what to expect with financial compensation and that this type of compensation is not desired. Finally the NEN-balance approach and re-determining the NEN limits still have to be worked out in policy documents, but it was mentioned during discussions on the new Wro. The provincial website shows a time line in which the new Wro will be implemented. It still needs to be awaited how this will influence the provincial compensation policy, but according to the respondent the 'Beleidsregel Natuurcompensatie' will probably remain as it is. At last it can be indicated that Noord-Brabant is forerunner with the extensive registration and monitoring system. It is a pity that the progress forms are not returned yet. Currently the province tries to find all the information on projects through plans and other documents, from which overviews on compensation projects can be made. Yearly registration and documentation reports have been published since 2004. As the 'Beleidsregel Natuurcompensatie' states that compensation projects are verified in the field randomly. It appeared that this does not frequently occur. During the interview it was mentioned that the last 25% of the compensation process still needs work. Although Noord-Brabant is well ahead in implementing a registration/monitoring system, improvements can still be of interest and during the interview it became clear that they are working on this.

2. Conformity of behavior

How do actions of involved actors in a compensation process correspond with the national and/or provincial compensation policy statements? The following table includes components like the role of parties involved, experiences & appliance of compensation, the guarantee of compensation fulfillment and a usability degree. An overview of the parties involved, their relations and their involvement is sketched out, which is of importance when researching the provincial compensation policy and the appliance of this policy. In this case the experiences of the province are captured. All these elements are related to the fact: if behavior of the parties involved in the compensation procedure act according to the national and/or provincial compensation policy. To start by giving an overview of the key actors in the compensation process, as perceived by the province:

- Government (Ministries)
- Province
- Municipalities
- Initiative taker
- And many other involved parties, e.g. varying from the environmental federation (in Dutch: Brabantse Milieufederatie), Landscapes of Noord-Brabant (in Dutch: Brabant Landschap), Nature Monuments (in Dutch: Natuurmonumenten), State Forestry Service (in Dutch: Staatsbosbeheer), LTO (agrarian sector) etc. This depends on the case, according to the respondent. In certain projects only two or three players are connected, while other projects concern 10 or more. Does it concern a small damage or for instance a large infrastructural plan (in which the state and interest groups are involved)?

Application	Conformity of Behavior	Comments
Role of parties involved		
Are the key actors in the compensation process, as perceived by the province, involved in the compensation procedure?	Yes	As mentioned above, the involvement of parties depends on the project.
Which relationships exists between the key actors in the compensation process, as perceived by the province?	Yes	It all starts with the initiative taker. Someone is confronted about the compensation policy, since this person wants to plan a project in a protected area. The municipality is mainly in contact with the initiative taker. The province is rarely in direct contact with the initiative taker. The municipality sometimes does come with questions for the province. The province does think along with the involved parties. Further relations between key actors differs per case.
Experiences & appliance of compensation (did compensation policy contribute to a change in behavior?)		
Do parties agree on the compensation policy?	Yes	According to the provincial respondent "the policy is clearly accepted and it is obviously known. All the things that could be expected from the province have been done properly". It was also mentioned by the representative that "when parties are confronted with this policy it is not experienced as pleasant. It costs money and long procedures are connected to it. It is frequently indicated that these procedures are experienced as too long. They want to go on. Financially it is also considered as an issue, which is logical of course." Thus involved parties do not like compensating (which is quite logical), but they are well aware of it and it is accepted.
Do parties act according to the compensation policy?	Yes / No	The provincial respondent indicated that "large scale projects go along better than the smaller projects, because the grounds are often assigned to nature managing organizations, like the Brabant Landschap or Nature Monuments. Then you have the guarantee that what will be implemented is what was expected." Thus from this it appears that compensation of smaller projects is not assigned to managing organizations and that compensation is expected to be executed correctly if it is assigned to managing organizations. An example of a large scale project that was successfully implemented includes the highway A50. The respondent noted that "Rijkswaterstaat was a partner in this project and they have their own 'Tracebesluit' to which compensation policy was connected. There were some tensions because it needed to be awaited how the provincial 'Beleidsregel Natuurcompensatie' would be sufficed. Everything was registered step by step, including how the compensation duties were realized and finally the Minister was involved. The compensation, which involved a large amount of hectares, was produced. This case went perfectly." It appears that large scale cases probably have more resources at hand than smaller cases, which has an influence on the appliance of the compensation policy. The larger projects might have previous experiences with compensation policy as well, which works in their advance (e.g. Rijkswaterstaat as mentioned above). Finally coming back to how municipalities apply the compensation policy. The respondent mentioned that "municipalities do want to suffice the policy, but that this is an effort for them. This also has to do with the available time, manpower, filling in of forms. The province can imagine that this can be difficult. This frequently does not go as it supposed to." The province indicates that the last step is most difficult, including the monitoring of projects and assuring fulfillment within the time limit. As indicated with plan conformity, an extensive registration and monitoring system is present in Noord-Brabant. But the forms are not returned yet and the verification of projects in the field is also not applied yet. The 'Beleidsregel Natuurcompensatie' does indicate this should occur. Evaluations are present (created through consulting archives), and these

		offer information on how parties act according to the compensation policy or not. Compensation is often not / or partially realized. During the interview it became clear that the province is working on this last step of the compensation process. The future can only tell if parties act according to the compensation policy, but Noord-Brabant is busy with discovering to which extent this occurs.
Guarantee of compensation fulfillment		
Is a sufficient amount of instruments available to guarantee the fulfillment of compensation duties?	Yes	The provincial respondent answered that "an agreement and penalty clause can guarantee compensation fulfillment, but it remains the question if municipalities have enough manpower, money, etc. to properly make use of it. The respondent has the idea that municipalities frequently lack this. Thus the task of municipalities to guarantee compensation can be a problem, certainly concerning nature compensation. It is thought that this is a problem, rather than troubles in other areas. Municipalities set priorities of course. Work is needed on the realizing, monitoring and implementing it as agreed on. A proper method needs to be sought. The accomplishment of compensation is in hands of the municipalities. Than it is out of sight for the province." As the 'Beleidsregel Natuurcompensatie' indicated "the province assumes municipalities take on the guarantee of compensation fulfillment of decisions registered in agreements, since the development plan and the compensation plan are formulated by and/or falls under the responsibility of the management of a municipality (c: 21)." It is clear that municipalities have to see to it that compensation is sufficiently implemented, but to which degree is this being reached? The provincial representative stated that "municipalities do not step in when compensation is not fulfilled, at least they have never heard of it. Much is still unclear in the end of the track, concerning the compensation process". It appears that municipalities do not see to it that compensation is fulfilled as agreed on (perhaps due to lack of manpower, money). This is remarkable since the 'Beleidsregel Natuurcompensatie' is so clarifying on this topic. Examples of forms and an agreement are even given, which the municipalities only have to fill in. As mentioned before municipalities will probably have to get used to filling in these forms and they did not know it was obligatory. The 'Beleidsregel Natuurcompensatie' shows the way to guarantee compensation fulfillment (including agreement with realization date, penalty clause), but currently municipalities do not step in yet to force compensation. From the policy documents it appears that enough instruments are present to guarantee compensation, but in practice these instruments are not always used.
Are these instruments applied to guarantee compensation?	Yes / No	The instruments to guarantee compensation fulfillment need to be processed in the compensation plan and in the agreement, otherwise the Provincial Executive will not approve the plans. As mentioned above it still remains to be seen if municipalities really step in when compensation is not sufficiently executed or if it is not in time. From past experiences of the province this appeared not to happen. The province indicated that they miss the organizational possibilities to find out if compensation is actually implemented as it was meant / as it was agreed on. They have not succeeded in this yet, but stated that the last part of the compensation process still needs to be worked on.
Usability degree (compensation procedures)		
- To which extent is compensation policy known by the intended users?	Yes	The respondent noted that "nowadays everyone is aware of compensation, which is an advantage. They know that they have to take damage to nature into account. It means something needs to happen and that people have to come clean. Plans will be reviewed. Nature is really valued and nature needs to be taken into account." The provincial respondent also noticed that "often there are still questions. They are aware of the 'Beleidsregel Natuurcompensatie' and know about this rule.

		But it is still quite difficult to grasp. Certainly when it involves disturbance and how this needs to be compensated. Several questions concern the agreement and the date. The representative has the idea that employees of municipalities, who work with the Beleidsregel, know it well. In practice the municipalities deal with initiative takers. Preliminary consultations with initiative takers is important to discuss the options. Municipalities sometimes approach the province with questions, but generally this does not occur frequently. And provinces are rarely in contact with initiative takers." Thus when initiative takers have questions it will be answered by municipalities and sometimes the municipalities approach the province for further explanations. When questions arise information can be gained in order to proceed.
- To which extent is compensation policy applied by the intended users?	Yes / No	As mentioned before by the province: "compensation is well known by society. But the implementation of it lacks at times. A couple of compensation duties were examined in the field during a research of the VROM (Ministry of Housing, Spatial Planning and the Environment) Inspection. It appeared that a substantial amount of projects were not implemented. Something can be done about this." This research of the VROM-Inspection includes projects between 1993-2004, while the 'Beleidsregel Natuurcompensatie' is from 2005. Of course it takes a while before intended users are fully acquainted with it. The 'Beleidsregel Natuurcompensatie' is very clarifying and can perhaps lead to more cases being applied according to compensation policy. Currently the province is still working on this last part of the compensation process, including the correct implementation of compensation.

It appears that compensation is a well known concept in Noord-Brabant. The compensation policy is also accepted. Initiative takers are aware of the compensation policy and the 'Beleidsregel Natuurcompensatie' but questions remain on the realization of it. How does it fit their project specifically. The municipalities are in contact with the initiative takers. Municipalities also need to guarantee that compensation is being fulfilled, according to the compensation plan and agreements. Apparently municipalities have not yet stepped in when compensation was not entirely fulfilled or if it was not in time. While the 'Beleidregel Natuurcompensatie' requires this. Also the monitoring is not always executed as it supposed to be. Progress forms are included in the 'Beleidregel Natuurcompensatie' and the municipalities need to fill these in, with assistance of the initiative takers. These progress forms have not been returned yet. The province still monitors by using information from archives. The registration and monitoring system is present but it still has to be put to practice optimally. Additionally compensation projects need to be verified in the field. The 'Beleidregel Natuurcompensatie' notes that this occurs randomly, but in practice this happens occasionally. More verifications of projects in the field are necessary in order to research if involved parties act according compensation policy and to which extent it is applied. As the provincial representative nicely stated: "they have processed $\frac{3}{4}$ and the last quarter is certainly not unimportant. Holes in there need to be filled." Thus behavior definitely changed, since compensation is a known concept and more attention is paid to the last part of the compensation process because here improvements are desirable.

3. Final conformity

Final conformity involves if reality corresponds to the intentions of the initial plan. During the interview with the provincial representative a couple of experiences with nature compensation were mentioned. These examples of compensation being applied in practice are taken into consideration while assessing the effectiveness of nature compensation policy. The practical situations are compared with plan conformity

(initial plan) and conformity of behavior (change in behavior), which have been discussed previously. But final conformity does not solely involve these characteristics only. It is also of importance to view in which context the compensation process takes place. In the end the question remains: How effective compensation policy is currently? The effectiveness criteria of Sabatier and Mazmanian can be categorized by plan conformity, conformity of behavior and the context, which can be found back in the following table. A short summary will be given next on how the criteria of effectiveness (from Sabatier and Mazmanian) are used in this research on nature compensation:

- 1) ***Policy objectives are clear and consistent, Plan Conformity & Conformity of Behavior:*** This criterion is researched by looking into how compensation is processed in policy statements (comparing national guidelines to provincial compensation policy and how this policy is applied on local level). This criterion also involves how aware the involved parties are of the compensation policy and how well they understand it (usability degree). This includes questions like: can involved actors find themselves in the compensation policy and do they act according to this policy? All these factors influence the outcome.
 - 2) ***The program is based on a valid causal theory, Plan Conformity:*** This criterion is examined by researching if no net-loss of values occurs, which is the goal behind nature compensation. Do the areas in which an intervention is planned & takes place and the compensated areas result in the fact that no net-loss of values occurs?
 - 3) ***The implementation process is structured adequately, Plan Conformity:*** This criterion is researched by looking into which standards are in place. Do the compensation guidelines/policy statements (set on national and/or provincial level) structure the compensation procedure adequately? This also involves experiences of involved actors with the implemented standards.
 - 4) ***Implementing officers are committed to the program's goals, Conformity of Behavior:*** This criterion is researched by looking into how implementing officers act according to the compensation policy. How is compensation applied within the province?
 - 5) ***Interest groups and (executive & legislative) sovereigns are supportive, Conformity of Behavior:*** This criterion is researched by looking into how key actors, concerning interest groups and sovereigns (as perceived by the province) are supportive regarding the compensation procedure. Do they act according to the compensation policy?
 - 6) ***There are no detrimental changes in the socio-economic framework conditions, Context:*** This criterion is researched by looking into the context surrounding the compensation procedure. External / internal events can have influences on the compensation procedure. This can for instance include: currently the international/national financial crisis, changes in legislation (accentuating the Nb-wet in 1998, implementation of the new Wro in 2008), the province can possibly influence the procedure for social-cultural, economical, spatial, agricultural and/or natural (etc.) reasons, a change in Members of the Provincial Executive or a change in members of a municipality can influence the implementation of compensation policy, natural disasters (floodings, earthquakes etc.), and so on. Which context and how this context influences the compensation procedure is examined by applying this criterion in this research.
- * ***Final Assessment*** on how effective the compensation policy has been, taking into account all the criteria of effectiveness (designed by Sabatier & Mazmanian). When is the compensation policy effective? Only if all effectiveness criteria are met concerning final conformity or if the greater part of the effectiveness criteria suffice the requirements of final conformity? The question remains if people are aware of the compensation policy, are informed of all the elements of the compensation policy and

act according to the compensation policy. Where do bottlenecks possible appear in these phases? There is a difference between the past, present and future. This can possible become visible in this last part of inspecting the final conformity.

Application	Final Conformity	Comments
Criteria of effectiveness (Sabatier & Mazmanian)		
1) Policy objectives are clear and consistent; (Plan Conformity & Conformity of Behavior)	Yes	The 'Beleidsregel Natuurcompensatie' offers quite some information on how to deal with nature compensation. The action plan, registration form, progress form and sample of an agreement are given in the appendixes. It is very easy to obtain the correct forms or a quick overview of what applies to you. In this document several examples are given to clarify concepts. The 'Beleidsregel Natuurcompensatie' also states that "in this document the policy is described as clearly and transparent as possible". The respondent mentioned as well that "they want to arrange it as efficient & clear as possible. This perhaps means that less guarantees are tied down. You don't want that either, because than it becomes impossible to accomplish. It needs to be simple, but in the meanwhile you also need the guarantee that it will be executed. Partly this lies in trust, but this cannot be too much. They are still working on this matter." This shows that much effort is put into making the policy objectives clear and consistent. Involved parties are aware of the compensation policy, but sometimes questions remain. As the respondent noted "it involves interpretations (are certain things allowed or not and can something be counted as compensation or not). There is a certain range in which compensation projects must fit. This brings along tensions." Even provincial counselors have question marks sometimes when projects deviate from the framework. Compensation is a concept where every case can be different and different approaches are necessary. The province indicated that it "thinks along with the municipalities and initiative takers. It is not that they receive a feeble plan to which they can immediately say yes or no. Consultations are needed to come to a good plan." Still you will run into miscommunications, like for instance the respondent mentioned a case in which the initiative taker handed in all the necessary information and expected the province to make a plan from it. Ultimately it depends on which party is involved, certain parties will find it clear and consistent while others won't.
2) The program is based on a valid causal theory; (Plan Conformity)	Yes	Monitoring and evaluations can provide information, from which conclusions can be made about the causal theory (no net loss of values). During the interview an overview was handed over and it contained information on compensation projects between 1997-2003. The respondent mentioned that "this list was created through a lot of effort of people and means. Back in 2003 it was experienced as remarkable that such a list did not exist yet and that it should be registered structurally. All the new cases were registered from then. From the moment that it is registered all the in's and out's are recorded and once a year this is handed over to the Executive." It appears that still quite a lot of projects are not realized yet or partially realized. As frequently mentioned before, the province is still working on this last part of the compensation process. "The last 25% of the compensation process is difficult, according to the respondent. To their opinion this can (not) be expressed in numbers, but yet this is done. For the actual implementation they stated 'durf ik niet mijn hand in het vuur te steken'. Projects are randomly checked in the field (once every twice years), but this has not taken place." Verifying projects in the field can result into valuable information, concerning the no net loss of values. Finally the provincial representative noticed "surely compensation contributes but you cannot put a '=' between it. They do not dare to say which way the advantage goes." The future can possibly tell if no net loss of values takes place in Noord-Brabant. Perhaps when the registration and monitoring system is completely up and running and when projects are verified in the field more frequently. But the yearly overviews of projects in Noord-Brabant is already a good start to keep up information/progress on compensation projects.
3) The implementation process is structured	Yes	The respondent replied that "generally it is experienced as structured, but this depends on the municipality.

adequately; (Plan Conformity)		Everyone is searching for the margins. It never or rarely occurs that someone wants to compensate generously. You often come back to considerations if something is possible or not." Thus it actually depends on the initiative taker, municipality and the extent to which boundaries are sought. How structured the compensation is experienced can also be detected with the criteria on clear / consistent policy objectives. When the objectives are clear and consistent it can structure the compensation process. The 'Beleidsregel Natuurcompensatie' certainly structures the compensation process, since it offers information, overviews and sample forms. Still the question remains of how initiative takers experience the structure of compensation processes.
4) Implementing officers are committed to the program's goals; (Conformity of Behavior);	Yes	The respondent indicated that "within the province it is well known. You do notice that counselors, who inspect agreements, sometimes have questions because it deviates from what fits within this framework. They are examining how things should be arranged on a juridical level. But within the province it goes well." This example of counselors inspecting ways for compensation to fit the framework and juridical requirements proves a commitment to the program's goal. As the province stated, within the province it goes good. On the other hand municipalities do not always have enough manpower or money available to implement their duties, concerning nature compensation. During the interview it did not appear that municipalities were not supportive of the program's goal. Although it is remarkable that municipalities do not step in when compensation is not entirely fulfilled or if it is not performed in time. The 'Beleidsregel Natuurcompensatie' does prescribe this and it needs to be forced since the municipalities are responsible to guarantee compensation fulfillment. I do not know the reason behind this fact. Does this influence the commitment of municipalities? Perhaps future research into municipalities and implementation of compensation can provide more insight.
5) Interest groups and (executive & legislative) sovereigns are supportive; (Conformity of Behavior)	Yes / No	The provincial respondent described a situation with the LTO as an example. "It can be noticed that the LTO (organization focused on agriculture) thinks it is not fair that compensation needs to be performed outside the NEN (through which agrarian grounds are lost to compensation). Tensions are present in this case. The LTO brings a message connected to the international food situation and that we cannot miss anymore agrarian grounds. Lobbying can be detected and it even led to a discussion in the parliament. This discussion involved the possibility to compensate in the NEN or not. In the NEN compensation is not allowed, but Noord-Brabant allows it in ecological connection corridors". It seems that the LTO is totally opposite to the compensation policy. I wonder if the LTO disapproves of all the opportunities possible with the concept nature compensation. Another example involves the Efteling, which is an interesting case in which interest groups had a large role. The Efteling had to start all over again with the compensation process (due to a procedural mistake) and they wanted to speed up the process by approaching interest groups in advance. Together they have agreed on the terms for the project and compensation. These interest groups received a certain function through this. Deciding when to agree to the plans or not. It is the function of the province to inspect if the plans are conform the compensation policy. Although the province does not mind of course that more is compensated, than prescribed by the compensation policy. Interest groups were resistant in this case, but could finally participate in shaping the plans and compensation. Yet again support depends on the interest groups / sovereigns.
6) There are no detrimental changes in the socio economic framework conditions. (Context)	Yes / No	The respondent asked if detrimental changes in socio economic framework conditions involve disasters or infrastructural works. They mentioned an example "involving 'maintenance valley'. The state wants to assemble all the choppers there. Just now it has nothing to do with nature, because 20.000 jobs are connected to this project. The parties that can ask questions also immediately notice that they gain something with nature compensation and realize the significance. They will put effort in letting this pass as well." In this case social and economic interests are favored to preserving nature. Considerable social importance will probably be met and I'm not aware if alternatives are available. By the way these economic and social interests do not seem to have a detrimental effect in the framework of socio economic conditions, on the contrary. It was mentioned that employment is

		connected to the project and certain gains can be established with nature compensation. Finally the provincial representative stated that “compensation is a dynamic policy element. It is a kind of ball of the social field of force. Compensation is registered in the ‘Beleidsregel Natuurcompensatie’ but still objections can for instance be noticed (e.g. LTO thinks compensation costs a lot of agrarian grounds).” Again it depends on the situation. In the large scale project of the Efteling detrimental changes in socio economic framework conditions were probably present, because the compensation process takes such a long time and so many parties were involved. During the interview no other examples were mentioned.
Final assessment on the effectiveness of nature compensation, by using the outcomes of all the effectiveness criteria that are mentioned above (ratings between 1 and 5 points, see chapter 5.5 for explanations behind ratings per province).	■ ■ ■ ■	Noord-Brabant generally meets the effectiveness criteria. Policy objectives can be regarded as clear and consistent (exceptions always exist). The ‘Beleidsregel Natuurcompensatie’ also provides a certain structure to the compensation process. Besides Noord-Brabant is working on the last part of the compensation process quite intensively (registration/monitoring system), which could lead to finding out something about the causal theory (no net loss). Projects in the field still need to be verified structurally. Also the responsibility of municipalities to guarantee compensation fulfillment needs to be reviewed, since municipalities do not step in when compensation is not entirely fulfilled or when it is not in time. But it appears that implementing officers are supportive, just like interest groups can be (but again exceptions exists). To end with the fact that no real detrimental changes in socio economic framework conditions were described, than discussions of the LTO and the Efteling case. Finally the criteria are generally met, which explains the high rating.

During the interview with the province, in which four provincial representatives took place, not many examples of compensation projects were mentioned. We focused mainly on the ‘Beleidsregel Natuurcompensatie’ and the registration/monitoring system. The implementation of projects could be found back in documents, since an overview of projects between 1997-2003 was available and reports on the registration and documentation of compensation (from 2004 to 2007). Additionally a report of the VROM-Inspection shows how compensation was accomplished in practice. From this it appeared that improvements can be made in the last part of the compensation process. The progress forms need to be used by municipalities and municipalities need to guarantee that compensation is implemented conform the agreement and plans. Ultimately projects need to be verified in the field. It becomes visible that Noord-Brabant is forerunner with their monitoring system, but even this still makes the province want to move forward and refine this last part of the compensation process. When coming back to plan conformity, everything is worked out in the ‘Beleidsregel Natuurcompensatie’ and quite according to the ‘EHS-spelregels’. Quality addition differs slightly and the NEN-balance approach needs to be processed, just like re-determining the limits of the NEN. While researching conformity of behavior it appeared that everyone knows about compensation and it is an accepted concept. Questions about how to apply the ‘Beleidsregel Natuurcompensatie’ remain. The municipalities are in contact with the initiative takers and sometimes municipalities approach the province to gain more insight. Finally to conclude that Noord-Brabant has accomplished $\frac{3}{4}$ and the last quarter still needs to be amplified. It remains to be seen how this will be processed/ implemented.

Utrecht

1. Plan Conformity

Plan conformity is largely examined by using provincial policy documents on compensation. A list of these documents is provided. Besides if and how national compensation policy is translated into provincial compensation policy is explained next. A table is used, which gives a description of how compensation is registered in the provincial policy documents. First the areas are mentioned in which compensation is supposed to be applied. Then the standards are covered by looking at the seven steps to implement compensation, taken from the 'EHS-spelregels'. These topics in the table are taken from national guidelines, and can be used to determine how standards are being applied by provinces.

1.1 List of documents concerning nature compensation

- a) Streekplan 2005-2015 (regional plan);
- b) Beleidslijn Nieuwe Wro, Inclusief Nota van Beantwoording. Beleidsneutrale omzetting van het Streekplan (2008) (document giving direction to the implementation of the new Wro)
- c) Handleiding Bestemmingsplannen (2006) – Servicedeel (manual of development plans)
- d) Finally the website of the province Utrecht has frequently been visited (www.utrecht.nl)
 - * Information on the structuurvisie and new Wro, including the articles:
 - Beleidslijn nieuwe Wet ruimtelijke ordening vastgesteld
 - Streekplan Utrecht 2005-2015 en de beleidslijn nieuwe Wro juni 2008

References to these documents will be made in the following scheme in which a description on the compensation policy is given. Next to these documents an interview took place with a representative of the province (specialized in nature compensation) in 2008 to gain insight in the compensation policy.

1.2 Description of how compensation policy is registered in documents

Application	Plan Conformity	Comments
Areas in which the compensation principle is in force		The regional plan states that the compensation principle is in force on grounds belonging to the Birds and Habitat Directive, Ecological Network, Nature Protection Act and Forest Policy (a: 107). It is also mentioned that areas belonging to the NEN, BHD and Nb-wet have been appointed as 'green outline' (in Dutch: groene contour) (a: 89).

		A map of this green outline is available. Besides the compensation principle also counts in large scale recreation areas, e.g. Henschotermeer and Maarsseveensche Plassen (a: 107). The province is responsible for the protection, conservation and development of special values and characteristics present in these provincial areas (a: 107).
1. National Ecological Network (NEN) areas & robust ecological connections;	Yes	The NEN is registered in the regional plan, regarding planning (a: 88). The nature goal types (natuurodoeltypen) have been worked out into a map, which is the basis for formulated nature area plans (a: 88). This involves: existing nature, existing nature with military use, new nature (developed since May first 1988 or still needs to be developed), remaining areas (bordering management- and reserve areas, nature area plans that declare search areas for new nature and ecological connection areas), ecological connection zones, green corridors and overpasses for fauna.
2. Birds and Habitat Directive (BHD) areas;	Yes	The regional plan states that research needs to prove if and in which way interventions have consequences for habitats, when spatial interventions are planned. This is used to assess in which way and to which extent the intended spatial measures could take place. (a: 91)
3. Nature Protection Act (Dutch acronym: NB-wet) areas;	Yes	The regional plan states that after the revised Nb-wet came into force, the connected consideration framework is implemented (a: 107).
4. Compensation registered in other policy documents:		
a. Forest policy;	Yes	Forest policy is briefly mentioned in the regional plan and 'Handleiding Bestemmingsplannen'. Areas that fall under forest policy belong to the green contour, in which the compensation principle is in force.
b. Flora and Fauna policy (Dutch acronym: FF-wet);	Yes	The regional plan indicates that flora and fauna species can be protected inside and outside NEN areas, due to the FF-wet. This needs to be taken into consideration when choosing the location or spatial design (a: 91). Additionally it is described in the 'Handleiding Bestemmingsplannen' that: "the FF-wet distinguishes three categories of species with their own protection regime and criteria for exemption. Next to the national assigned Red lists another Orange list has been developed for provincial endangered flora and fauna. These lists are present to protect species from going extinct on local, regional or national level. Endangered nature values that are present need to be described if within the limits of the development plan species from the red or orange list exist." (c: 90)
c. New policy of spatial planning (Dutch acronym: Wro).	Yes	The document on policy concerning the Wro noted "that policy statements and policy rules, which have been assigned to category 1, are the essence for provincial spatial policy after the implementation of the new Wro. The compensation principle is assigned to category 1, which means the policy goals will remain unchanged and it is marked as provincial interest. Finally the regional plan will directly be converted to the spatial structure vision." (b: 15) Next to this the following is mentioned on digitalizing spatial plans: "the Wro obliges that all spatial visions, plans and area focused decisions are edited in such a way that it is usable and exchangeable in digital shape. Digital spatial products need to simplify the process around providing current and reliable information, through which the inequity of rights decreases. Digital plans make the spatial chain of

		planning more effective, efficient and clearer for citizens and companies.” (b: 14) To conclude many documents exist on the implementation of the new Wro. It still remains to be seen how these new instruments will be applied and which consequences it will have for the implementation of nature compensation.
Compensation procedure in seven steps		Utrecht has designed a schema in which the steps concerning the ‘no, unless’ rule are worked out (c: 92). Next to this the ‘Handleiding Bestemmingsplannen’ gives several examples with additional information, which clarifies used concepts. These examples for instance are focused on: what falls under interventions with a limited size, how it can be assessed if significant damage takes place, research on consequences of an intervention, optimal location & arrangement and minimizing damage etc (c: 93, 94). To end with Utrecht mentioning in the regional plan that the regular assessment pays attention to possible consequences for: nature, landscapes, water management, cultural history, traffic- and environmental effects. When checking for significant consequences, which is additional to the regular assessment of new spatial developments, attention is paid to the: preservation of nature values on the location connected to a new development and the effect on the NEN in broader context. (a: 90) These are a couple of general details showing how Utrecht processed compensation.
1) Testing the ‘No, unless rule’ consideration framework		
No formula (interventions are basically not allowed), unless formula:	Yes	Utrecht states that the ‘no, unless’ rule is according to the national policy ‘Nota Ruimte’ (c: 90). The regional plan and the ‘Handleiding Bestemmingsplannen’ describe the ‘no, unless’ formula (a: 108 & c: 90). Also a scheme shows which steps to take in this process (c: 92).
a. Prove considerable social importance;	Yes	The regional plan and the ‘Handleiding Bestemmingsplannen’ both give a description (a: 108 & c: 90, 92)
b. Research the alternatives;	Yes	The regional plan and the ‘Handleiding Bestemmingsplannen’ both give a description (a: 108 & c: 90, 92)
Compensation principle (No net-loss of values):	Yes	In Utrecht the ‘stand-still’ principle has been implemented, which means that in principle there cannot be a net-loss of essential characteristics and values (acreage, quality and cohesion) in assigned areas (a: 108). The regional plan also mentions that the compensation principle is not only in force with direct interventions in assigned areas connected to the compensation principle. It also counts for areas, outside of the assigned areas connected to the compensation principle, which experience negative effects. (a: 107)
1. Integration operations of landscapes and mitigation;	Yes	The regional plan notes “when it is proven that an intervention suffices the criteria then the damage needs to be limited as much as possible by using mitigating measures” (a: 108). It is also stated that mitigation measures are meant to soften the consequences of the intervention on nature and landscapes on site. Examples of mitigating measures are mentioned. Finally in practice the mitigative measures cannot take away the damage in most cases and compensation is necessary. (c:95)
2. Physical compensation including:	Yes	
a. Compensation of surface (direct effects);	Yes	The regional plan prescribes in first instance in kind compensation (a: 108). In most

		cases an extra addition on top of the physical compensation (1:1) takes place, but for recreation areas one on one compensation is adequate (c: 95).
b. Compensation of quality loss (quality addition, in Dutch: kwaliteitstoelag);	Yes	<p>The regional plan mentions that “due to many spatial demands in Utrecht it is necessary to make qualitative compensation possible. The replacing values with qualitative compensation need to be higher in rank or they should have a multiplier effect on the essential characteristics and values.” (a: 108) According to the ‘Handleiding Bestemmingsplannen’ the amount of quality addition in ha. depends on how replaceable an ecosystem is. Three categories can be distinguished:</p> <ol style="list-style-type: none"> 1 Quickly replaceable (nature qualities replaceable within 25 years or areas with nature qualities that are not yet 25 years): 0,3 of the physical compensation, unless the new area is connected to the NEN (then it is 0,1 of the physical compensation). 2 Replaceable nature qualities within 25-100 years: 0,7 of the physical compensation, unless the new area is connected to the NEN (then it is 0,3 of the physical compensation). 3 Difficult to replace, possibly irreplaceable nature qualities (replaceable in a 100 years or more): decided per case (custom made measures). (c: 95) <p>This resembles the quality addition figures used in the ‘EHS-spelregels’. Only the percentage used for areas connected to the NEN are lower than in the ‘EHS-spelregels’</p>
3. Financial compensation	Yes	The regional plan notes that only in extreme cases financial compensation can take place, when in kind compensation is not possible. This type of compensation is only acceptable if the initiative taker of the intervention can prove that compensation cannot occur nearby or that other locations are not available as well. (a: 108) Although the regional plan does not show how the amount of financial compensation is composed.
Measures specifically designed for NEN areas:	Yes	
4. NEN –balance approach	Yes	The regional plan notes that the ‘no, unless’ formula assesses plans, projects and actions separately, while the province tries to stimulate a more development focused approach, under certain conditions, by which it can become possible to make a ‘no, unless’-consideration on an area level (i.e. NEN – balance approach) (a: 90). It is also described when the NEN – balance approach is applicable (a: 109). This literally resembles the ‘EHS-spelregels’. The NEN – balance approach is described quite well. The provincial respondent even said that Utrecht was involved in the creation of the ‘NEN-balance approach’ concept. During the interview the appliance of the NEN-balance approach in Utrecht was often described with the practical case in ‘Utrechtse Heuvelrug’.
5. NEN re-determining the limits	Yes	The regional plan notes: “it can be expected, during this regional plan term, that developments will occur, which give a cause to adjust the borders of the NEN as they have been registered in the regional plan” (a: 89). Examples in which this can become the case are also mentioned.
2) Compensation plan according to standards	Yes	
- Compensation plan, independent document according to standards	Yes	The ‘Handleiding Bestemmingsplannen’ gives several examples of what needs to be taken into account during the compensation process, also regarding compensation

		plans.
- Requirements on the content of compensation	Yes	All the concepts seem to have been worked out in policy documents. Only certain elements could be extended a bit more. For instance examples can be given with financial compensation, or at least guidelines of what can be expected.
3) Decision authorized authority on intervention and compensation	Yes	(a) & (c)
4) Embedding intervention and compensation into spatial plans	Yes	(a) & (c)
5) Private law agreement initiative taker and authorized authority	Yes	The 'Handleiding Bestemmingsplannen' notes "it is essential that the actual realization (design and management) of compensation is guaranteed sufficiently. Since design- and management measures are arranged according to public law (development plan or exemption ex article 19 WRO), which cannot be forced. The use of private law instruments is inevitable. Finally an agreement is made between the municipality, initiative taker and when necessary the future manager. This agreement will include decisions that have been made on the: realization term, future management, financing, and penalties." (c: 95)
Legal binding agreements on the execution of the compensation plan:		
- Bank warranty	Yes	(c: 96)
- Final realization date	Yes	(c: 95)
- Penalties when exceeding final realization date	Yes	(c: 95)
6) Monitoring implementation by authorized authority		
- Authorized authorities yearly report to the province	No	This is not mentioned in policy documents.
- Provinces verify these reportages and collects these inspected reports	No	This is not mentioned in policy documents, and if reportages are verified is unknown.
- These provincial findings are reported to the state	No	This is not mentioned in policy documents.
7) Authorized authority takes over execution when final realization date expires	-	
- The executing costs are for the initiative taker, including:		The 'Handleiding Bestemmingsplannen' indicated that the bank warranty can be used (by for instance a municipality) when compensation is not sufficiently executed or if it is not executed at all. The amount of this warranty needs to be in relation to the costs of the compensation (c: 96).
- Bank warranty	Yes	(c: 96)
- Penalty	Yes	(c: 95)
(Money is situated in the Green trust (Groenfonds) linked to the project)		

Finally it becomes visible that Utrecht generally incorporated the national compensation guidelines into their provincial compensation policy. The area categories are present and most of them fall under the designed 'green contour', in which the compensation principle is in force. Additionally large recreation areas are included. It also became visible in several documents how the new Wro will be implemented, but during the interview it appeared that the ordinance was not developed yet. The provincial respondent said that "everyone knew it was coming, but we were waiting on each other. They were kind of waiting to see what the state would ask of them. The province could have been a long way, but if that was not what the central government would have wanted then a lot of work would be for nothing. This is the reason why it has been lying around for too long, according to the respondent. The ordinance

will surely not be ready before the first of July. It is not entirely sure what this means for compensation. How it will be shaped and described is not known yet.” Thus it remains to be seen how the new instruments of the new Wro will influence the implementation of compensation policy. Next it can be noticed that the types of compensation have been processed in the regional plan and elaborated in the ‘Handleiding Bestemmingsplannen’. The ‘no, unless’ formula is according to the national policy, specifically according to the Nota Ruimte (c: 90). This has been worked out in a scheme, including steps surrounding the process of the ‘no, unless’ formula. Compensation only arises when the following criteria have been passed: great public interest and if alternatives are missing. This rarely occurs according to the respondent, and generally the upper part of the scheme is used. When going deeper into the types of compensation it became visible that the quality addition differs when it involves areas connected to the NEN (lower percentages) and that the concept financial compensation is not explained very extensively (no guidelines/examples are present). Additionally guidelines exist for meadow birds and for instance the area ‘Utrechtse Heuvelrug’. When looking further into the compensation process it becomes notable that the monitoring and evaluation of compensation projects is not yet established. The provincial representative also stated that “attention needs to be paid to this, but that it often was postponed due to lack of time. In a conversation between the province and the Ministry of Housing, Spatial Planning and the Environment this also came up. Although the respondent is keeping track of ‘no, unless’ formula cases and possible compensation cases, on an ad hoc basis. He notes that this needs to be organized in a better way. Due to changes in the organization and the new Wro the monitoring of compensation got a lower priority. A provincial registration point needs to be set up.” Thus Utrecht is aware that evaluations need to take place and that a registration system needs to be developed. It is difficult to estimate if no net-loss of values takes place when there are no evaluations available to confirm this. Besides the provincial representative noted that “it can take 20, 30, 40, 50 years before it is possible to say something on the quality of the compensation and in relation to its original location”. In the end the compensation principle is still implemented quite recently, in comparison to these numbers of years in which compensation is established. At last the provincial respondent mentioned that “the ‘EHS-spelregels’ was created too late. In the last couple of years the state has delegated quite much to the province and municipalities. The province and municipalities could give their own direction to it. Now the state (Dutch House of Representatives) wants to know how this goes (the realization of EHS). This cannot be answered with an unambiguous response. The ‘EHS-spelregels’ is too late because the provinces already had done so much. It has been tried to bring it together a bit through a ‘doorwerkingsnotitie’.” The ‘EHS-spelregels’ is largely processed by Utrecht, except for certain topics mentioned above. It is a remarkable notion that these guidelines were created too late in 2007, which is quite some years after compensation came into the picture in 1997 and since it has been adjusted through changes in the Nb-wet in 2005. The provinces were already expected to have compensation policy in place and now the ‘EHS-spelregels’ can improve the implementation of compensation policy. I agree that such guidelines would have been quite useful during the design of compensation policy, but now that they exist it can still give guidance in the implementation of compensation.

In the end it is noticeable that Utrecht tries to inform the user. Utrecht refers to several documents in policy documents (e.g. regional plan and ‘Handleiding Bestemmingsplannen’). The ‘Handleiding Bestemmingsplannen’ refers to the following documents, in order to find more information: Werkdocument Ecologische verbindingzones (1993), Natuurgebiedsplannen (ever since 2001), Programma

Ecologische verbindingzones, Werkdocument soortenbeleid, onderdeel fauna en onderdeel flora, www.provincie-utrecht.nl (section 'Natuur- en landschap'), Handreiking BORO (2005), RER-Ecodatabank. Voor gegevenslevering flora en fauna, Handboek voor Natuurdoeltypen (Ministry of Agriculture, Nature and Food Quality), and the Utrechtse Natuurdoeltypenkaart (2001). Utrecht also contributes to the supply of information, according to the 'Handleiding Bestemmingspannen'. The provincial RER-Ecodatabank contains distribution data of flora and fauna situated in Utrecht and these are available on request (c: 90). The website of Utrecht also shows indication maps of species from the Habitat Directive, since 2006. This is a great deal of information connected to the protection of nature. The regional plan and 'Handleiding Bestemmingspannen' involve the main documents to consult when dealing with the 'no, unless' rule / nature compensation.

2. Conformity of behavior

How do actions of involved actors in a compensation process correspond with the national and/or provincial compensation policy statements? The following table includes components like the role of parties involved, experiences & appliance of compensation, the guarantee of compensation fulfillment and a usability degree. An overview of the parties involved, their relations and their involvement is sketched out, which is of importance when researching the provincial compensation policy and the appliance of this policy. In this case the experiences of the province are captured. All these elements are related to the fact: if behavior of the parties involved in the compensation procedure act according to the national and/or provincial compensation policy.

To start by giving an overview of the key actors in the compensation process, as perceived by the province:

- Government (Ministries)
- Province
- Municipalities
- Initiative taker
- And many other involved parties, e.g. varying from Landscapes of Utrecht (in Dutch Utrecht's Landschap), market research institutes, ecological consultancy agencies, foundation Nieuwe Gelderse Vallei, compensation bank Gelderse Vallei, Nature Monuments (in Dutch: Natuurmonumenten), State Forestry Service (in Dutch: Staatsbosbeheer), recreation, agriculture, Dienst Landelijk Gebied (Agency connected to the Ministry of Agriculture, Nature and Food Quality), environmental organizations, and a lot of other contacts.

Application	Conformity of Behavior	Comments
Role of parties involved		
Are the key actors in the compensation process, as perceived by the province, involved in the compensation procedure?	Yes	The respondent noticed that "when focusing only on compensation it is quite simple, including the persons who decide on it like municipalities and the province. Then you have the initiative taker who is prepared to fulfill compensation. When a new location needs to be

		arranged a planning procedure is connected to it. At that point all kinds of other parties can start to interfere in a project. In that way anyone can get involved in the compensation procedure." Thus anyone can get involved, but this does depend on which stage of the compensation process they are in.
Which relationships exists between the key actors in the compensation process, as perceived by the province?	Yes	As mentioned above there is a relation between the province, municipalities and the initiative taker. During the interview relations between varying initiative takers become visible. Next to this for instance Nature Monuments and the State Forestry Service are frequently of help during the search for compensation locations. And many other parties are involved in the process, which all have certain relations with each other.
Experiences & appliance of compensation (did compensation policy contribute to a change in behavior?)		
Do parties agree on the compensation policy?	Yes / No	During the interview with the provincial representative it appeared that it is not a matter of agreeing on the compensation policy. According to the respondent "numerous parties do not look at it in such a general way. They often try to determine how it fits with their company, in their environment, or within the municipality." Thus parties do not really look at the policy in first instance, but observe how it fits their own situation. Besides the respondent mentioned that "they do not really have a compensation policy, because it is embedded in a bigger picture. They are more occupied with the 'no, unless' formula and compensation is the last step." Although through the interview certain tensions between involved parties were brought up. For instance the provincial representative mentioned that "strains existed with people who have the space for compensation fulfilment. Communication with municipalities was necessary before this group totally understood what was behind it and before they agreed on it, because certain restraints are connected to it. This group of people is fairly brought around now. They still run into certain desired developments, which cannot take place." Strains also arise if compensation is underestimated (difference in value of land is large between agriculture and nature) or when involved parties refuse to perform research (concerning the 'no, unless' rule or connected to the compensation). In the end limitations always bring along tensions, which influences the degree of agreement on the compensation policy. On the other hand environmental organizations and local environmental groups indicated they are pleased with the fact that this policy forces municipalities and initiative takers to make proper plans (in which no damage exists and alternatives are researched), according to the respondent. The agreement on compensation policy probably also differs per case.
Do parties act according to the compensation policy?	Yes / No	During the interview it did not become clear to which extent parties act according to compensation policy. Without evaluations it becomes quite difficult for the province to judge if involved parties act according to compensation policy. The respondent did notice that agreements need to be documented correctly, otherwise you cannot force the fulfillment of compensation duties. The regional plans also points out that agreements need to be registered correctly and gives information on the topics that should be present in a private law agreement. Finally the respondent mentioned that the compensation policy is quite new and the development duration of compensation can differ from 5-100 years, which is a

		longer period than that has passed yet. This also makes it difficult to assess if involved parties act according to compensation policy. It remains to be seen how this criterion is met.
Guarantee of compensation fulfillment		
Is a sufficient amount of instruments available to guarantee the fulfillment of compensation duties?	Yes	The respondent answered with "yes there are enough instruments in the principle of course, but it always remains the question if they are prepared to use them". It was mentioned that there are certain instruments, which can be applied in urgent matters (e.g. disownment, or others instruments regarding compensation). This is already a big step to take. The provincial representative notes that "when the new Wro sets in a number of instruments are gained, which also could give authority. If this will be used is another thing, but it is possible." The respondent thinks that "the new Wro makes it less unambiguous. They will lean on the municipalities quite much. The big question that arises is if municipalities will be capable to arrange everything sufficiently on that level, with yet relatively limited capabilities and knowledge. He notices that the 'no, unless' formula is still a quite complicated piece of legislation. Nearly no municipality is good in it, and it has already been about three years. They do not really understand how it goes and often fall back on the respondent to gain insight on how it should exactly be addressed by them." The respondent has his "concerns about how this will go after the first of July 2008 and notes that when the ordinance is in place it should become somewhat sharper, but you still need to understand what the policy involves." Thus there are instruments in place and it remains the questions if they will be used. How the new Wro will influence the guarantee of compensation fulfillment must be awaited.
Are these instruments applied to guarantee compensation?	Yes / No	It remains to be seen if instruments will be used to guarantee the implementation of compensation. The new instruments that become available through the new Wro still need to be applied. This process needs to be monitored/evaluated before conclusions can be made about how the instruments guarantee compensation fulfillment.
Usability degree (compensation procedures)		
- To which extent is compensation policy known by the intended users?	Yes / No	This depends on the involved party, according to the respondent. The provincial representative noted the importance of "getting informed from the start. Some do not want to know and keep it at a distance. For example a graveyard wanted to expand but refused to perform a research, concerning the 'no, unless' formula. First the great public interest and availability of alternatives need to be inspected. The cemetery for instance refused to research if graves could be kept for 20 years instead of 30 years to improve the scarcity of space. The resistance can be detected from this compensation project." Thus the extent of knowledge on compensation policy depends on how approachable involved parties are. If involved parties are not willing to work along with the track concerning the 'no, unless' rule and compensation then they could possibly have less knowledge of the compensation policy (since they are not open to being informed). The provincial representative indicated that "from 2004 it all became sharper. You can still detect parties, which are not really acquainted with this matter, to experience it as tough. There are certainly some municipalities who have great difficulties with it. For instance the municipality of Zeist has relatively no grounds outside the NEN. The municipality thinks it is the problem of the province and do not want to

		interfere with it. Zeist does want to pay, but the province needs to take care of the realization, according to them. This is a field of tension in which we are situated." I detect that when parties are reluctant to act according to the compensation policy, they probably are not so open to be informed, which increases the duration of compensation processes since parties might not have to expertise to deal with it. On the other hand, during the interview it for instance appeared that creative solutions can occur when agencies know how it works. The province has gained different experiences with involved parties and their knowledge on the compensation policy also differed.
- To which extent is compensation policy applied by the intended users?	Yes / No	The extent in which compensation policy is applied by intended users can be verified by using data of monitoring and evaluations. As mentioned before monitoring data is not really gathered. The provincial representative is keeping track of 'no, unless' formula cases and possibly compensation cases, on an ad hoc basis. He estimated that they have about 70 cases regarding the 'no, unless' rule and about 4 or 5 cases that finally end up at the level of compensation. Of course the 'no, unless' rule is part of the provincial compensation policy but it is remarkable that only few cases actually pass through the whole scheme and require compensation. The respondent noticed that "monitoring should occur more frequently. Specifically verifying if agreements are followed up in the field. People should be send to check in the field. For the Forest policy this is already done, but in other cases this is actually not applied sufficiently enough. There should be a system, which shows the department of enforcement when to monitor in the field in order to check if agreements are being fulfilled. Then the question arises if the agreements are documented correctly." It remains to be seen to which extent compensation duties are being fulfilled.

During the interview several compensation projects were discussed. It appeared that in certain cases the involved parties (municipalities and initiative takers) were in need of information on the 'no, unless' rule and compensation procedures. The province also indicated in the regional plan that already in case of small extensions it can be wise to have a preliminary consultation with the province (c: 93). It also occurred that some involved parties were resistant to go along with guidelines, connected with the 'no, unless' rule and compensation procedures. Not open for suggestions or help from the province. In other situations parties were supportive of the 'no, unless' rule and compensation policy (environmental organizations). But the main point is that compensation policy cannot be seen separately from the 'no, unless' formula. Compensation is one of the last steps that is taken when the criteria of great public interest and missing alternatives is met. Besides the compensation policy is not considered as general as that. Involved parties look how the situation / and possibly compensation fits their company, environment or municipality. How does mitigation / compensation fit in their situation.

Since 2004 the policy connected to the 'no, unless' rule and compensation has become sharper. It is essential that decisions are correctly documented in private law agreements. Then it is for instance possible to force the fulfilment of compensation duties. If this will be applied remains the question. New instruments are applicable since the new Wro is in force. It is interesting to see how the municipalities will cope with these new instruments. The respondent indicated that municipalities can already have difficulties with the

'no, unless' formula and frequently fall back on the respondent. With the new Wro more is left for the municipalities to implement, including the 'no, unless' formula (since the approval of the province is not necessary anymore). Thus it also remains to be seen how this will evolve in the future. This needs to be monitored. Utrecht does not have a monitoring system yet. The respondent mentioned that monitoring of data and evaluations still needs to be worked out. In a conversation between the province and the Ministry of Housing, Spatial Planning and the Environment this also came up. Without evaluations it becomes difficult for the province to answer certain questions about involved parties, like for instance if parties act according to compensation policy or to which extent compensation policy is being applied by intended users. It is of interest to see which results come from monitoring and evaluations.

3. Final conformity

Final conformity involves if reality corresponds to the intentions of the initial plan. During the interview with the provincial representative a couple of experiences with nature compensation were mentioned. These examples of compensation being applied in practice are taken into consideration while assessing the effectiveness of nature compensation policy. The practical situations are compared with plan conformity (initial plan) and conformity of behavior (change in behavior), which have been discussed previously. But final conformity does not solely involve these characteristics only. It is also of importance to view in which context the compensation process takes place. In the end the question remains: How effective compensation policy is currently? The effectiveness criteria of Sabatier and Mazmanian can be categorized by plan conformity, conformity of behavior and the context, which can be found back in the following table. A short summery will be given next on how the criteria of effectiveness (from Sabatier and Mazmanian) are used in this research on nature compensation:

- 1) ***Policy objectives are clear and consistent, Plan Conformity & Conformity of Behavior:*** This criterion is researched by looking into how compensation is processed in policy statements (comparing national guidelines to provincial compensation policy and how this policy is applied on local level). This criterion also involves how aware the involved parties are of the compensation policy and how well they understand it (usability degree). This includes questions like: can involved actors find themselves in the compensation policy and do they act according to this policy? All these factors influence the outcome.
- 2) ***The program is based on a valid causal theory, Plan Conformity:*** This criterion is examined by researching if no net-loss of values occurs, which is the goal behind nature compensation. Do the areas in which an intervention is planned & takes place and the compensated areas result in the fact that no net-loss of values occurs?
- 3) ***The implementation process is structured adequately, Plan Conformity:*** This criterion is researched by looking into which standards are in place. Do the compensation guidelines/policy statements (set on national and/or provincial level) structure the compensation procedure adequately? This also involves experiences of involved actors with the implemented standards.
- 4) ***Implementing officers are committed to the program's goals, Conformity of Behavior:*** This criterion is researched by looking into how implementing officers act according to the compensation policy. How is compensation applied within the province?

- 5) **Interest groups and (executive & legislative) sovereigns are supportive, Conformity of Behavior:** This criterion is researched by looking into how key actors, concerning interest groups and sovereigns (as perceived by the province) are supportive regarding the compensation procedure. Do they act according to the compensation policy?
- 6) **There are no detrimental changes in the socio-economic framework conditions, Context:** This criterion is researched by looking into the context surrounding the compensation procedure. External / internal events can have influences on the compensation procedure. This can for instance include: currently the international/national financial crisis, changes in legislation (accentuating the Nb-wet in 1998, implementation of the new Wro in 2008), the province can possibly influence the procedure for social-cultural, economical, spatial, agricultural and/or natural (etc.) reasons, a change in Members of the Provincial Executive or a change in members of a municipality can influence the implementation of compensation policy, natural disasters (floodings, earthquakes etc.), and so on. Which context and how this context influences the compensation procedure is examined by applying this criterion in this research.
- * **Final Assessment** on how effective the compensation policy has been, taking into account all the criteria of effectiveness (designed by Sabatier & Mazmanian). When is the compensation policy effective? Only if all effectiveness criteria are met concerning final conformity or if the greater part of the effectiveness criteria suffice the requirements of final conformity? The question remains if people are aware of the compensation policy, are informed of all the elements of the compensation policy and act according to the compensation policy. Where do bottlenecks possible appear in these phases? There is a difference between the past, present and future. This can possible become visible in this last part of inspecting the final conformity.

Application	Final Conformity	Comments
Criteria of effectiveness (Sabatier & Mazmanian)		
1) Policy objectives are clear and consistent; (Plan Conformity & Conformity of Behavior)	Yes / No	The respondent answered to this criterion that it is experienced "more frequently yes. Of course it depends on the civil servants that communicate it to the outside and how the management brings it. In that sense we have had some changes (for instance in members of the Municipal Executive or Provincial Executive). Attention goes to bringing forward the regional plan in a sharper way, on a administrative level. This results in different discussions." Thus if policy objectives are clear and consistent depends on how certain persons communicate it to the outside world. The scheme that is provided on the 'no, unless' formula can be of help in bringing this concept forward in a clarifying way. It is transparent and clear on how this is done, according to the respondent. He also noted "that creativity begins to show when agencies really understand how it works. The agencies inspect how a project can also increase nature quality. This is not always a possibility, but in certain cases it is possible and then it really works too." For instance the chessboard model, which is applied in the Utrechtse Heuvelrug ,shows quite creative solutions. The balance between red (constructions) and green (nature) needs to remain equal. An idea behind it is that low valued red can be upgraded and money can be earned from this improved high valued red. The reorganization (to create/improve green) can be paid from the earned money of the upgraded red. The NEN-balance approach that is applied at Soesterberg proved that more money is necessary to execute the reorganization of all that

		extra green. It is of interest to view how red and green are balanced out. During the interview it appeared that parties situated in for instance the Utrechtse Heuvelrug have inventive ideas on spatial planning, but not everything is possible of course. Finally the provincial representative noticed that one element is not clear yet, which involves the connection with the Forest policy. This policy does not fall under the green contour, but the 'no, unless' rule/compensation principle is in force in these areas. Vagueness can exist between interventions inside or outside the NEN (if the 'no, unless' rule is applied) and when the Forest policy is in place. Different considerations need to be taken into account. The respondent stated that you always needs to look in which framework rules are formulated.
2) The program is based on a valid causal theory; (Plan Conformity)	No	The provincial representative noted that "it can take 20, 30, 40, 50 years before it is possible to say something on the quality of the compensation and in relation to it's original location. There are also many other factors on which they do not have a grip, like for instance air pollution, darkness and lightness, etc, which do proceed. The presence of humans increases as well. The quality of nature rather decreases, let alone applying the 'stand-still' principle for new nature concerning compensation. This is quite difficult. The respondent does think that by putting it forward in a more strict way it begins to look like it more." In the end the compensation principle is still implemented quite recently, in comparison to the duration in which compensation is established. Monitoring data and evaluations can show if a valid causal theory is in place. It can be difficult for Utrecht to answer this criterion, since the monitoring system still needs to be created. "But it has to do with that you take something away and the same quality needs to be returned, according to the respondent. This is always very difficult and already tough for experts. One of the biggest obstacles is that municipalities, but also initiative takers, frequently do not understand it, while they are responsible for the process. The process is pushed forward, and this slows it down and makes it tiring. This is also the case with politicians. For instance alderman sometimes do not understand it, or do not want to understand, and approach members of the provincial executive, which makes it all a hustle. When you think about it then you can swiftly move forward, but through all the fuss around it this becomes difficult (to work rapidly). A lot of confusion can exist" According to the provincial representative there is also "confusion about differences in ground values. People think that compensation can be applied like that, plant some trees and it is finished. But for instance agricultural lands or construction ground is relatively more expensive than nature and this difference in values also needs to be compensated to the owner." Finally the valid causal theory involves the goal behind nature compensation, including that no net-loss of values takes place. A lot of different aspects surround the compensation process that is supposed to lead to no loss of values. The main idea of compensation has been mentioned during the interview and is also registered in the regional plan, but if this valid causal theory is reached in practise remains to be seen in the future. Evaluations can provide information on this.
3) The implementation process is structured adequately; (Plan Conformity)	Yes	The department has the nickname of being the green interference power, according to the respondent. He noticed that the department "continuously has to say: wait a second, the 'no, unless' rule. It has a negative meaning connected to it (plans are always refused, unless..). This gives a lot of fuss. On the other hand he notices that more and more municipalities and colleagues within the province do acknowledge it's good that this policy exist. In this way you work on a weaker sector. The ground value of nature remains low and richer functions easily go over it. In this way we made it

		<p>more clear where our national and provincial interests lay. And this is better to keep up. It sticks with people and we are pretty fixed on it. Sometimes you find yourself in difficult situations." From this it can be noticed how certain parties look against nature compensation. Next the compensation process is briefly mentioned to show the presence of a structure. According to the provincial representative "you observe if significant damage is done first. Utrecht has a different solution for it, which needs to be inspected by a judge. Utrecht looks at the whole plan of each project that is being handed over. The damages are viewed (acreage, quality, cohesion), but you can also examine which desires, regarding nature, could be reached within a project. This method is called 'plusses and minuses'. In this way you can still come to the conclusion that no significant damage occurs and then one does not have to follow the rest of the track. You remain in the first part of the 'no, unless' scheme and for a project new nature will be developed, quality will be improved or a better reorganization is arranged. This is all considered in the first step, which is a crucial step for them. Compensation is only required when you pass the steps, concerning great public interests and missing alternatives, which is not reached very quickly. It rarely happens that the upper part of the list is passed." The scheme, concerning the 'no, unless' formula, shows the structure in which steps concerning this policy and compensation becomes visible. The 'Handleiding Bestemmingsplannen' shows a structure in which compensation is described. This information and the scheme give a clarifying image of how to deal with the compensation process. Although there are always certain parties that will not be aware of this information or they do not understand it, as mentioned before.</p>
4) Implementing officers are committed to the program's goals; (Conformity of Behavior);	Yes	<p>As mentioned before everything became sharper since 2004, including the 'no, unless' rule. The respondent noticed that not everyone is familiar with the 'no, unless' formula. Municipalities have much difficulties with it. As mentioned above the municipality of Zeist, who have nearly no grounds outside the NEN, do not understand the policy since they are only prepared to pay and want the province to realize everything, concerning the plans of compensation connected to NEN areas. Of course the 'no, unless' rule and even national guidelines do not indicate this. There is a tension between the province and certain municipalities (probably caused by missing the proper knowledge on the implementation of compensation policy or miscommunication). Another example involves the construction of a large conference centre, which is planned besides the highway but in a NEN area. The respondent noted that "the province will need to solve this with the municipalities (and put pressure on the body of surveyors of recreation) to find a solution. On the other hand you do not want an intervention in the NEN. There is much tension in this case and it is exciting to see how it will develop. The municipality of the Utrechtse Heuvelrug also has a role in this matter. There are a couple of ambitious alderman that are testing the boundaries on what the province will find acceptable. These alderman are supporting these plans. This makes it extra thrilling to see how it will continue. The conference centre is not of great public importance and alternatives outside the NEN are also possible. In that sense you notice internal resistance." This is an example that shows resistance with the municipality because they want to execute an intervention, while the province is following their compensation policy. During the interview it appeared that municipalities can be supportive of the compensation policy but they can also work against it. On the other hand it appeared that implementing officers of the province are committed to the program's goal. The implementing officers do not only focus on damages (acreage, quality, cohesion), but desired nature</p>

		qualities that can be reached within a project are also examined. Weighting out the 'plusses and minuses' of a project. During the interview it was not mentioned that resistance existed among implementing officers within the province.
5) Interest groups and (executive & legislative) sovereigns are supportive; (Conformity of Behavior)	Yes	During the interview it appeared that environmental groups are supportive of the compensation policy because it forces municipalities and initiative takers to make an accurate plan. It forces them to look into how damage is prevented and alternatives are researched. It became visible which roles interest groups had in certain projects as well. The regional plan also states that by expanding the national park for the larger part of the Heuvelrug offers opportunities, concerning collaboration between involved parties, in order to shape the policy that is focused on strengthening the unity within the area (a: 102). From this it appears that involved parties can participate to a certain degree.
6) There are no detrimental changes in the socio economic framework conditions. (Context)	Yes / No	During the interview it appeared that the implementation of the new Wro had consequences for the further implementation of nature compensation. The respondent stated that "due to changes in the organization and the new Wro the monitoring of compensation got a lower priority. Attention needs to be paid to this, but it was often postponed due to lack of time. A provincial registration point needs to be set up." This shows that the implementation of other policies had a priority and lack of time influenced the progress being made with the implementation of compensation, concerning monitoring of projects. During the interview it was also mentioned that a change in members of the Municipal- and/or Provincial Executive could have an influence on the compensation process. For instance the respondent mentioned "a project, regarding an extension of a camping site in Rhenen (Recreatiecentrum De Thijmse Berg) took a lot of time since the municipality did not decide on the matter and later on a new municipal executive at some point indicated that it should go very differently." This has socio economic consequences for parties involved. Next to this the respondent mentioned certain characteristics of Utrecht, which are connected to socio economic framework conditions. He notes that "the same amount of people are present in Utrecht, but in need of more houses, which means that the whole area needs to be expanded. Utrecht is also very busy, concerning all the roads that join here (i.e. the central location of Utrecht). This all puts a lot of pressure on the area, which makes it exciting to shape the policy. It is a challenge for the province, which they try to arrange." In general Utrecht meets this criterion, but examples that have consequences for the socio economic framework conditions have been detected. The fact that monitoring of compensation projects received a lower priority, due to the new Wro and other causes, is quite remarkable and should be kept in mind.
Final assessment on the effectiveness of nature compensation, by using the outcomes of all the effectiveness criteria that are mentioned above (ratings between 1 and 5 points, see chapter 5.5 for explanations behind ratings per province).	■ ■ ■	The effectiveness criteria have generally been met, except for the criteria of a valid causal theory. In order to find if no net-loss of values occurs monitoring is necessary. Utrecht stated that a monitoring system still needs to be arranged. Further more the compensation policy is experienced as clear consistent and structured, while this can differ between parties. Just as the support of compensation differs between involved parties. Thus the criteria are generally met, but monitoring data and evaluations could give more insight on how these criteria are met.

This section on final conformity indicates that Utrecht appears to moderately suffice the effectiveness criteria from Sabatier & Mazmanian. It becomes visible that plan conformity exists, except for the elements concerning monitoring of projects and

evaluations. This makes it difficult to assess certain elements of conformity of behavior and final conformity. It was difficult to assess if parties act according to compensation policy or to which extent compensation is being applied. During the whole interview many compensation projects have been discussed. This gave insights in how compensation projects are being dealt with. It showed relationships between the province, municipalities, initiative takers and other involved parties. Examples of projects also showed that certain parties agree with the compensation policy, while others don't. The knowledge on compensation policy is sometimes limited with municipalities and initiative takers, while these parties are responsible for the compensation process. The respondent showed concerns for when municipalities have more instruments available when the new Wro is in place. Especially because municipalities are not always sufficiently informed on everything surrounding the 'no, unless' rule. It is of interest to see how the new Wro will evolve through the years and which consequences this has for compensation policy. It is also remarkable that the respondent noticed that the 'EHS-spelregels' were created too late. I agree on this since these guidelines would be useful when designing the compensation policy. Currently all the provinces already have compensation implemented in different ways and this needs to be adjusted to meet the guidelines of the 'EHS-spelregels'. On the other hand the 'EHS-spelregels' is quite detailed, which can improve compensation policy when necessary. The provincial representative noticed that as province it is of importance to keep the main elements on a abstract level. Although I think that Utrecht has quite some information on explaining the 'no, unless' rule and the given examples have a clarifying effect. Although information supply and communication is still essential since many involved parties do not really understand the appliance of the 'no, unless' rule and the specifics of implementing compensation. Preliminary consultations are advisable, also in smaller projects, just as the province already advises in the regional plan. In the end these are still only experiences shared from the province. In this research it was not possible to approach involved parties, in order to gain insight into their experiences. This could lead to interesting results concerning conformity of behavior and final conformity.

Zeeland

1. Plan Conformity

Plan conformity is largely examined by using provincial policy documents on compensation. A list of these documents is provided. Besides if and how national compensation policy is translated into provincial compensation policy is explained next. A table is used, which gives a description of how compensation is registered in the provincial policy documents. First the areas are mentioned in which compensation is supposed to be applied. Then the standards are covered by looking at the seven steps to implement compensation, taken from the 'EHS-spelregels'. These topics in the table are taken from national guidelines, and can be used to determine how standards are being applied by provinces.

1.1 List of documents concerning nature compensation

- a) Omgevingsplan Zeeland 2006-2012 This document includes a combination of plans: the regional plan, environmental policy plan (in Dutch: milieubeleidsplan) and the water balance plan (in Dutch: waterhuishoudingsplan)
- b) Natuurcompensatieprogramma Westerschelde, Voortgangsrapport 2007.
(progress report on the nature compensation program of the Westerschelde)
- c) Finally the website of the province Zeeland has frequently been visited (www.zeeland.nl/)
 - * Information on the new Wro (<http://provincie.zeeland.nl/wonen/omgevingsplan/wro>)
 - * Uitwerking van de Kadernota Wro (2008)
 - * Ganzenopvang Zeeland, Beheersgebiedenplan ruime jas begrenzing (2006) Beheersgebiedsplan in het kader van de Provinciale Subsidieregeling Agrarisch Natuurbeheer (PSAN) – Management of forage areas for geese
 - * Natuurgebiedsplan Zeeland (2005) – Nature area plan of Zeeland

References to these documents will be made in the following scheme in which a description on the compensation policy is given. Next to these documents an interview took place with a representative of the province (specialized in nature compensation) in 2008 to gain insight in the compensation policy.

1.2 Description of how compensation policy is registered in documents

Application	Plan Conformity	Comments
Areas in which the compensation principle is in force		As the Omgevingsplan states: "the compensation principle sets in when it involves existing nature areas and areas of ecological value. Besides the compensation

		principle is in force in forests and vegetation of certain landscapes that fall under the Forest policy." (a: 211)
1. National Ecological Network (NEN) areas & robust ecological connections;	Yes	The NEN is incorporated in the Omgevingsplan and states in this plan that "Zeeland was driven in the creation of the NEN. Zeeland is ahead by making good agreements, connected to the agriculture, high ground mobility and high provincial ambitions (in accordance with policy and financial means). In the meantime 80% of the ground is acquired and 55% is actually arranged." (a: 74)
2. Birds and Habitat Directive (BHD) areas;	Yes	Is mentioned in the Omgevingsplan. (a)
3. Nature Protection Act (Dutch acronym: NB-wet) areas;	Yes	The Omgevingsplan indicated "Natura 2000 areas require management plans an the province takes initiative to compose management plans for: de Kop van Schouwen, Manteling van Walcheren, Yerseke en Kapelse Moer, kreken Zeeuws-Vlaanderen and the Zwin. The state (Ministry of Transport, Public Works and Water Management) will do this for the large waters." (a: 211)
4. Compensation registered in other policy documents:		
a. Forest policy;	Yes	The Forest policy arranges the quantitative preservation of the forests in Zeeland. Besides the Omgevingsplan includes rules for the protection of timber stand. (a: 211)
b. Flora and Fauna policy (Dutch acronym: FF-wet);	Yes	The Flora and Fauna policy is mentioned in the Omgevingsplan. It also mentioned forage areas for geese. A separate document focused on the sheltering of gees gives more information on this topic. (a, c)
c. New policy of spatial planning (Dutch acronym: Wro).	Yes	The essence of the Omgevingsplan and the use of proposed (new) instruments are mentioned in the Kadernota Wro. The provincial website noted that Zeeland wants to realize policy while consulting municipalities (and other parties). The approval of development plans is not required any more. The province noted on their website that this can speed up the procedures surrounding the development plan, but in certain situations members of the Provincial Executive can obstruct communal plans. The provincial website also mentioned that an provincial ordinance will replace this required approval of development plans. With this ordinance the province clearly wants to indicate in advance which elements of the provincial policy (e.g. provincial interests as described in the Omgevingsplan) will receive binding meanings for communal plans. Next to this the elaboration on the Kadernota stated that: "when processing the agreement, concerning the provincial ordinance, fifteen topics were introduced. This involves tangible formulated provincial policy goals from the Omgevingsplan. These are examined from it's importance and the use of lighter instruments is not desirable. The compensation principle (including: existing nature areas and areas with ecological values as well as forests and vegetation of landscapes connected to the Forest policy) will be registered in the ordinance. This also means that relations exists of supervision / consultation and if necessary a notion to gain insight or reactive notion (in Dutch: zienswijze or reactieve aanwijzing/ beroep) can be submitted. The protection of the NEN in Zeeland will also be registered in the ordinance. (c, 2008:2)"
Compensation procedure in seven steps		

1) Testing the 'No, unless rule' consideration framework		
No formula (interventions are basically not allowed), unless formula:	Yes	The Omgevingsplan indicates that "flexibility is essential when adapting to new developments from society. At the same time new initiatives should not take place at the expense of the valuable environment. Zeeland has therefore designed a consideration framework, in which environmental qualities are explicitly described. On basis of these qualities shape is given to the appropriateness/relevance of new developments. This consideration framework notes that very vulnerable and valuable areas have a protection regime, which corresponds to the consideration framework of the Nota Ruimte. On the other hand when high environmental qualities are present than there is limited space for new developments because more requirements are connected to these high qualities. In this case the concept 'negotiable scarcity' can possibly occur to a certain extent. In short, different environmental qualities are present per location, area or region, which requires those cases to be processed in their own way. As the Omgevingsplan notes that in all cases authorities should look for smart solutions, and not to go for standards too fast. When considering new developments the following aspects are kept in mind: desirability of new development, choice of location, design, principle of settlement (red for green / rood voor groen) and legal requirements. Finally the formulation of environmental qualities and the connected strategies, which are described in the Omgevingsplan, can determine the relative weight of a quality in the consideration process as well. Zeeland also has a quality team in place that secures quality aspects." (a: 33, 34)
a. Prove considerable social importance;	Yes	(a: 33, 34, 213)
b. Research the alternatives;	Yes	(a: 33, 34, 213)
Compensation principle (No net-loss of values):	Yes	(a: 213)
1. Integration operations of landscapes and mitigation;	Yes	The initiative taker is required to apply mitigation and fitting it in landscapes as much as possible. This includes the prevention of negative effects from arising or the decreasing of negative effects (a: 213)
2. Physical compensation including:	Yes	
a. Compensation of surface (direct effects);	Yes	Compensation of surface includes that the basic arrangement involves lost qualities, which can be replaced. (a: 213)
b. Compensation of quality loss (quality addition, in Dutch: kwaliteitstoelag);	Yes	The amount of quality addition depends on the development time of the concerning nature goal type (natuurdoeltype). The Omgevingsplan shows a list in which nature goal types are combined with their development time (a: 212). This partly resembles the list given in the 'EHS-spelregels'. The idea behind quality addition is the following: - Very quickly replaceable (within 5 years) : no quality addition; - Quickly replaceable (within 10 years) : 1/3 of the costs of physical compensation; - Replaceable (within 25 years) : 2/3 of the costs of physical compensation; - Difficult to replace or irreplaceable (longer than 25 years) : decided per case. (a: 213) Remarkable is that Zeeland implemented quality addition in a stricter way than the 'EHS-spelregels' advises. The EHS-spelregels advises the following on quality addition (< 5 years = no addition, 5-25 years = 1/3, 25-100 years = 2/3, >100 years = decided

		per case).
3. Financial compensation	Yes	The Omgevingsplan indicates that “when physical compensation is not possible financial compensation becomes an option. Financial compensation includes quality addition and also the costs from the acquiring/arranging the area. The amount is labeled as ‘provincial budget’ and deposited in the environmental trust (in Dutch: Groenfonds). But the costs of mitigative an compensation costs are part of the total project costs.” (a: 213) In the end the Omgevingsplan does not show how the amount of financial compensation is composed.
Measures specifically designed for NEN areas:	Yes	
4. NEN –balance approach	Yes	(a: 213)
5. NEN re-determining the limits	Yes	Briefly mentioned (a: 75) The limits are also registered in ‘Natuurgebiedsplan Zeeland’, written in 2005.
2) Compensation plan according to standards	Yes	
- Compensation plan, independent document according to standards	Yes	The Omgevingsplan states that “the province will only provide planning assistance when the measures in the Omgevingsplan, concerning compensation, are guaranteed. Also the economical feasibility of the compensation measures need to be demonstrated.” (a:213)
- Requirements on the content of compensation	Yes	All the requirements seem to been worked out in the Omgevingsplan of Zeeland. All the required topics are described but not very extensively. For instance a procedure scheme could be clarifying during the compensation process and perhaps more guidelines can be processed regarding financial compensation, which could give the reader an idea of what to expect. The provincial respondent indicated that “you should approach things practically instead of all that theoretical stuff. For instance around the ‘EHS-spelregels’ a lot has been build and all those rules do not make it easier. According to the respondent the compensation policy is registered quite clearly in the Omgevingsplan. He thinks it is quite simple and only written in a couple of pages, more is not needed.” Next to this the Ministry of Housing, Spatial Planning and the Environment looked at the Omgevingsplan before it was implemented and approved it. Thus according to national level the requirement on the content of compensation are also met.
3)Decision authorized authority on intervention and compensation	Yes	(a:213)
4) Embedding intervention and compensation into spatial plans	Yes	(a:213)
5) Private law agreement initiative taker and authorized authority	Yes	
Legal binding agreements on the execution of the compensation plan:		
- Bank warranty	Yes	As mentioned before, the economical feasibility of the compensation measures need to be demonstrated. (a:213)
- Final realization date	-	Unknown
- Penalties when exceeding final realization date	-	Unknown
6) Monitoring implementation by authorized authority		
- Authorized authorities yearly report to the province	No	Only yearly reports were required in the large project of the Westerschelde, in which the

		state itself was also involved. Otherwise evaluations are not taking place in Zeeland. The provincial respondent noted that “ the end result is always the same. Documents on the projects is seen as an addition. He noted that there are no evaluation reports and that the province works very practical. Research and reports cost money, which could also have been used to bring it into practice, in a good way. In a way an evaluation already took place, because the previous regional plan contained compensation policy and this was incorporated and accentuated in the Omgevingsplan.” The Omgevingsplan does not indicate if and how monitoring data is collected and how evaluations should take place. Although on the other hand, because the compensation principle falls under the provincial ordinance, quality needs to be preserved and it should to be examined if plans are being applied correctly.
- Provinces verify these reportages and collects these inspected reports	No	This is not mentioned in the Omgevingsplan. If reportages are verified is unknown.
- These provincial findings are reported to the state	No	During the interview it appeared that the only provincial findings, which are being reported to the state, involve reports concerning projects in the Westerschelde.
7) Authorized authority takes over execution when final realization date expires	-	It is unknown if authorized authorities take over the execution of nature compensation duties, when the final realization date expires.
- The executing costs are for the initiative taker, including:		
- Bank warranty	Yes	(a: 213)
- Penalty	-	Unknown
(Money is situated in the Green trust (Groenfonds) linked to the project)		

To summarize Zeeland has incorporated all the area categories and mentions all the types of compensation in the Omgevingsplan. Zeeland had an opportunity to adjust the Omgevingsplan to future legislation (e.g. new Wro), since the province replaced their regional plan with the Omgevingsplan in 2006, which is quite recently. During the construction of the Omgevingsplan the Ministry of Housing, Spatial Planning and the Environment was asked to look into this plan, in respect to future policies like the new Wro. Thus on national level it was confirmed that the Omgevingsplan suffices the new Wro. It is a pity that in 2006 the ‘EHS-spelregels’ was not established yet. Certain aspects from the ‘EHS-spelregels’ are not present in the Omgevingsplan. For instance the monitoring of compensation projects and evaluations are not mentioned in the Omgevingsplan. If the province indicates that it does not want to have a net-loss of values than evaluations would be necessary to prove that no values are lost. Monitoring data and evaluations are needed to compare spatial plans to what has been applied in practice. This can show if the compensation policy is an success or not. But as the provincial representative indicated “no evaluation projects are planned. Reports and research cost a lot of money, which could also be used to correctly bring it into practice.” The respondent seemed to be very practically minded. The respondent frequently mentioned that it should be very practical. He also noted that “a large framework was designed around the ‘EHS-spelregels’, and all those rules do not make it easier. In his opinion it is quite easy: compensation needs to be fulfilled for all planning, in which the purpose of nature values are acknowledged. The respondent also noticed all the theoretical fuss and remarked that the creators of policy can be distant from the practice. Finally to summarize the respondent thinks that the provincial compensation policy is written in a very clear way. According to him it is simple and it only contains a couple of pages, more is not needed.” Perhaps more

pages are better, because it would contain more information on how compensation is applied. The compensation principle is defined clearly and contains most aspects, but with more elaborations on this concept it could be even clearer and possibly more complete. This is in contrary to the provincial respondent, who prefers clear but brief guidelines. To make the compensation process even more clarifying a procedure scheme would be advisable, in which the steps of the compensation procedure are presented (given in the 'EHS-spelregels'). Finally to conclude that Zeeland generally suffices plan conformity. Besides improvements and additions are always desirable when implementing policy, and also desirable for the provincial compensation policy of Zeeland.

2. Conformity of behavior

How do actions of involved actors in a compensation process correspond with the national and/or provincial compensation policy statements? The following table includes components like the role of parties involved, experiences & appliance of compensation, the guarantee of compensation fulfillment and a usability degree. An overview of the parties involved, their relations and their involvement is sketched out, which is of importance when researching the provincial compensation policy and the appliance of this policy. In this case the experiences of the province are captured. All these elements are related to the fact: if behavior of the parties involved in the compensation procedure act according to the national and/or provincial compensation policy.

To start by giving an overview of the key actors in the compensation process, as perceived by the province:

- Government (Ministries)
- Province
- Municipalities
- Initiative taker
- And many other involved parties, e.g. varying from privately-owners to Dienst Landelijk Gebied (agency connected to the Ministry of Agriculture, Nature and Food Quality), Nature Monuments (in Dutch: Natuurmonumenten), State Forestry Service (in Dutch: Staatsbosbeheer), recreation, agriculture, body of surveyors of the dikes (in Dutch: Waterschap) etc..

Application	Conformity of Behavior	Comments
Role of parties involved		
Are the key actors in the compensation process, as perceived by the province, involved in the compensation procedure?	Yes	During the interview it was mentioned that projects can differ very much (e.g. large projects - individual projects). Differences in projects can also influences which relations exist and the involvement connected to these relations. For instance the state was involved in a huge project like the Westerschelde, but in smaller projects this does generally not occur of course. The provincial representative described which role the province has during the compensation process and "for example it is not a problem when the government thinks along with entrepreneurs. The authorities are the most important party in the implementation of this policy. Besides it is not a bad thing when compensation arrangements are combined,

		or if the province takes over for a bit, so that projects can be linked (combining what you have). Sharing experiences can be valuable and of interest is making it easier for entrepreneurs to successfully fulfill their duties. The province tries to help compensating parties." How parties were involved became clear from the Westerschelde project. During this process the province arranged the borders, looked for areas, supplied information to the region, participation was possible and the province started the whole organization of this project. Thus in this process many parties were involved and these actors had the possibility to participate in certain parts of the process.
Which relationships exist between the key actors in the compensation process, as perceived by the province?	Yes	The relationships were already briefly mentioned when discussing if key actors are involved in the compensation procedure. The relationships between key actors will differ per projects. In large projects Dutch ministries can be involved, while this generally does not occur with small/individual projects. The provincial respondent noticed a difference between projects. In short he stated that "private owners more often consider the policy to be difficult. The understanding of the compensation procedure is sometimes less. The very large projects usually go well, but with normal cases it has to be viewed in just a bit more practical way." Thus there is a difference between projects, concerning how much information and guidance is necessary during the compensation procedure, which sets the relationships.
Experiences & appliance of compensation (did compensation policy contribute to a change in behavior?)		
Do parties agree on the compensation policy?	Yes	How parties agree on the compensation policy is answered by giving a brief notion of what the provincial representative experienced, like for instance that "very large projects often go well, but normal cases need to be treated in just a bit more practical way. The initiative taker can experience it as difficult. That person would rather not compensate, but still needs to apply it and if necessary under force. A smart initiative taker will not resist the compensation duties, but arranges it as quickly as possible. They discover this quite quickly. Compensation is inevitable. In the past people could try to avoid compensation, but that is not smart. Compensation can better be arranged, otherwise everything goes wrong in the end of the procedure. The Council of state will need to know how compensation is arranged. If this is not arranged then they can start over again, which will cost years of time (and costs will rise too). For instance the Maasvlakte and the container terminals involves billions and it can make a difference of millions if the procedure goes well." So smaller initiative takers can have difficulties with the compensation policy / procedures. For instance the respondent noticed "difficulties can be experienced with the overlap between the Forest policy and compensation principle (e.g. by private owners). They also experience difficulties in finding suitable ground and how to arrange the design of it. Sometimes private owners just want to solve these problems with paying money. Also municipalities occasionally have difficulties with the appliance of compensation, but this actually is not the case anymore. The big players understand it very well. The initiative takers often do not like the fact that compensation is needed but they understand it and the smart ones also extensively show how well they have arranged their compensation duties."
Do parties act according to the compensation policy?	Yes / No	As described in the previous question (i.e. agreeing on the compensation policy), it is

		generally known that compensation needs to be fulfilled. It is not smart to avoid it because in later phases of a project the arrangement of compensation will be checked and if this is not sufficiently enough than the process will have to start again. It will cost a lot of extra time and extra money to go through this process, concerning spatial planning, again. In the end this question is difficult to answer, because only evaluation data is available from the Westerschelde project. The other compensation projects are apparently not monitored and evaluated. It becomes difficult to research if the parties actually act according to the compensation policy without this data.
Guarantee of compensation fulfillment		
Is a sufficient amount of instruments available to guarantee the fulfillment of compensation duties?	Yes	The provincial respondent told the following on instruments that influences the fulfillment of compensation. "First it is wise to register agreements before a development plans is approved (which is not the case anymore with the new Wro) or when a building permit is handed over, otherwise the first part of the plans will be executed while the second part will possibly not be accomplished. This can be solved with a private law agreement that needs to be signed at the same time a development plan is revised or when a building permit is handed over. This is enforceable. The guarantee that compensation is fulfilled also depends on how it is arranged. A person can organize their own compensation or it can be arranged by others." A couple of examples the respondent gave: the cooperation between provincial colleagues (department of building roads and a department that is focused on nature and compensation) or the cooperation between the state and the province (state causes deepening of Westerschelde while the province arranges the compensation) or the assistance of the province assisting with smaller projects. During the interview it appeared that "you always have to be aware of the difference between involved parties. For instance authorities can be fine in arranging it, but they can also have interests that decide the success or failure of certain things". Next to this the procedures concerning private owners needs to be arranged quite strictly (probably due to facts mentioned earlier, e.g. inexperience). These are a couple of ways that the guarantee of compensation fulfillment is influenced. According to the respondent the guarantee of compensation fulfillment is arranged sufficiently in Zeeland.
Are these instruments applied to guarantee compensation?	Past: Not always Present: Yes	The examples of compensation projects given during the interview involved well arranged projects. Agreements were made and especially with the Westerschelde project everything was registered extensively. The respondent noted that people who do not suffice the instruments will experience disadvantages (i.e. the compensation procedure will not be approved and the whole compensation process needs to start over). In the past sometimes the agreement was not signed before development plans were revised or before building permits were handed over. In these cases sometimes the first part of the plans are realized while the nature compensation, mentioned in the second part of the plans, would be overlooked. Nowadays agreements are made, which prevents this from happening. Although because no evaluations are taking place, it becomes difficult for the province or municipalities to judge if compensation is truly being fulfilled.
Usability degree (compensation procedures)		

- To which extent is compensation policy known by the intended users?	Yes / No	According to the provincial representative "nowadays everyone knows about compensation. Existing nature cannot be destructed without having to compensate. All municipalities understand this very well. Although smaller projects could possibly be unaware of it. The municipalities will need to point out that spatial planning would be difficult, because it is in a nature area in which compensation is in place. But before the compensation principle comes into force, something else needs to be answered (i.e. the no, unless formula), which is frequently overlooked/skipped. They think, ow we will compensate then. The first spatial planning consideration involves if it is possible at that spot (i.e. if the intervention is of social importance & if no alternatives are available)? In this phase consultation already takes place. Smaller projects need to be reminded of nature compensation and then the pages of the Omgevingsplan are referred, which are quite clarifying. Next a question rises that involves them understanding the compensation principle but not knowing how this applied in their own project. A problem is that they do not have the ground and do not know how to proceed then. They ask if the province can't buy ground for them or they can join existing compensation projects." Thus during the interview it became clear that the compensation policy is known, but the knowledge on the appliance of this policy differs between for instance large and small projects.
- To which extent is compensation policy applied by the intended users?	Yes / No	Compensation policy is being applied. But no evaluations are present and this will also not occur. It is difficult to formulate conclusions on how compensation policy is being applied, because no evaluations or monitoring data is available in which spatial plans are compared with results booked in the field. Examples were given during the interview, but these are just a couple and all examples of compensation projects that were/are arranged quite well. Although the message is clear: compensation cannot be avoided (and thus needs to be fulfilled by intended users).

Behaviour changed quite positively, since nowadays it is known that nature compensation cannot be avoided and needs to be arranged. During the interview it became quite obvious that there are differences between large projects (with for instance a budget of 80 million gulden in the Westerschelde project) and smaller projects (like individual initiative takers or small businesses). This influences the involvement of parties and relationships between key actors. It is also of influence on the instruments used to guarantee compensation fulfilment. Larger projects probably have more resources to fulfil compensation and are frequently already familiar with the compensation policy due to previous experiences. Smaller / individual projects could possibly have less experience with applying compensation policy and through this need more guidance from authorized authorities. As conclusion it comes down to the separate projects, which need to be viewed in order to examine the change in behaviour. But it is clear that compensation needs to be accomplished, which is a change in behaviour. Finally it is a pity that there is no monitoring data available or that no evaluations are taking place (other than the evaluations required for the Westerschelde project in which the state is involved). Through this kind of information it can be researched if parties act accordingly to compensation policy and to which extent the compensation policy is applied by intended users. All the separate projects could possibly be found back on the internet or in provincial archives. During this

research there was no time to go through all this information. Now only the experiences of the province are processed in this research while the experiences of the separate compensation projects are not included. This could be interesting for future research.

3. Final conformity

Final conformity involves if reality corresponds to the intentions of the initial plan. During the interview with the provincial representative a couple of experiences with nature compensation were mentioned. These examples of compensation being applied in practice are taken into consideration while assessing the effectiveness of nature compensation policy. The practical situations are compared with plan conformity (initial plan) and conformity of behavior (change in behavior), which have been discussed previously. But final conformity does not solely involve these characteristics only. It is also of importance to view in which context the compensation process takes place. In the end the question remains: How effective compensation policy is currently? The effectiveness criteria of Sabatier and Mazmanian can be categorized by plan conformity, conformity of behavior and the context, which can be found back in the following table. A short summary will be given next on how the criteria of effectiveness (from Sabatier and Mazmanian) are used in this research on nature compensation:

- 1) ***Policy objectives are clear and consistent, Plan Conformity & Conformity of Behavior:*** This criterion is researched by looking into how compensation is processed in policy statements (comparing national guidelines to provincial compensation policy and how this policy is applied on local level). This criterion also involves how aware the involved parties are of the compensation policy and how well they understand it (usability degree). This includes questions like: can involved actors find themselves in the compensation policy and do they act according to this policy? All these factors influence the outcome.
- 2) ***The program is based on a valid causal theory, Plan Conformity:*** This criterion is examined by researching if no net-loss of values occurs, which is the goal behind nature compensation. Do the areas in which an intervention is planned & takes place and the compensated areas result in the fact that no net-loss of values occurs?
- 3) ***The implementation process is structured adequately, Plan Conformity:*** This criterion is researched by looking into which standards are in place. Do the compensation guidelines/policy statements (set on national and/or provincial level) structure the compensation procedure adequately? This also involves experiences of involved actors with the implemented standards.
- 4) ***Implementing officers are committed to the program's goals, Conformity of Behavior:*** This criterion is researched by looking into how implementing officers act according to the compensation policy. How is compensation applied within the province?
- 5) ***Interest groups and (executive & legislative) sovereigns are supportive, Conformity of Behavior:*** This criterion is researched by looking into how key actors, concerning interest groups and sovereigns (as perceived by the province) are supportive regarding the compensation procedure. Do they act according to the compensation policy?
- 6) ***There are no detrimental changes in the socio-economic framework conditions, Context:*** This criterion is researched by looking into the context surrounding the compensation procedure. External / internal events can have influences on the compensation procedure. This can for instance include: currently the international/national financial crisis, changes in legislation

(accentuating the Nb-wet in 1998, implementation of the new Wro in 2008), the province can possibly influence the procedure for social-cultural, economical, spatial, agricultural and/or natural (etc.) reasons, a change in Members of the Provincial Executive or a change in members of a municipality can influence the implementation of compensation policy, natural disasters (floodings, earthquakes etc.), and so on. Which context and how this context influences the compensation procedure is examined by applying this criterion in this research.

- * **Final Assessment** on how effective the compensation policy has been, taking into account all the criteria of effectiveness (designed by Sabatier & Mazmanian). When is the compensation policy effective? Only if all effectiveness criteria are met concerning final conformity or if the greater part of the effectiveness criteria suffice the requirements of final conformity? The question remains if people are aware of the compensation policy, are informed of all the elements of the compensation policy and act according to the compensation policy. Where do bottlenecks possible appear in these phases? There is a difference between the past, present and future. This can possible become visible in this last part of inspecting the final conformity.

Application	Final Conformity	Comments
Criteria of effectiveness (Sabatier & Mazmanian)		
1) Policy objectives are clear and consistent; (Plan Conformity & Conformity of Behavior)	Yes	To answer this criterion certain responses given during the interview are summarized. The provincial representative stated that “you have to agree on the principles, which includes that compensation is required to be fulfilled. This is why it’s most important that the compensation policy is accurately registered in certain documents (Omgevingsplan). Then per project it needs to be seen what is damaged and which type of nature is desired to compensate for this damaged ground. This varies very much. You need to become very practical and no difficult or complicated studies are needed. Per project it quickly needs to be determined what is the obvious step to take. Frequently it is quite obvious what can be done. In certain cases an agreement is quickly made, including answers to the following question: Who does it? When does it occur? Who pays? And who manages it when compensation is fulfilled? Sometimes it takes years of negotiation to arrange this, while other times the agreement is swiftly made. There is no definite outline for this. It is kind of the Zeeuwse approach, not wanting a definite outline (that forces a bureaucratic situation).” The respondent indicates that the province is very clear, fast and tangible. It was also mentioned before that there is a difference between smaller and larger projects. Most difficulties are frequently experienced by the smaller projects, while larger projects regularly know about the rules of the game and try to arrange compensation as quickly as possible. During the interview it was mentioned that the province and/or municipalities offers information and when necessary guidance, if policy objectives are not clear.
2) The program is based on a valid causal theory; (Plan Conformity)	No	The basic idea behind nature compensation is that no net-loss of values occurs. But if no evaluations are available then it becomes difficult to examine if there really is no loss of values. There is no evaluation that shows how plans correspond with the actual results in the field. Although in the Westerschelde project the province was required to report back to the state, which resulted in evaluations. This nature compensation case is quite interesting, when looking into this criterion. In the administrative agreement of the Westerschelde it was registered that lost values cannot be

		<p>compensated. The loss of salt marsh and mud flat in the Westerschelde will defiantly not be compensated with what they are doing now, according to the provincial representative. He noted that: "when an edge is taken of that shoal, due to the deepening, then it will not be compensated by arranging a nature area on the landside of the dikes. The vegetation in that area on the landside of the dikes resembles the outer dike salt marsh and many of bird species on the landside of the dikes have a lot to do with the outer dike birds. So a relationship is present but it is not one on one, and this was known in advance. The province chose for this out of necessity." Thus the criterion that no net-loss of values occurs does not count in this case. When coming back to the evaluations the provincial respondent stated that "two kinds of evaluations are recognizable: is the chosen type of compensation suitable for what was lost? Was this a conscious decision or were you aware that it will not totally fit? Secondly is the chosen compensation realized? These questions need to be viewed separately otherwise it will be mixed up." When connecting these questions to the Westerschelde project it becomes clear that the first question is already answered with no (i.e. lost values could not be replaced in exactly the same shape). Then the provincial representative stated that "when the project still proceeds it needs to be inspected if the project went well. Has it been entirely executed and has the quality, which was set in advance, been reached? In the Westerschelde case this will be reached. In the meanwhile this was evaluated and at the end an final evaluation is planned. Extraordinary nature has been developed due to this project. It is also exactly what was planned. Only it was not the nature that was lost, but this was known in advance." To conclude that Zeeland is aware of this 'no net-loss of values' criterion and in certain circumstances the province is flexible in its appliance. Although evaluations of all compensation projects are necessary to research if no net-loss of values is maintained.</p>
3) The implementation process is structured adequately; (Plan Conformity)	Yes / No	<p>As response to this criterion the provincial respondent stated that "when taking all projects into account it is not structured at all because every project is different. The province has no book in which everything is written down, except for the nature compensation policy but that mainly includes the basic assumptions. How it is implemented is not worked out (i.e. there is no procedure on the execution). It needs to be seen per case. The Westerschelde case involves ± €31,5 million and is fundamentally different from for instance a project of a beltway in Aardenburg, which includes 20 ha of compensation." But when asking about the compensation policy the respondent noted that "the provincial compensation policy is clear, structured and concise. He stated that you have to agree on the principles (i.e. compensation needing to be applied) and it is most important that compensation is registered correctly in documents (e.g. Omgevingsplan). Then it is estimated per project what will be damaged and which type of nature is needed in return. This is very different and it needs to be processed in a very practical way." This shows that the implementation process can be structured. To summarise: the main objectives of nature compensation are described in the Omgevingsplan, but a detailed overview on the procedures surrounding the execution is not included. This could possibly show that the implementation process is not structured. On the other hand the provincial representative strongly indicates that the compensation policy is clear and that the execution can pass very quickly and tangible, which are signs that the implementation process is structured. So the implementation process can still be experienced as structured while only the basic assumptions are given in policy documents.</p>

4) Implementing officers are committed to the program's goals; (Conformity of Behavior);	Yes	During the interview compensation projects, which successfully have been executed, were mainly discussed. This included certain projects in Westerschelde and the project of 'Duurzaam Veilig' in which several small compensation duties were gathered together to be able to compensate in a more meaningful way. The provincial respondent noted that "implementing officers of the provincial government building are committed and very satisfied with the provincial compensation policy. After all they have developed it themselves. Compensation does not have a major part in their daily operations." In a major project like the Westerschelde case it becomes visible how committed implementing officers are. The province took over the compensation duties from the state. A large amount of projects needed to be selected and executed. It is a long process that took years and a lot of effort. In this case Zeeland shows their dedication to correctly apply the concept nature compensation. Although the exact same type of nature could never be replaced. Projects were chosen that could come close to what was damaged (but it could never be an one on one relation).
5) Interest groups and (executive & legislative) sovereigns are supportive; (Conformity of Behavior)	Yes / No	During the interview mainly successful compensation projects were discussed. It was not really mentioned if interest groups were supportive or not. But the major compensation projects in Zeeland, like the Westerschelde, of course brought along a lot of discussion. Many interests are connected to large projects, which can cause resistance if interests are negatively effected. For instance the second deepening of the Westerschelde caused a lot of commotion. Zeeland provided information in the region and participation was possible to an certain degree. This is a way to gain the support of parties involved. How this case proceeded will be explained more with answering the next criterion.
6) There are no detrimental changes in the socio economic framework conditions. (Context)	Yes / No	The provincial respondent gave an example in which detrimental changes in the socio economic framework conditions could be detected. It involves the discussion on the removal of polders, which is connected to the third deepening of the Westerschelde. The idea is that polders will be removed from 600 ha of agricultural ground as restoration for the Natura 2000 in the Westerschelde. The respondent noted that "this gives terribly much resistance in Zeeeland. It is very emotional. Anger is directed against the plans by farmers but also by common citizens. Some are generally very negative. This all gives movements that pulls everything back. The agricultural discussion and the discussion on the removal of polders is generally also aimed against nature, which makes the execution of this more complicated indeed. Practically you need to come by ground, which makes adequate ground mobility necessary. You can have money but than you do not have the ground yet, which is of importance. Or you need to arrange the ground very quickly, otherwise you need to have the time. The option of disowning ground is not desirable, according to the respondent." It becomes clear that there is no social support for the removal of polders. This led to an discussion in the parliament. Political support for the removal of polders stayed out as well. On 17-04-2009 the parliament decided outer dike nature recovery is preferred to the removal of polders. The Hedwigepolder will not be removed. The European Commission will give the final answer to this situation and will be briefed by the parliament on their decision. This is certainly a case that has detrimental changes in the socio economic framework conditions. Many different parties have interests in it, varying from citizens, agriculture, organizations, governmental authorities, to the parliament etc. It is of interest to follow the proceedings in the Westerschelde project. In the end more interests are involved in high profile cases, which increases the chance that detrimental changes occur in socio economic framework conditions. In Zeeland there are several high profile

		projects, especially the Westerschelde. In advance it could have been expected that these projects possibly lead to changes in the socio economic framework.
Final assessment on the effectiveness of nature compensation, by using the outcomes of all the effectiveness criteria that are mentioned above (ratings between 1 and 5 points, see chapter 5.5 for explanations behind ratings per province).	■ ■ ■	Although several criteria are met, it remains the question of how effective the compensation policy is. An essential criteria is not met (valid causal theory). The goal behind nature compensation includes that no net-loss of values concerning acreage, quality and cohesion occurs. It is difficult to make conclusions on how effective a policy is when there is no monitoring of the compensation areas and if no evaluations are available. How can the compensation policy be inspected on effectivity when the plans are not compared with the outcome of a project, through which it becomes difficult to judge if compensation duties are really fulfilled. This comparison is necessary when researching if there really is no net-loss of values concerning acreage, quality and cohesion. Thus it is hard to say something about the extent of the appliance of compensation policy. Evaluations do not take place with all compensation projects, but evaluations did/do take place in the high profile case of the Westerschelde (in which the state was involved). This shows differences in the procedures between certain compensation projects. Since in the Westerschelde case the nature type could not exactly be replaced, other projects were selected. This case shows how the province can work with their compact compensation guidelines from the Omgevingsplan and give shape to it. On the other hand in large projects many interest are involved, which can cause problems. Also in this case the province tries to involve parties and allow participation to a certain degree.

This section on final conformity indicates that Zeeland appears to moderately suffice the effectiveness criteria from Sabatier & Mazmanian. Due to high profile projects in the Westerschelde a lot of interests are involved. This influences the criteria on support of interest groups and if no detrimental changes occur in the socio economic framework conditions. Generally these criteria are met, but with the high profile cases it is more difficult to reach since so many interests are involved (context). Those large projects also show how committed the implementing officers are and how much effort the province puts into correctly executing these projects. It was quite interesting to notice the difference between large and smaller (individual) projects, which was described by the provincial respondent. This difference in size of compensation projects influences the involvement of parties and the relationships between key actors. Knowledge on compensation policy also frequently differs per project. As conclusion it comes down to the separate projects, which need to be viewed in order to examine the change in behaviour. But it is clear that compensation needs to be accomplished, which is a change in behaviour. Then the question remains to which extent compensation is being applied. No monitoring data and evaluations (other than the Westerschelde case in which the State is involved) are available. This is the reason why the criterion of a valid causal theory is difficult to examine. This is an essential element when inspecting the effectivity of provincial nature compensation policy because now it cannot become visible if no net-loss of values concerning acreage, quality and cohesion occurs. It is difficult to say something about the relation between the initial area and the compensated situations (does it result in no net-loss of values). Of course plans can be found back on the internet or in archives and results of compensation duties being fulfilled in the field can also be gathered, but in this research there was no time to do this. Only the experiences of the province were used. During the interview it did become visible that nowadays the concept compensation is a known fact and that compensation cannot be avoided. The provincial respondent also indicated that the compensation policy is experienced as clear, consistent and structured.

Additionally the Ministry of Housing, Spatial Planning and the Environment already confirmed that Zeeland suffices the new Wro. Thus Zeeland suffices plan conformity for the greater part, but the last steps of the compensation process are not present yet. It involves registering and monitoring of projects and evaluations. Additionally certain concepts (e.g. financial compensation, procedure scheme) can be worked out more extensively. The 'EHS-spelregels' can be used for this. The provincial representative noted that the province worked out the basic assumptions and more is not needed. This could be preferred, because custom made measures are still possible then. During the interview it appeared Zeeland was very practically focussed.

Zuid-Holland

1. Plan Conformity

Plan conformity is largely examined by using provincial policy documents on compensation. A list of these documents is provided. Besides if and how national compensation policy is translated into provincial compensation policy is explained next. A table is used, which gives a description of how compensation is registered in the provincial policy documents. First the areas are mentioned in which compensation is supposed to be applied. Then the standards are covered by looking at the seven steps to implement compensation, taken from the 'EHS-spelregels'. These topics in the table are taken from national guidelines, and can be used to determine how standards are being applied by provinces.

1.1 List of documents concerning nature compensation

- a) 'Compensatiebeginsel voor natuur en landschap' involving the compensation principle of nature and landscape, which was presented by the members of the Provincial Executive (in Dutch: Gedeputeerde Staten / GS) in September 1997 (development note);
- b) Zuid-Holland is divided in four areas, including separate regional plans for Zuid-Holland West (2003-2015), Zuid-Holland East (2003-2015), Zuid-Holland South (2000-2010), Zuid-Holland Rijnmond (2005-2020). These regional plans mainly refer to the compensation principle of 1997;
- c) 'Nota Ruimte voor Ruimte' (2003) including 'Regels voor Ruimte' (Rules for Space) from 2007. In the past the 'Regels voor Ruimte' replaced the 'Nota Planbeoordeling' (Note of Planning assessment). That 'Nota Planbeoordeling' from 1998 initially included the compensation principle as a provincial policy for testing (development) plans. The 'Regels voor Ruimte' together with regional plans include the assessment framework for members of the Provincial Executive to review municipal spatial plans and refers to the compensation principle of 1997. (Regels voor Ruimte, 2007:4);
- d) Beleidsplan Groen, Water en Milieu 2006-2010, Nota van Beantwoording, deel 2: Beantwoording reacties mei 2006;
- e) The website of Zuid-Holland has frequently been visited in search of information (www.zuid-holland.nl).

References to these documents will be made in the following scheme in which a description on the compensation policy is given. Next to these documents an interview took place with a representative of the province (specialized in nature compensation) in 2008 to gain insight in the compensation policy.

1.2 Description of how compensation policy is registered in documents

Application	Plan Conformity	Comments
Areas in which the compensation principle is in force		The following areas are stated in the provincial compensation principle: Provincial Ecological Network (PEHS), Nature areas outside the PEHS but registered in regional plan and/or bounded nature reserves under the NB-wet, Biotopes of red list species and areas outside the EHS with (very) high nature values, Vegetation under the Forest Policy, Randstad Groenstructuur (green structure) projects and 4 strategically green projects, State buffer zones and Areas with very high values concerning landscape. (a)
1. National Ecological Network (NEN) areas & robust ecological connections;	Yes	Including Provincial NEN (Dutch acronym: PEHS) (a)
2. Birds and Habitat Directive (BHD) areas;	Yes	(a)
3. Nature Protection Act (Dutch acronym: NB-wet) areas;	Yes	(a)
4. Compensation registered in other policy documents:		
a. Forest policy;	Yes	(a)
b. Flora and Fauna policy (Dutch acronym: FF-wet);	Yes	(a)
c. New policy of spatial planning (Dutch acronym: Wro).	-	The implementation of the new Wro is in progress according to the respondent. Due to the new Wro provinces are obliged to create a provincial structure vision. The representative of Zuid-Holland mentioned that this structure vision should be finished this year (2008) and that the NEN is supposed to be included in this vision. The province will also try to identify what belongs under the NEN in a distinct manner for the provincial structure vision and the 'EHS-spelregels' are of course of interest. The representative of the province also noted that "it is hard to estimate how the new Wro will work out. Perhaps the province will be a bit more distant from municipalities. This could mean that certain, perhaps smaller, projects with compensation duties slip through. Although this is thinking out loud. Currently provinces have to authority to approve development plans and disapprove these plans when it is not according to standards, which is not the case when the new Wro is in place. On the other hand the province can make an ordinance due to the new Wro and different possibilities & authorities become available. It can not be assessed yet how this will work out in relation to nature compensation. Perhaps the compensation principle needs to be adjusted a little for the new Wro." Zuid-Holland already has a provincial spatial structure vision (structuurvisie) in place next to the regional plans since 2004. The new Wro states that the structure vision will replace regional plans. Zuid-Holland currently assesses how this is possible in the future (e). Thus adaptations on the NEN and the 'EHS-spelregels' still need to be processed. It must be awaited how the new Wro will be applied and implemented with its new functions.
Compensation procedure in seven steps		Zuid-Holland presented a procedure scheme in their 'compensation principle' from 1997, with the concepts: 'No, unless formula', mitigation and compensation. Damage to

		nature and landscapes are supposed to be compensated. A negotiation model is in place concerning the appliance of compensation. "Previous experiences of Zuid-Holland have taught that regulations to determine the nature and the extent of compensation is barely possible. It can also obstruct the possibility to adapt to specific circumstances. The province has chosen to go into further consultation and negotiations per situation to determine the most desirable shape of compensation and the execution of it." (a:7) It was noticed that this may influence the appliance of standards during the compensation procedure, since decisions are taken per project.
1) Testing the 'No, unless rule' consideration framework		
No formula (interventions are basically not allowed), unless formula:	Yes / No	The 'no, unless' formula is mentioned, although it was noted in 2006 that this 'no, unless' formula was not sufficiently worked out in the 'Nota Planbeoordeling (c)' regarding the consideration frameworks of the BHD, NEN and Nature Protection Act (d:125). Thus the 'no, unless' formula is worked out but it still needs to suffice the guidelines mentioned in the Nota Ruimte.
a. Prove considerable social importance;	Yes	(a)
b. Research the alternatives;	Yes	(a)
Compensation principle (No net-loss of values):	Yes	(a)
1. Integration operations of landscapes and mitigation;	Yes	(a)
2. Physical compensation including:	Yes	Larger flexibility exists with physical compensation of direct effects and quality loss is always before financial compensation becomes an option. (a)
a. Compensation of surface (direct effects);	Yes	(a)
b. Compensation of quality loss (quality addition, in Dutch: kwaliteitstoetslag);	Yes	Interventions are generally not accepted in areas that have a development time of more than a 100 years. It is not clear how the quality loss and quality addition is arranged for other nature categories (0-25 and 25-100). (a)
3. Financial compensation	Yes	Financial compensation is mentioned in the compensation principle (a) but how financial compensation should be applied is not described. Perhaps since a negotiation model is in place in Zuid-Holland it causes the financial compensation to be estimated per case. But further elaboration on financial compensation can be desirable to clarify the compensation procedure.
Measures specifically designed for NEN areas:	Yes / No	These concepts have not yet been worked out on provincial level. The succeeding document of the 'Regels voor Ruimte' will contain elaborations on these concepts (d:125). The representative of the province did state he was aware of the existence of these concepts and notes it is not yet applied in this province. The province has more experience with red list species (included in Nb-wet) than compensation of NEN areas.
4. NEN –balance approach	No	
5. NEN re-determining the limits	No	
2) Compensation plan according to standards	Yes / No	Procedures have been worked out in a scheme from 1997. It can be noticed that this procedure scheme is somewhat limited, in comparison to the schemes given by the 'EHS-spelregels'. Zuid-Holland emphasizes on custom made measures, especially since a negotiation model is in place.

- Compensation plan, independent document according to standards	Yes	(a)
- Requirements on the content of compensation	Yes / No	National requirements on the content of compensation is not completely processed in provincial compensation policy. But provincial requirements on compensation are present in Zuid-Holland, which should be met by the compensator. (a)
3) Decision authorized authority on intervention and compensation	Yes	(a)
4) Embedding intervention and compensation into spatial plans	Yes	(a)
5) Private law agreement initiative taker and authorized authority	Yes	Agreement is made, but if penalties are connected is unknown
Legal binding agreements on the execution of the compensation plan:		
- Bank warranty	Yes	(a)
- Final realization date	Yes	(a)
- Penalties when exceeding final realization date	-	Unknown
6) Monitoring implementation by authorized authority	No	Evaluations are processed in the compensation procedure scheme (a), but no reports have been published on the outcome of these evaluations. The compensation principle of 1997 also noted that in 1999 Zuid-Holland would perform an evaluation on the application of the policy rules. The documentation of this evaluation was unfortunately not available. It is the question if the evaluation actually took place. According to the respondent currently several people are working on the evaluation of compensation projects and the bookkeeping of this.
- Authorized authorities yearly report to the province	No	Work in progress
- Provinces verify these reportages and collects these inspected reports	No	Work in progress
- These provincial findings are reported to the state	No	Work in progress
7) Authorized authority takes over execution when final realization date expires	-	Unknown
- The executing costs are for the initiative taker, including:		
- Bank warranty	-	Unknown
- Penalty	-	Unknown
(Money is situated in the Green trust (Groenfonds) linked to the project)		

The compensation principle currently applied in Zuid-Holland exists since 1997. Kuindersma *et al*/ stated in 1999 that the provincial compensation policy of Zuid-Holland is conform the state's policy, which was registered in the SGR back then. The area categories, 'no, unless' principle, implementation of compensation and monitoring & evaluation of compensation are mentioned in provincial policy texts of 1997. But a lot has changed since 1997 in which the current compensation principle of Zuid-Holland was developed. The Nota Ruimte replaced the SGR and the EHS-spelregels replaced the SGR elaborations on the compensation principle. This led to the consequence that the provincial compensation policy also needs to be worked more extensively according to these extended guidelines. This still needs to be applied on certain points. Although the 'Regels voor Ruimte' was developed in the beginning of 2007 it does not totally suffice frameworks presented in the Nota Ruimte. Besides the 'Regels voor Ruimte' could not include EHS-spelregels guidelines since this document originates from a later date (mid 2007). It is of interest how the 'EHS-spelregels' is

processed in the design of the new Wro. Concepts from the 'EHS-spelregels' like the NEN-balance approach and re-fencing the NEN still need to be worked out in official policy documents on provincial level in Zuid-Holland.

When coming back to the compensation principle of Zuid-Holland from 1997 it can be elaborated on certain topics. The procedure scheme could become more clarifying when for instance the current area categories are all presented in the scheme. The scheme still refers to SGR-areas, which is out of date. Besides the compensation types are not specifically mentioned, including: mitigative measures, physical compensation, financial compensation, NEN-balance approach and NEN re-fencing. If the scheme showed these types of compensation and described when one should suffice to these requirements it could clarify the compensation process. Also elaborations are needed on the last elements of the scheme including: securing the actual implementation of compensation, monitoring and evaluations. It is not described when, how and who executes these steps. Evaluations are recently set into motion and the outcome needs to be awaited.

What is remarkable in Zuid-Holland is that the provincial compensation principle from 1997 states that "due to scarcity of space in Zuid-Holland a larger flexibility exists. Custom made measures and more possibilities of compensation by improving existing quality of rural areas are brought forward earlier than in the national compensation policy." (a:5) But principally it is viewed if compensation of surface, with the same quality and goal type, is possible first before qualitative compensation becomes an option. Additionally the provincial compensation principle requests that damage in the provincial NEN is compensated in a quantitative way above a qualitative way. And finally the principle states that physical compensation has always the preference above financial compensation. (a:8) Next to scarcity of space Zuid-Holland contains areas that are not replaceable, like for instance dunes. Dunes are a product of nature's course and cannot be reproduced by humans, but human activities occur in dunes that need to be compensated. Larger flexibility also exists in these cases.

2. Conformity of behavior

How do actions of involved actors in a compensation process correspond with the national and/or provincial compensation policy statements? The following table includes components like the role of parties involved, experiences & appliance of compensation, the guarantee of compensation fulfillment and a usability degree. An overview of the parties involved, their relations and their involvement is sketched out, which is of importance when researching the provincial compensation policy and the appliance of this policy. In this case the experiences of the province are captured. All these elements are related to the fact: if behavior of the parties involved in the compensation procedure act according to the national and/or provincial compensation policy.

To start by giving an overview of the key actors in the compensation process, as perceived by the province:

- Government

- Province
- Local authority like municipalities
- Initiative taker
- And many other involved parties, e.g. Body of Surveyors concerning the dikes (in Dutch: Waterschap), Water Supply Companies, Interest Groups like Institution of Dune Preservation (in Dutch: Stichting Duinbehoud), Nature Monuments (in Dutch: Natuurmonumenten) or State Forestry Service (in Dutch: Staatsbosbeheer), Landscapes of Zuid-Holland (in Dutch: Zuid-Hollands landschap), agriculture etc. In the end the involvement of parties depends on the project.

Application	Conformity of Behavior	Comments
Role of parties involved		
Are the key actors in the compensation process, as perceived by the province, involved in the compensation procedure?	Yes	As stated before a negotiation model is in place in Zuid-Holland. The representative of the province stated that "the negotiation depends on the dedication of the two involved parties (the authorized authority and the initiative taker), and it involves a subjective element. Next to these actors other parties are involved (a few mentioned above) and their involvement depends on the project according to the respondent."
Which relationships exists between the key actors in the compensation process, as perceived by the province?	Yes	The province provides information but also helps in the process of finding suitable locations. The initiative taker is usually in direct contact with their municipality, that is the authorized authority, which should see to it that compensation is fully executed. When the compensation is performed then the management is handed over to the State Forestry Service or Nature Monuments and Landscapes of Zuid-Holland.
Experiences & appliance of compensation (did compensation policy contribute to a change in behavior?)		
Do parties agree on the compensation policy?	Yes	According to the respondent "there is frequently resistance with initiative takers. It is often clear for the initiative taker that compensation needs to be accomplished. Otherwise the members of the Provincial Executive will not approve the plan. Thus in order to get your plan through parties need to follow the compensation policy. There is no getting around this obligation, but the extent is discussable. Due to the negotiation model it is possible to differ in opinion and negotiate with each other. In the end involved parties need to come to an agreement together. Contact in early stages can frequently trigger the initiative taker to review and alter the project in order to lessen the compensation costs (together finding ways to decrease costs)." These are experiences of the province. It would also be of interest to pay attention to the separate compensation projects (since there is no evaluation in which the progress of these projects is described). This could give new insights.
Do parties act according to the compensation policy?	Unknown	Evaluations should show if this criterion is met. It is difficult to make conclusions on this topic, since the evaluation of compensation projects is not published yet. The province is working on this. To give an overview of how this is arranged (as mentioned during the interview):

		<ul style="list-style-type: none"> - One person is working on the book keeping and this person also performs the evaluation. Within the province, department of Nature, four or five persons are working with compensation, separated by regional plan district. - Other persons, active in the various districts, are involved with the separate projects. Thus the outcomes of the evaluation must be awaited in order to answer this criterion.
Guarantee of compensation fulfillment		
Is a sufficient amount of instruments available to guarantee the fulfillment of compensation duties?	Yes	The representative of the province mentioned that "municipalities can process/record compensation in a chapter of a development plan to guarantee compensation being fulfilled. The compensation plan and the financial section is recorded in this way. Direct (bilateral) agreements with parties is also an option to ensure the fulfilment of compensation. The respondent noted that the province often thinks along when compensation is not possible within the municipality. If the province finds possibilities to compensate then they are handed over." The compensation principle states that compensation can be realized within the district. There are still ways to ensure compensation being fulfilled by recording the agreements. While the negotiation model could give a certain degree of freedom to interpret the compensation policy.
Are these instruments applied to guarantee compensation?	Yes	The instruments mentioned with the previous criteria involve the instruments that are being used in Zuid-Holland. New instruments can appear when the 'EHS-spelregels' and the new Wro are completely processed into policy in Zuid-Holland.
Usability degree (compensation procedures)		
- To which extent is compensation policy known by the intended users?	Yes / No	The initiative takers perhaps is not aware of every detail, concerning the compensation policy, but the province arranges that the necessary knowledge is provided in a early stage of the compensation process.
- To which extent is compensation policy applied by the intended users?	Yes / No	How compensation should take place is agreed on together between the authorized authority and initiative taker, which involves how and in which shape compensation should be applied. The authorized authority (usually municipalities) is responsible to guarantee that compensation is fulfilled. "This last part, including the guarantee of compensation fulfilment, is not a part of the compensation process that the province supervises, according to the provincial representative. The province does not supervise the management of the grounds on which compensation was fulfilled either. But many of these ground on which compensation took place are handed over to organisations focussed on nature conservation. The respondent noted that it is to be expected that the grounds are in good hands then with these organisations." It is difficult to make conclusions on the extent of the appliance of compensation policy by the intended users, since there are no evaluations available in which the extent of the appliance of compensation could become visible. Thus the authorized authorities (municipalities) should be interviewed to inspect to which extent compensation is applied by intended users, instead of interviewing the province. A question that comes to mind involves how the negotiation model influences the extent in which the compensation policy is applied. It should also be taken into account how the new Wro and the 'EHS-spelregels' will

How has behavior towards compensation policy evolved through the years in Zuid-Holland? The compensation principle from 1997 is still applied. References to this compensation principle are made in the regional plans of four districts. Elaborations on the compensation principle have been made in these regional plans (e.g. guidelines for meadow birds have been developed in Zuid-Holland). But how has this influenced the behavior, regarding the implementation of compensation policy. It is generally known that people cannot get around their compensation duties. This does not mean that there is no resistance. Initiative takers can resist in the beginning of the compensation process. This changes when such initiative takers realize that plans cannot be executed because the Provincial Executive will not approve of the plan if it does not meet the requirements. When it is accepted that compensation duties are inevitable (when the 'No, unless' rule counts of course) the initiative taker can negotiate with the authorized authority on the content of the agreement, because a negotiation model is in place. Both the initiative taker as the authorized authority and the province are challenged to look for ways to decrease costs and go for the most suitable plan (trying to meet interests of parties involved). To guarantee compensation fulfillment instruments are in place. The compensation plan is recorded, together with a financial section, into the development plans. The province plays a role in the beginning of the compensation process. It offers information and guidance in the early stages of the compensation process to prevent compensation coming around the corner in the final stages. The province also connects parties, when the initiative taker / municipalities cannot find suitable locations to compensate. It is difficult to judge to which extent compensators apply the compensation policy and act accordingly to this policy, since no evaluation and monitoring data is available. The compensation principle from 1997 actually notes that an evaluation should be performed in 1999, which was not accomplished. Of course separate compensation projects can be found back on the internet or in archives, and a few were discussed during the interview with the representative of the province, but the fact remains that the province has not yet published an evaluation of the progress of these compensation projects. There is a book keeping of the compensation projects and the province is working on the evaluation. This makes it difficult to judge if behavior really changed regarding the compensation policy, since the experiences of the province form mainly the source for answering this section and the experiences of separate projects/compensators could not be processed. Although the experiences of the province certainly show how behavior towards compensation policy changed (e.g. people are aware of compensation and know it cannot be avoided).

3. Final conformity

Final conformity involves if reality corresponds to the intentions of the initial plan. This includes plan conformity (initial plan) and conformity of behavior (change in behavior), which is compared to practical situations. The actual practical cases, studied in this research while focusing on legitimacy, will be linked with the final conformity (described in chapter 5.3). In this case experiences of the Dune Water Company Zuid-Holland (DZH) are taken into consideration while assessing the effectiveness of nature compensation. It can be noticed from plan conformity and conformity of behavior that initial plans are known and behavior certainly

changed regarding the implementation of compensation. But final conformity does not solely involve these characteristics only. It is also of importance to view in which context the compensation process takes place. In the end the question remains: How effective compensation policy is currently? The effectiveness criteria of Sabatier and Mazmanian can be categorized by plan conformity, conformity of behavior and the context, which can be found back in the following table. A short summery will be given next on how the criteria of effectiveness (from Sabatier and Mazmanian) are used in this research on nature compensation:

- 1) ***Policy objectives are clear and consistent, Plan Conformity & Conformity of Behavior:*** This criterion is researched by looking into how compensation is processed in policy statements (comparing national guidelines to provincial compensation policy and how this policy is applied on local level). This criterion also involves how aware the involved parties are of the compensation policy and how well they understand it (usability degree). This includes questions like: can involved actors find themselves in the compensation policy and do they act according to this policy? All these factors influence the outcome.
 - 2) ***The program is based on a valid causal theory, Plan Conformity:*** This criterion is examined by researching if no net-loss of values occurs, which is the goal behind nature compensation. Do the areas in which an intervention is planned & takes place and the compensated areas result in the fact that no net-loss of values occurs?
 - 3) ***The implementation process is structured adequately, Plan Conformity:*** This criterion is researched by looking into which standards are in place. Do the compensation guidelines/policy statements (set on national and/or provincial level) structure the compensation procedure adequately? This also involves experiences of involved actors with the implemented standards.
 - 4) ***Implementing officers are committed to the program's goals, Conformity of Behavior:*** This criterion is researched by looking into how implementing officers act according to the compensation policy. How is compensation applied within the province?
 - 5) ***Interest groups and (executive & legislative) sovereigns are supportive, Conformity of Behavior:*** This criterion is researched by looking into how key actors, concerning interest groups and sovereigns (as perceived by the province) are supportive regarding the compensation procedure. Do they act according to the compensation policy?
 - 6) ***There are no detrimental changes in the socio-economic framework conditions, Context:*** This criterion is researched by looking into the context surrounding the compensation procedure. External / internal events can have influences on the compensation procedure. This can for instance include: currently the international/national financial crisis, changes in legislation (accentuating the Nb-wet in 1998, implementation of the new Wro in 2008), the province can possibly influence the procedure for social-cultural, economical, spatial, agricultural and/or natural (etc.) reasons, a change in Members of the Provincial Executive or a change in members of a municipality can influence the implementation of compensation policy, natural disasters (floodings, earthquakes etc.), and so on. Which context and how this context influences the compensation procedure is examined by applying this criterion in this research.
- * ***Final Assessment*** on how effective the compensation policy has been, taking into account all the criteria of effectiveness (designed by Sabatier & Mazmanian). When is the compensation policy effective? Only if all effectiveness criteria are met concerning final conformity or if the greater part of the effectiveness criteria suffice the requirements of final conformity? The question remains if people are aware of the compensation policy, are informed of all the elements of the compensation policy

and act according to the compensation policy. Where do bottlenecks possible appear in these phases? There is a difference between the past, present and future. This can possible become visible in this last part of inspecting the final conformity.

Application	Final Conformity	Comments
Criteria of effectiveness (Sabatier & Mazmanian)		
1) Policy objectives are clear and consistent; (Plan Conformity & Conformity of Behavior)	Yes	As mentioned before people might not always be fully aware of the compensation policy. The representative of the province mentioned that “when informing parties it seems as if they experience the compensation policy as clear. Initiative takers are made aware of the fact that they are obliged to complete compensation duty. Either employees of the department of nature or employees of spatial planning inform initiative takers on this topic. The respondent also has the notion that municipalities know about nature compensation.” Next to this the Dune Water Company Zuid-Holland (DZH) also experienced the compensation policy as clear and consistent, according to the representative of DZH.
2) The program is based on a valid causal theory; (Plan Conformity)	No	The implementation of compensation policy needs to result in no net-loss of values. The mitigative and compensative measures need to contribute to a situation in which no net-loss of values occurs. As mentioned before the province does not monitor compensation projects (although book keeping takes place). The provincial representative stated that “nobody keeps hold of this kind of information including questions like for instance: if finally the same type of ground is compensated or if the quantity remains to exist etc. The province provides the preconditions for a compensation project. If these preconditions are met then the province is finished with the project. But to monitor if the quantity of nature is actually realized does not fall under the province’s responsibility.” Monitoring is the responsibility of the authorized authorities and the management of these areas is the responsibility of the organization to which the area was handed over to. Thus it is difficult for the province to answer the question if the area taken for an intervention is replaced by an area sufficient/suitable enough to result in no net-loss of values.
3) The implementation process is structured adequately; (Plan Conformity)	Yes / No	The respondent notes that “the province mainly tries to provide good conditions in which compensation can be shaped. Both financially as locations. After that it is up to the parties involved.” Although there is still a part that needs structuring. The compensation policy needs to be up to date, sufficing the ‘EHS-spelregels’ and the new Wro will also be of influence. Besides the procedure scheme is out of date and needs to be expanded (‘EHS-spelregels’ offers an example). Although improvements are needed, the implementation process can still be experienced as structured. As DZH states that the implementation process is structured and clear. They knew where to get the necessary information and worked/negotiated with the province to create a situation in which all parties settled with the agreement/outcome. In this case the implementation process was experienced as structured, nevertheless improvements to the compensation policy could structure the process even more.
4) Implementing officers are committed to the program’s goals; (Conformity of Behavior);	Yes	Compensation projects regularly come up in Zuid-Holland. Not always large projects like the HSL and 2 ^e maasvlakte. The province also gained more experiences with red list species than interventions in NEN areas. The implementing officers are required to deal with various situations. The representative of the province thinks that implementing officers can find themselves in the compensation policy and are committed to the policy goals. It is clear for others that your plan will not be approved when you do

		not suffice the compensation requirements. Additionally the representative of DZH spoke of his contacts within the province, which according to him were committed to the goals of nature compensation. Together with the province negotiations took place, regarding DZH projects.
5) Interest groups and (executive & legislative) sovereigns are supportive; (Conformity of Behavior)	Yes	"Interest groups / NGO's can have a role in the compensation process but until now the province did not come into contact with NGO's very much" according to the provincial respondent. It is possible that frequent contact between initiative taker and province takes place. The initiative taker will probably be in contact with interest groups and sovereigns more frequently, since they are the ones wanting to execute the plan. The implementation of a plan passes more smoothly when interest groups and sovereigns are supportive. The DZH representative noted that contact with interest groups did take place in order to keep them updated and gain their support for certain projects.
6) There are no detrimental changes in the socio economic framework conditions. (Context)	Yes / No	An example of how detrimental changes in the socioeconomic framework conditions existed can include Ade near the Kagerplassen. A special type of land use planning was started because the HSL would bring on much compensation with it. A lot of agrarian ground was needed to realize this project. It caused the necessary consequences for the farmers in this region. A planning regarding adjustment was started (which is a special type of land use planning). This planning was not successful and had to be dropped. A part of the compensation was established, but not in the intended region. It took quite some time. It should have been realized within 5 years, together with the region and especially with the farmers. The involvement of farmers in this project was not achieved and thus the idea to provide a better agrarian structure for farmers failed. Farmers would have also been able to manage a part of the compensation, but this did not happen because the land use planning failed. In the end the province tried to arrange this compensation project together with the region, but not all intentions were reached. Thus to summarize in this case the farmers experienced detrimental changes due to loss of ground necessary for this compensation project. An solution to involve farmers in a project to mitigate the loss failed. This effectiveness criteria does not apply on the Ade case, which is one compensation project out of many compensation projects that do suffice this criterion. In the end this criterion is generally met but exceptions can always exist.
Final assessment on the effectiveness of nature compensation, by using the outcomes of all the effectiveness criteria that are mentioned above (ratings between 1 and 5 points, see chapter 5.5 for explanations behind ratings per province).	■ ■	Although several criteria are met, it remains the question of how effective this compensation policy is. An essential criteria is not met (valid causal theory). The goal behind nature compensation includes that no net-loss of values concerning acreage, quality and cohesion occurs. It is difficult to make conclusions on how effective a policy is when there is no monitoring of the compensation areas and if no evaluations are available. How can the compensation policy be inspected on effectivity when the plans are not compared with the outcome of a project, through which it becomes difficult to judge if compensation duties are really fulfilled. This comparison is necessary when researching if there really is no net-loss of values concerning acreage, quality and cohesion. Thus it is hard to say something about the extent of the appliance of compensation policy. On the other hand it must be noted that the practical case, DZH, is very positive about the compensation process. In the interview with the representative of DZH it becomes clear that the current compensation policy and procedures suffice the effectivity criteria, according to them. It appeared that DZH and the province have a very good understanding and work together on this topic. Policy texts, findings with the province and the practical case of DZH show different outcomes on the effectivity of compensation in Zuid-Holland. Further research is necessary to discover how effective nature compensation policy has been in Zuid-Holland.

		In the end the rating is not very high since the compensation policy of Zuid-Holland is still from 1997 and has not been updates (i.e. to suffice the 'EHS-spelregels'). Although DZH proves that this compensation principle works very well in their case, it still remains one practical case and other compensation projects should also be taken into account to get a more complete view on the effectivity of the compensation policy of Zuid-Holland.
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This section on final conformity indicates that Zuid-Holland appears to moderately suffice the effectiveness criteria from Sabatier & Mazmanian, if there was not one exception concerning a valid causal theory. The criteria on a valid causal theory is an essential element when inspecting the effectivity of provincial nature compensation policy. Which goal is connected to nature compensation? The goal is to ensure that no net-loss of values concerning acreage, quality and cohesion occurs. It is difficult to say something on the topic if the initial area and the compensated situations result in no net-loss of values, when there is no data (including plans and the realization of projects) to research this criterion. Data on projects with their compensation plans can be gathered along with the realization of compensation in the field. Further research is necessary to compare these sets of data. Until then it remains difficult to judge on the effectivity of compensation policy in Zuid-Holland. But from this section on final conformity it appears that the experiences of the province and DZH are positive for the other criteria. The negotiation model and the compensation principle seems to provide a structure sufficient enough to offer guidance through the compensation procedures. The province puts effort in the beginning of the compensation procedure, while the authorized authorities (municipalities) are responsible for the guarantee of compensation fulfilment and State Forestry Service, Nature Monuments & Landscapes of Zuid-Holland look after the management of compensated areas. This understanding of everyone's tasks and the compensation principle from 1997 appear to work, when looking into the experiences of the province and DZH. However several improvements can be made in the compensation principle, including the appliance of the 'EHS-spelregels' and the new Wro offers possibilities that can influence the compensation principle as well. By making adjustments the compensation procedure / procedure scheme can become more visible, structured and up to date. Although it is not yet clear how the 'EHS-spelregels' could be adjusted to fit the negotiation model, which is applied in Zuid-Holland. To end with a notion of the provincial representative: "compensation does not have it's own track, but it always lifts on other decision-making, like for instance in the framework of spatial planning." And compensation cannot be at cost of regular policy, as stated in the compensation principle. This sets the environment in which compensation is an element. It remains to be seen how provincial compensation policy will change through the implementation of the new Wro and the appliance of the national guidelines 'EHS-spelregels'. Zuid-Holland remains a special case because this province copes with a serious scarcity of space, and special areas that cannot be replaced artificially, which may lead to greater flexibility in implementing compensation.

Appendix V Processing of data per practical case - legitimacy

Practical case: Municipality Nunspeet

Input legitimacy

Input legitimacy is studied by paying attention to how the initiative taker could influence the process surrounding the design of nature compensation duties. Questions arised like: who participated in this process, how did the process pass by and important moments in influencing the process are mentioned. What did the initiative taker need to keep in mind? It is also of interest to look into the support and resistance towards a intervention/compensation project. Finally the question remains if the initiative taker could add topics to the agenda during negotiations. Besides how did the province involve initiative takers in the process of making important decisions on the project and could contributions be made? The table below shows how and to which degree input legitimacy was reached.

Concepts behind Input Legitimacy	Explanations of respondent
How could the initiative taker influence the compensation process?	First of all it became clear that compensation policy was forced. The municipality understands the rules and follows them, because they have no other choice. This policy does not anticipates a situation in which new legislation is implemented. The new Nb-wet did not exist when the agreement was arranged about the new business area and the removal of the Generaal Winkelmankazerne. The municipality was confronted with this afterwards. The respondent indicated "they have experienced this as compensating twice. But if this agreement did not exist it would not be possible to construct the new business area." It appears that the compensation policy was forced when the new Nb-wet came into being, since more compensation needed to be implemented due to stricter legislation. This brought along quite some discussion. The municipality acknowledges that the rules need to be applied, but mainly because otherwise this project cannot start. The respondent of the municipality of Nunspeet mentioned "many conversations took place on several levels and both administrative as official talks. Especially extensive conversations took place with the Ministry of Agriculture, Nature and Food Quality (Dutch acronym: LNV). It was discussed how compensation should be implemented and the municipality needed to take away resistance of the LNV about the shape of the compensation to which the ministry finally agreed. The LNV was sceptical about the necessity of this project and this needed to be demonstrated. The choice of the traced out road section needed to be accepted. A business area can only be realized if a good dilatation is present. The LNV proposed different traced out road sections that crossed through nature to a lesser extent." It was a choice of putting the traced out road section nearer to citizens or nature. The municipality showed that the traced out road section they proposed was the most optimal one and by this influenced the compensation process since the LNV agreed to it. Another example involves damage to the habitat of the Black Woodpecker and the Honey Buzzard. It was indicated that their foraging areas were located there. The respondent noticed that "this concept is explained quite generously by the LNV. It is not registered anywhere. The municipality has experienced it to be a personal vision of an expert at the LNV. They thought it was quite heavily explained and enforced. But the municipal authorities indicated that their interests are so big and they do not want to fight it. They just want to reach their goal. They generously collaborated with the policy ,because otherwise it will fail. If you ask how reasonable and legitimate this is. It can be seen from two points of view. Why do we need to compensate for the damage of that habitat, since a very large part is turned back to nature. And measures need to be arranged for the damage done to a habitat in which perhaps these species could ever exist in the future. This was experienced as very strict." Finally data on birds from the

	SOVON and an ornithologist proved that the Black Woodpecker and the Honey Buzzard are not present in that area. The following statement of the respondent is in contradiction to these examples above in which the influence of the municipality could be noticed. The municipal representative says "their ability to influence the process was quite limited. They are depended on what is decided by other authorities. Then you need to come with arguments to direct the content somewhat". Ultimately the influence of Nunspeet can be noticed in the plans they created, but since the policy was forced from higher up it appears not much can be influenced in that sense. It is obligatory.
Could the initiative taker add topics to the agenda during the negotiations of the compensation duties?	The respondent noticed "the municipality needed to convince the LNV about how the 'no, unless' rule was applicable in their case. Thus the 'unless' part." The new business area was urgent because of the loss of employment through the removal of the Generaal Winkelmankazerne. Additionally the respondent noticed "questions arising about the dilatation and how necessary the assigned traced out road section was. These were topics that really needed to be discussed. Afterwards the focus was mainly on how compensation could take place and in which shape compensation should be implemented. These were the topics that determined the agenda principally."
Was the initiative taker actively involved during important decision-making processes, which were connected to their project? (i.e. could they influence the process or could a contribution be made and were the preferences of the initiative taker taken into account?)	The respondent noticed that "meetings have contributed to mutual understanding. The meaning behind the policy became clearer for the municipality and what this policy involves. Besides other authorities and interest groups understood that Nunspeet wanted to realize this very accurately and founded." The contribution of the municipality included the design of plans but also to inform other informed parties. The respondent stated "to have involved the province from the start and many conversations took place on how to proceed. Especially the old debts needed to be resolved first. This was important for the province because they have cooperated with development plans and changes in these plans, which were not followed up. Agreements/promises were not met." These old debts were also processed in the Schaarweide, next to the new debts of the new business area. The respondent indicated that "during De Kolk the province has guided and advised the municipality. They advised on what to do and to talk with the LNV (additionally indicating contact persons). The municipality has been to the LNV, but created the arguments with respect to the content themselves. Or these arguments have been formulated by consultants." Thus the municipality took in the advises and directions of the province and LNV, during the formulation of the plans. The main discussion seemed to be about the choice of where the road should be. How the traced out road sections, in connection to the beltway, would go through nature was discussed. Studies proved which traced out road section was logical. It remains the question if the road was preferred to go through nature or through inhabited areas. These reports were used to convince surrounding citizens. This is an example of how the municipality contributed to the an important decision and also by actively including other involved parties.
Were objections filed during the design of the intervention- and compensation plans? Or was support shown?	A diverse range of examples was given, concerning support for and resistance against the intervention and compensation projects. A quick overview, of examples mentioned by the respondent, is given next: <ul style="list-style-type: none"> - At the LNV different ways of thinking were noticed, which caused for tensions. Thinking of the traced out road sections and the measures that are required for the Black Woodpecker and the Honey Buzzard (while these bird species have not been detected in this area). - The province mainly tried to supervise the process (also since they are the implementer of this policy). They ensured that everything passed by as it should go. And advise was given, like you should do this and that. The province supervised the process, also because the province needs to be able to defend the arrangements of Nunspeet. - Within the municipality opinions differ about the implementation of compensation (i.e. some still have the feeling of compensating twice, but realize it needs to be accepted to get any further with the project). - Nunspeet had to take suspicion away with the Gelderse Milieufederatie (environmental federation of Gelderland), due to old debts that were not sufficed yet. Developments had occurred for which compensation was embedded in

	<p>development plans, but the compensation was never executed (although it was officially registered). The Gelderse Milieufederatie said these old debts should be sufficed first. The municipality should show it could compensate for these projects. Old and new debts were all processed in the Schaarweide project. This project involves the concept 'compensation bank', because the municipality wants to build up a positive balance by mitigating, and one could fall back on it when something occurs for which ground is needed to compensate (see Ontwikkelingsplan Schaarweide). The plans showed good will. At first Nunspeet did have to convince the Gelderse Milieufederatie and other interest groups that it is inevitable (i.e. it was already registered in the agreement of 1993.) The municipality showed to be really positive and prepared to work purposeful on the development of new nature. Generally interest groups are interested in the fact if compensation will really be executed. As the respondent noticed that interest groups are like a watch-dog (positively meant). Authorities need to show they are prepared to fully implement their compensation duties. Than interest groups are usually willing to think along with the municipality and to cooperate.</p> <ul style="list-style-type: none"> - Stichting Natuurschoon (joined with the Gelderse Milieufederatie) still resists this project, because a part of the northern side of the business area would not really be necessary in their opinion, and it would only damage pastures. The size of the business area is too large, according to them. But the size has already been agreed on in 1993 (and if they minded the size objections should have been made back then). - The respondent indicated that he could understand if farmers would resist, since agrarian grounds are lost to the business area De Kolk and to the compensation site of the Schaarweide. - Finally with the choice of where to put the traced out road section caused for interesting remarks from surrounding citizens. On an information evening it was questioned if the birds are more important than those people? Thus they did not really want the traced out road section nearby. <p>Finally the municipality involved all the possible parties in the process of creating of the plans (including the province, Gelderse Milieufederatie, surrounding citizens, farmers etc.). Nunspeet held presentations which were broadly set up and sketched out what was meant to occur in the Schaarweide and where compensation would be implemented. Through information supply the support of involved parties could possibly be gained.</p>
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It becomes visible that input legitimacy can be divided in two, since the municipality can influence the content of the plans, but on the other hand the new Nb-wet was forced on them (which excluded the possibility to influence the process to a certain extent). Nunspeet indicated to understand the rules and they will follow them, but only because they have no other choice. It comes down to the fact that their project will not be approved, if the municipality does not suffice the compensation policy (i.e. the new Nb-wet). Although the compensation policy does not anticipates a situation in which new legislation is implemented. The new Nb-wet did not exist when the agreement was arranged about the new business area and the removal of the Generaal Winkelmankazerne. The municipality was confronted with this afterwards. In a sense the agreement of 1993 was already sufficed since 80 hectares was added to the Natura 2000 by removing the Generaal Winkelmankazerne. But a business area cannot be realized without a properly arranged dilatation. Stricter rules, connected to the new Nb-wet, needed to be sufficed in order to realize the dilatation. This caused a lot of troubles and discussions. The importance of the business area was proven by the need for opportunities to increase employment (i.e. employment was lost due to the removal of the Generaal Winkelmankazerne). The agreement from 1993 also makes this project kind of inevitable. How the dilatation would be arranged could be appealed. The municipality studied the options and used these findings to convince other parties. Another point of discussion is how the compensation should take place. Good will

needed to be shown by Nunspeet, since it still had quite a lot of old debts in which compensation was never realized. In the Schaarweide both old and new debts are processed. The municipality tried to involve everyone during the design of these plans (e.g. presentations, workshops). Some resistance still occurs nowadays, but support is given as well. The plans have been approved by the Provincial Executive in December 2008 and now the intervention/compensation can start.

Output legitimacy

The end result is of interest during the research into output legitimacy. Is the initiative taker content with the final agreements/final product? It comes down to the effectiveness and acceptance of compensation policy. Or can the compensation policy be improved, according to the initiative taker? The table below shows the degree of satisfaction connected to the established end results and the compensation policy.

Concepts behind Output Legitimacy	Explanations of respondent
How is the accomplished end result experienced by the initiative taker? And how was the whole compensation procedure experienced?	Finally the 'Ontwikkelingsplan Schaarweide' has become a large plan, since old debts were processed into it as well. According to the respondent it "has been a long process, in which a lot of consultations took place. It has costs so much money too (e.g. all the studies and reports). If it is worth while should still need to be awaited. The execution of the development plan has not started yet (i.e. this interview was held before the development plan was approved). The respondent expects everything to pull through. The municipality realizes that this needed to occur according to the legislation, which is in force currently. But the logic, legitimacy, reasonableness and fairness have not always been detected." This project did certainly take a long time (i.e. from 1993 onwards). Due to all the confusions and discussions it is quite comprehensible that the municipality experienced it as unfair at certain moments. In the end the plans are approved (their goal is reached) and the municipality can finally start the long desired construction of the beltway, business area De Kolk and compensation project Schaarweide. As the respondent stated that "the whole advisory committee (including the mayor, alderman and himself) is content if the development plan is approved and the process passes by correctly." Luckily the plans have been approved, which shows that Nunspeet can be content with their designed plans and apply it.
Does the realized compensation correspond to the actual plans?	The development plan on the business area De Kolk together with the 'Ontwikkelingsplan Schaarweide' were only recently approved by the Provincial Executive. Activities started in 2009. It remains to be seen how everything will be implemented in practice. In chapter 6.1 an idea is given about the planning of activities.
How was the effectiveness of the compensation policy experienced by the initiative taker, while keeping in mind: how clear & consequent policy objectives are, the role of compensation in daily actions, dedication to policy objectives and received support. Ultimately the question remains if the compensation	The respondent indicates that "their acceptance is mainly connected to the removal of the Generaal Winkelmankazerne, which was added as nature to the Natura 2000. The project of the new business area was meant as compensation for the loss of employment. The 80 hectares were compensated and now more needs to be compensation because of a piece of nature in which De Kolk is situated. This is of no proportion to the very large area that was already brought back to nature. So much more needs to be compensated/invested, because of the presence of certain bird species that have never been spotted there (but could possibly be present in the future). Isn't the policy used in a very strict sense? While the policy is not explained very structurally. That is the main point, because this policy does not describe everything of what should happen in this case of De Kolk. In this case the explanation of the 'no, unless' rule includes the largest shortage, according to the respondent. Thus their acceptance is connected to such measures." It becomes clear the

policy is accepted?	<p>respondent is quite critical about the policy that needs to be sufficed. Policies do not really prescribe what to do in certain cases. It involves custom made measures and the municipalities sometimes thinks it is forced quite strictly (compensation for birds that are not present). The respondent also notes that "if it did not include the removal of the Generaal Winkelmankazerne then it would be very obvious. Everyone understands that if nature is taken away it needs to be compensated, which would not have resulted into discussions. The content of compensation duties would be discussed at the very most then. In Nunspeet the past history of the agreement in 1993 played a role, through which 80 hectares was added to the Natura 2000. This made it very difficult. It comes down to the content of compensation duties again (e.g. how and what will be compensated). Experts say it involves habitat of certain species, but the respondent indicates this is very vague, personal and dependant of insights. They have missed the scientific support of compensation. The municipality experienced it to be quite unclear and it is based on a lot of premises and vagueness." All these experiences led to a certain view on the effectiveness of compensation policy. It appears that this project caused a lot of confusion. The past history does not make it easier of course. Although the municipality still generously cooperated, with one purpose of reaching their goal (e.g. approval of plans and finally starting the projects). The new plans have a positive effect and the good will of the municipality becomes visible. The respondent finally stated "implementing officers at the municipality are supportive of the compensation policy, if it involves cases without such a prehistory. Nowadays the relation with the province is good as well and a mutual trust exists. They openly talk with each other during visits." This shows compensation policy can be accepted and efficiently applied, if not such a prehistory is present. This is useful, since the compensation policy is connected to the development plans and other developments that take place in the Natura 2000 and NEN. Other policies with compensation guidelines should also be kept in mind. The respondent noticed that "the policies are taken into account and applied as accurately and flexible as possible. In doing so problems are avoided." It seems that Nunspeet is trying to avoid situations like what happened with De Kolk, which is natural.</p>
Is the initiative taker content with the current compensation policy? Are changes desired in the compensation policy?	<p>The respondent indicated that "more unequivocality is desired. The arbitrariness of custom made measures should not take place, because than you do not know what you're dealing with. More clarity is desired on how compensation should take place and to which extent compensation is required. This is quite vague now. It costs so much time and consultations. It can also strongly influence the costs." These statements from the respondent are very interesting, since Gelderland is one of the province that has implemented a quite extensive provincial compensation policy. Gelderland is ahead in implementing the compensation policy. It became visible, during the part of input legitimacy, that the province offered guidance and advice to the municipality. Nunspeet indicated that the province supervised the whole compensation process. In the end the province needs to be able to defend the choices made by Nunspeet. Still the municipality would prefer more practical information on how the deal with this concept of nature compensation.</p>

At first instance it appears that Nunspeet would be content, because they indicated to be satisfied if the plans are approved. This occurred in December of 2008 and finally activities can start in 2009. It was a very long and difficult process. It would not have caused problems if it just involved an intervention for which compensation was required. This project of De Kolk had a prehistory with the agreement from 1993 and the removal of the Generaal Winkelmankazerne, which resulted in 80 hectares that was added to the Natura 2000. More compensation was required when the new Nb-wet came into force in 2005. Some experienced this as compensating twice. The respondent also indicated that the policy was applied very strictly, while it did not contain very clear guidelines. Especially regarding the presence of the Black Woodpecker and Honey Buzzard, because these species were not

observed in the area. It seemed to the respondent that the compensation policy did not have a scientific basis and that it was based on a lot of premises and vagueness. How this discussion affected people of the municipality became visible when the respondent mentioned “there are still politicians who say they will only compensate if it is really necessary and they will not compensate spontaneously. The enthusiasm for creating new nature decreases, because everything is enforced so much.” This shows how deep these problems went. It is quite a sensitive topic. Nunspeet does try to keep the compensation policy into account as much as possible now. Applying it as accurately and flexible as possible. In doing so problems are tried to be avoided. Fortunately the plans are approved now. Although it was a tough process, but it finally ended positively (e.g. the approval and also gaining the support of several key actors during the process, which involved the LNV, province, some interest groups, surrounding citizens, some farmers etc.). Results were booked, which is also shown in the section of input legitimacy. Nunspeet put a lot of effort in designing the ontwikkelingsplan of the Schaarweide, which includes old and new debts. This plan gives a framework from which future developments / compensation projects can be shaped. These plans can be considered as an end result from the compensation process. Finally the end results that becomes visible at the actual sites of De Kolk and the Schaarweide will need to be awaited.

Throughput legitimacy

This level of legitimacy is closely connected to how the compensation procedures were experienced. Was the initiative taker initially aware of where to find information on the compensation policy? The next step involves the appliance of procedures and if these were clear or not. Finally custom made measures are created by the province, municipality and initiative taker. Have the interests of initiative takers been taken into account during the design of custom made measures? Was this a legitimate process? And could a financial framework behind the compensation policy increase the legitimacy of implementation practices? The table below shows to which degree compensation procedures were experienced as legitimate.

Concepts behind Throughput Legitimacy	Explanations of respondent
Was the initiative taker aware of the provincial compensation policy and the phases of the compensation process? Which channels were used to possibly gain clarity when necessary and how was the compensation policy applied?	The respondent mentioned that “he was not that familiar with every detail, because he is the project manager and overlooks the mainline. He mentioned that when the new Nb-wet came into force they needed to gain more in-depth knowledge. During this time the limits of the Natura 2000 areas could be revised as well. The respondent indicated that in Nunspeet the limits of the Natura 2000 are not very logical.” Thus during this time the municipality needed to focus on the content of the new Nb-wet and pay attention to the re-determining of the Natura 2000 limits as well. Coming back to how aware Nunspeet was of the provincial compensation policy. The respondent states “they were not aware during the start of the development plan, because back then only the Forest policy was in place. The municipality gained insights about the new Nb-wet by calling around and asking questions, like what do we need to keep into account. They also went to the LNV, because these consultants should know how to describe it in the best way. It was noticed that these LNV consultants could differ in flexibility (i.e. some more practical than others).” If Nunspeet made use of this fact did not became clear. The respondent indicated “the policy texts were also consulted or the internet. But you are depended on the advisor of the Ministry when it involves questions like: how should compensation be applied exactly and in which shape/size.” From this

	statement it appears the provincial compensation policy does not really provide practical information, but advisors of the LNV seem to be necessary to provide answers on how it should be applied and to which degree. Again this is quite interesting, because Gelderland appeared to have an extensive compensation policy. Nunspeet indicates otherwise. On the other hand consultations will always be necessary, no matter how extensive and clear the compensation policy is presented.
Were the procedures clear during the appliance of compensation policy and how were these procedures experienced by the initiative taker?	The respondent mentioned “the amount of compensation was determined by strictly looking at the facts. Conversations pointed this out. Then Arcadis performed research to find out how compensation could be implemented. A lot of meetings took place and decisions were made. As municipality they have accepted it because they had only one interest involving the realization of the business area De Kolk with the necessary infrastructure. There was not much point in resisting the policy (otherwise nothing could be realized). At the very most conversations were possible (e.g. on how reasonable certain decisions were, how it should be done and in which term). So finally the amount of hectares was known and the way how compensation should take place came into being through dialogue (e.g. during workshops).” This led to the approval of the plans. Of course there was a lot of confusion during the implementation of the new Nb-wet, but the municipality accepted the fact it was inevitable because otherwise De Kolk could not be constructed. It was quite clear how the procedure proceeded afterwards. The respondent finally stated “the development plans of De Kolk and the Schaarweide needed to be arranged simultaneously (i.e. in one decision of the town council because than it goes 1:1). The planning procedure (embedding in spatial plans) was an important element.” In that case nothing can come in between of it. This is of interest since research on the levels of conformity proved compensation is not guaranteed, if plans are embedded in spatial planning. Even Nunspeet proved this with their old debts, which still needed to be sufficed (from which certain were registered in spatial planning).
Has the initiative taker noticed a financial framework behind the compensation policy?	No financial framework was noticed. The respondent indicated they “have only calculated the costs for realizing compensation at the Schaarweide. He does think it is an interesting question, but they have not really paid attention to it. It is a local situation that depends on where you are in the Netherlands. Nunspeet just knew compensation needed to take place in that area and there was no other possibility. Although they did study in which way compensation could be applied within the municipality.” When the respondent was asked if a financial framework would be desirable he answered that “it would be useful. The costs could be known in the beginning of a compensation process.” Besides the respondent mentioned that “a compensation bank would be useful (perhaps on national level). Then you could just buy ground and indicate how many hectares need to be compensated.” In a way this is buying of compensation duties, which is a kind of financial measure that can be applied.
How did the province, municipality and initiative taker come to the custom made measures, which should suffice the compensation requirements. And have interests of the initiative taker been acknowledged during the design of these custom made measures?	An example of custom made measures involves the decisions behind the choice of lanes, regarding the beltway. Two separate narrow lanes with a broad roadside would possibly cause less damage. Studies have shown how the beltway should be constructed optimally, while limiting damage. Quite some attention was also paid to aspects connected to the landscapes. Reports were made to indicate what the damage actually involved and to which extent it would take place. In the end the city council agreed to the plans. It will be applied in phases and limiting conditions have been established. For instance the sale of parcels can only occur if it summons a certain type of employment, but these measures still need to be worked out. As closing notion it was mentioned that the municipality just tried to go into the process very thoroughly. This can, for instance, be noticed from the extensive report of the ontwikkelingsplan Schaarweide. Custom made measures were designed and the balance, concerning nature, seems to remain positive. Only the actual execution of the projects can point out if no loss of values will take place.

It became clear that the agreement of 1993 and the removal of the Generaal Winkelbankkazerne occurred before the new Nb-wet came into force in 2005. Nunspeet was aware of the Forest policy, but had to gain more in-depth knowledge on the Nb-wet when it arrived in 2005. The municipality asked around, and went to the province and LNV. At this same time there was another important development, concerning the re-determining of Natura 2000 limits, and this also played a role during this period. Coming back to the new Nb-wet. It appeared that it was not always experienced as very practical, because many conversations were necessary to give shape to how compensation should be applied (i.e. to which extent and in which term). This could not be found back in the policy texts. In the section of output legitimacy it appeared the logic, legitimacy, reasonableness and fairness have not always been detected. Although Nunspeet acknowledges that it had no point to resist the compensation policy, since otherwise the construction of De Kolk could not proceed. Afterwards the procedures seemed quite clear-cut. Research was performed and decisions were made from the gathered data. During the compensation process no financial framework behind the compensation policy was recognized by the municipality unfortunately. It could be experienced as more legitimate if a financial framework would be present, because everyone will need to follow the same financial guidelines instead of custom made measures that decide the amount of costs (which differ per case). Nunspeet just focused in the costs connected to their project. The respondent indicated to be interested in a financial framework because then costs could be known in the beginning of the process. Besides a (national/provincial) compensation bank could be useful, according to the respondent. Ultimately the municipality could process their interests during the design of the plans (next to other interests since the municipality included involved parties in the designing phase).

Practical case: Dune water company Zuid-Holland

Input legitimacy

Input legitimacy is studied by paying attention to how the initiative taker could influence the process surrounding the design of nature compensation duties. Questions arised like: who participated in this process, how did the process pass by and important moments in influencing the process are mentioned. What did the initiative taker need to keep in mind? It is also of interest to look into the support and resistance towards a intervention/compensation project. Finally the question remains if the initiative taker could add topics to the agenda during negotiations. Besides how did the province involve initiative takers in the process of making important decisions on the project and could contributions be made? The table below shows how and to which degree input legitimacy was reached.

Concepts behind Input Legitimacy	Explanations of respondent
How could the initiative taker influence the compensation process?	To start with a description of why the dune water company of Zuid-Holland (DZH) needed to compensate and to which extent. During this outline their influences will become visible. The respondent noticed it is obvious DZH has a negative effect on nature. Infiltration takes place in the dunes due to the collection of water and an artificial high level of ground water becomes present. Water quality can be affected by so many things. For instance bulb cultivation caused eutrophic water to come into the dunes, which does not originally occur in there. In the past many studies have taken place on effects in dunes that are negative. From this it for instance appeared that wet hollows in dunes and wet grasslands were declining in Zuid-Holland. Studies also showed water infiltration caused damage. An infiltration ordinance of ground protection (Dutch acronym: IB) came into force in 1993, which included requirements on the quality of infiltration water. An administrative agreement was made between the province and DZH, since the IB requirements were not met in certain areas of the DZH (e.g. Solleveld, Meijendel, Berkheide). This agreement showed that surface-infiltration of water from rivers can bring along particles that are foreign to dunes. The effects that surface-infiltration causes on nature and the environment, concerning water quality, needed to be mitigated/compensated by DZH. Compensation projects were divided into: compensation of damage to vegetation in seepage lakes, compensation of ground and compensation of damage to vegetation of shores at infiltration pools. The compensation that was executed in the Hertenkamp was connected to this last category. During this research attention was solely focussed on the Hertenkamp compensation project, but many other compensation projects were described in the agreement and some were occasionally quoted during the interview. Coming to influencing the compensation process, the respondent indicated "DZH could influence the compensation process due to close consultations/contact with the province and the relationship is optimal. DZH could point out topics to their contact at the province (Bureau natuur, Harry Smit who was also interviewed to study the levels of conformity). DZH could say certain elements are very important when compensating. For instance the quality of water that is infiltrated is connected to actors/polluters and how can extra plusses be created for nature during the implementation of compensation. DZH is a special case, since it involves a dune water company and nature company through which profits from collection of water and nature are equally important. This means that they are there for a good quality of water from a good environment. Meaning that when the environment is good than the collection of water is

	<p>good, which is in relation to each other. DZH also feels responsible for this.” This shows the strong connection between the water quality (water collection) and nature (that influence the quality of water). This nicely shows the structure of DZH involving their function of being manager of nature and a collector of water. The idea concerns the water quality and holding the calcium rich water, while improving the duinbeek and restoring the inner dune limit of forests.” This shows development of nature has a high priority. DZH is an example of an initiative taker who notices that compensation can add value to an area (and be valuable for their business). Next the respondent mentioned “at first the province, municipality Wassenaar, DLG, Stichting Duinbehoud were present during meetings about the plans. Afterwards more parties were involved during the initiative phase (e.g. interest groups, working-parties concerning birds, other nature associations etc.). Conversations took place on the fact that compensation needed to be fulfilled and where areas of interest are specifically situated. The ambition is of importance here. A clear reasoning showed how plusses for nature could be gained by applying simple measures and in certain areas. The Hertenkamp was one of these areas.” In the end DZH tries to remove all sort of things from the dunes, which can possibly influence the water quality. Several measures were planned in the Hertenkamp. Firstly the bulb cultivation was removed from the water-collection area. This site needed to be transformed from a bulb farming area to a nature area. A shed in which bulbs were stored also needed to be removed. In the meanwhile another goal involved the increasing hydrological gains through calcium-rich seepage water (water belonging in the area) and keeping it in the area as long as possible. The drainage water (water foreign to the area) should be kept out of the area as much as possible. Compensation of 12 hectares was initially required, but it was possible to compensate 15 hectares there. DZH took over 3 hectares of compensation duties from the province for the broadening of a (land dividing) road, which brought it up to a total of 15 hectares of compensation in the Hertenkamp. It was possible to receive grants, because DZH took over compensation duties from the province. Grants were not possible for the compensation in relation to the IB. It appears that the water company profited by the removal of bulb cultivation, since that is positive for the water quality, but in the meanwhile this is also advantageous for the development of nature. Additionally the collaboration between the province and DZH, concerning the broadening of a road and taking over compensation duties, proved to be favourable because grants could be used for the implementation of compensation in the Hertenkamp. These are examples of situations in which DZH could influence the proceedings of the compensation process, while it was also in their favour and in favour of nature development. Finally the respondent indicated that “the province is the supervisor of the IB, which puts them in a position to ask for preconditions before handing over permits. This can involve conditions on how water is collected that results in minimal or no effects on nature. Again it was emphasized that the province did not just drop this on DZH and a very open relation exists between them.” This also becomes visible through the compensation duties that were covered by DZH from which grants could be received, while the province broadened a land dividing road that had extern effects on the bottom of the dunes. On the other hand the respondent also mentioned “Stichting Duinbehoud who are occupied with the conservation, protection and optimizing of dunes. They know each other well and also have a very open communication. In the beginning Stichting Duinbehoud thought DZH was damaging the dunes, but they also acknowledge that DZH is in a exquisite situation (i.e. the water company earns money from selling water and the nature company is in a wonderful position to manage nature).” This shows how DZH could also influence the compensation process, because it gains the support of interest groups by showing their dedication for developing nature. It seems only advantages are connected to the Hertenkamp case. The removal of bulb cultivation has positive effects on the quality of water, but it also increases the development of nature. The area is also open for the public (i.e. previously not open due to bulb farming) and the walking paths add (recreational) value too. Influences are quite visible, since this project brings along such improvements to the Hertenkamp area that no real resistance existed and value could be added to the area by DZH.</p>
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<p>Could the initiative taker add topics to the agenda during the negotiations of the compensation duties?</p>	<p>How DZH was able to put topics on the agenda already becomes visible in the previous section of their influences. The respondent stated “topics could be added to the agenda during the negotiations on compensation duties. Very much indeed. The reason behind this fact was the open communication between all the different parties. And the province of course values having good consultations with the manager of certain areas. This is an open communication and the manager knows the most about the areas and what could score the best. A great advantage of being a manager is the freedom you have, because it really involves the fact that it is tried to optimally compensate in relation to nature.” Thus DZH certainly added topics to the agenda and mainly connected to improving nature values in the Hertenkamp area.</p>
<p>Was the initiative taker actively involved during important decision-making processes, which were connected to their project? (i.e. could they influence the process or could a contribution be made and were the preferences of the initiative taker taken into account?)</p>	<p>The respondent indicated “it was different when DZH was still a company in service of the municipality. It was a bit more conservative, but the company privatized, which brought along changes. Attention needed to be paid to parties that wanted more than DZH wanted themselves. It should remain reasonable. This again was very open and the influence too (never to an irritating level).” It appears that a change within the water company had certain effects, but an open communication always existed. An example of how DZH was actively involved in decision-making processes involved the broadening of a land dividing road and the compensation duties that were covered by DZH in the Hertenkamp. The province approached DZH and asked if their compensation duties could be realized with the Hertenkamp project (i.e. more hectares could be compensated than was necessary for DZH so the water company had space to include the provincial compensation duties in the project). It was a win/win situation because the province had solved the implementation of their compensation duties and DZH could improve the Hertenkamp even more, especially with the grants becoming available by taking over these compensation duties. The respondent thought this was “really perfect and it really has to do with the networks (of contacts). The three hectares that would be compensated did require a financial argumentation. Finally they both helped each other in this case. DZH needs money to execute projects and the province distributes subsidies when a project suffices certain parameters (i.e. on basis of a plan certain projects can be implemented). The result is this project of the land dividing road and compensation in the Hertenkamp. The respondent called it a symbiosis.” This shows how actively DZH was involved in important decision-making processes, which resulted in a favorable collaboration. Both parties profited from it and most importantly a part of the Hertenkamp could be financed due to the grants that became available from this project. Ultimately the interests of DZH involve collection of water and nature. The aspects regarding nature are perfectly arranged according to the respondent. Their interests were taken into consideration as well (e.g. prioritizing the execution).” It became visible (in this project) how important the relation between the province and DZH actually is.</p>
<p>Were objections filed during the design of the intervention- and compensation plans? Or was support shown?</p>	<p>It appeared that the Hertenkamp project mainly received support instead of resistance. The respondent indicated “it was frightening when the IB first came into being. The director could feel like they were going to prescribe what to do and decide for him. After the shock it was alright and finally the relation became good. It all went in a very normal way.” It appears a natural reaction took place, when the IB came into force. Next to this the respondent mentioned there “was minimal to no resistance. There might have been minor irritations between people within the company, concerning interests related to the production <-> nature. This was marginal and it was actually a healthy professional tension.” During the interview it seemed that the interests connected to water collection and nature development/conservation are balanced. Besides the respondent noticed that “the nature company had the same thoughts as Stichting Duinbehoud and the province. There were no large differences in opinions. They all agreed on the plan of the Hertenkamp that the inner dune edge of forests should be recovered, the calcium rich water needed to be kept in the area and the bulb farmer needed to be removed. It went perfect because all the parties gained in this situation. From previous projects DZH learned communication is necessary in a open way. This involved: inviting many people, press releases were send to local papers that described what the plans were, special brochures were made that showed the old/new situation and</p>

	<p>they were distributed at the municipality of Wassenaar and the library , flyers were made with explanations, an article in a paper was written on transforming the bulb cultivation back to nature, people were invited for excursions and individual conversation took place with the surrounding citizens (who could experience road transport as negative). So people were well informed. DZH very clearly showed the present and future situation in presentations. Including the removal of bulb cultivation, wet hollows in the dunes, vroom grasslands being grazed on and the possibility to walk through the area as recreant. Perhaps some people would mind the parked cars from the recreants in front of their houses, but people were also aware that they were now allowed into this nature area, which later on resulted in neighbouring citizens recreating there. When the permit was requested it went very fast. The municipality of Wassenaar was happy with the fact that DZH had done everything in such an open communication. Presentations were held for the city council, mayor and alderman. Usually Harry Smit (Bureau Natuur - Province) was also present to tell about the provincial interest in this case, while DZH showed their interests, regarding water production, water quality and nature." It seemed that informing/involving the involved parties was an essential part of the initiative phase of the compensation process and DZH has done this in an extensive way. This could have contributed to the support of generally all the involved. Of course exceptions exist. The respondent mentioned that "a man was causing a lot of trouble in the Ganzenhoek (i.e. writing on property of DZH and causing more damage), while DZH had applied even more open plan processes than with the Hertenkamp project. You always have one or two persons that do such things, but with the Hertenkamp 99, 9% loved it." At least DZH did everything to gain the support of involved parties, and sometimes it cannot be prevented that extreme persons strongly resist their projects.</p>
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Open communication and good relations become visible between DZH and other key actors (e.g. the province, municipality of Wassenaar, Stichting Duinbehoud, DLG). The design of plans, concerning the Hertenkamp, was an open process in which key actors were involved. It seemed that everyone was on the same page. DZH had and used plenty of chances to influence the compensation process and to contribute to it. The collaboration between the province and DZH is quite remarkable as well, since they both profited from it. The compensation duties of the province were covered by DZH in the Hertenkamp and grants were given by the province for taking over these compensation duties. The grants were used to finance a part of the Hertenkamp. Finally 15 hectares could be transformed to nature. In the initiative phase information on the plans of the Hertenkamp were extensively distributed to a large range of parties. The support was gained for this project and involved parties were very positive about it. In the end this compensation project resulted in plusses for nature and by doing so the collection of water improved, which is just the main goal of DZH (i.e. water company: collection of water / nature company: development of nature).

Output legitimacy

The end result is of interest during the research into output legitimacy. Is the initiative taker content with the final agreements/final product? It comes down to the effectiveness and acceptance of compensation policy. Or can the compensation policy be improved, according to the initiative taker? The table below shows the degree of satisfaction connected to the established end results and the compensation policy.

Concepts behind Output Legitimacy	Explanations of respondent
<p>How is the accomplished end result experienced by the initiative taker? And how was the whole compensation procedure experienced?</p>	<p>The respondent indicated “to be very content with the end result. He is still quite impressed by the power of nature to recover. You can start doubting if everything goes well when you see that a creek in the dunes goes very slowly after 2 or 3 years, but it has resulted in a very beautiful product. He notices that everyone is very positive (e.g. within the municipality of Wassenaar, neighbouring people etc.). People finally have access to the area (previously closed due to the bulb cultivation) and they really make use of it. The walking paths make it possible to walk beside horses and cows. Additionally many flora and fauna species can be observed. This project just went really well. Everyone loves it and the project really succeeded. This is very different from the project in the Ganzenhoek (where quite some resistance exists).“ The process that resulted into these end results was also experienced very positively by the respondent.</p>
<p>Does the realized compensation correspond to the actual plans?</p>	<p>The respondent notes that “everything is realized according to the plans. The destination of the Hertenkamp changed from agrarian use (bulb cultivation) to nature with additionally the use of recreation and water collection. This is registered in both the regional plan as in the development plan of Wassenaar. Besides all the activities have also been executed (e.g. removal of bulb cultivation + bulb shed, improvements of hydrological system, and transforming the area back to nature).” Everything has been realized, but an evaluation still needs to be applied. As the respondent stated “an evaluation should take place after 5 years. The indicators, on which this project is based, will be monitored. The whole area will be monitored on for instance the water quality and specific indicators are necessary to monitor the (vroon) grasslands and the stream in the dunes (e.g. using flora and fauna species as indicators). Additionally the grazing needs to be monitored. During an evaluation that was performed in the meanwhile it appeared that the area was becoming rougher (i.e. since the bulb cultivation was removed). The gathered data is also given to the province (this is a formal part). Informally they come to the sites occasionally (i.e. once or twice per year). Members of the Provincial Executives have also visited the areas in which projects were executed from DZH. DLG and contacts from the municipality of Wassenaar were invited to walk/bike through the area as well. In this way you keep each other informed. Finally this results in plusses for DZH when a project succeeds, but the province also becomes better from such a nice anticipation. It works on both sides, since we work together and profit together too if it produces a couple of plusses. Finally it will be evaluated. Air photography takes place once in the five years to view the developments. Only the past three years this was not possible, due to bad weather and air traffic of Schiphol.” It remains to be seen what air photographs will show. On ground inventories of certain flora and fauna species already takes place and the water quality is studied too. Finally insights were gained through a possibility that was given during the interview, which involved the chance to view many documents related to the Hertenkamp. This involved: accountant's declaration, information on several meetings, ordinance of Provincial Executive, communication plan, planning, permits, drawings, working visits, studies of Oranjewoud with information on the area and recommendations, plan specifications with information on the activities and related costs, managing plans of the terrain and the final re-arranging report of the Hertenkamp. This information helped to obtain a more complete overview of the project. It was especially useful to learn more about all the plans behind this project.</p>
<p>How was the effectiveness of the compensation policy experienced by the initiative taker, while keeping in mind: how clear & consequent policy objectives are, the role of compensation in daily actions, dedication to policy objectives and</p>	<p>It appears the compensation policy is accepted from previous described statements of the respondent. The province and DZH are in close contact. This resulted in the possibility of applying additional measures to improve the Hertenkamp (i.e. DZH received grants for taking over provincial compensation duties that were connected to a land dividing road). Although in the past, the first director who needed to adjust to the IB could be quite shocked of course, but after that open communication was reached. Providing an environment in which the compensation policy was experienced as clear and consequent. Practical use was made of the compensation measures, from which not only nature profited, but also DZH. The respondent noticed “compensation policy has a role in daily activities. In the end they create investment</p>

received support. Ultimately the question remains if the compensation policy is accepted?	plans and project plans and they are also busy with all those project plans of the IB. It is all a matter of fitting in plans and finances, etc. It does not apply for everyone, but certainly people who are working on projects (i.e. leading and planning projects) are in contact with compensation policy. For instance also the directors (e.g. director of the production company and the director of the nature company and the general director). Perhaps we do not work with it every day, but it is ingrained." Their dedication to nature becomes visible in what has been reached with the Hertenkamp. The nature company wants to reach the maximum. This produces plusses for nature and for the water production. Finally the support for the Hertenkamp was gained from interest groups and many other involved parties. Extensive information distribution took place and people had the chance to participate in the initiative phase. Positive reactions were generally given on the plans. It becomes visible that the Hertenkamp is an exemplary compensation project. DZH took many steps to involve everyone and support was gained, which resulted in a quick proceeding of this project.
Is the initiative taker content with the current compensation policy? Are changes desired in the compensation policy?	The respondent noted "to have a big advantage as manager. It involves the freedom you have, because you are going to try and reach the most optimal situation for nature by compensating." This statement already gives an idea of how the respondent experiences compensation policy. DZH tries to accomplish the most, while applying the compensation policy. The respondent stated "they always try to reach the maximum (i.e. always demand the maximum and apply the maximum). It's all well, when due the open communication with the province, DLG, Stichting Duinbehoud, the plans are agreed on." It seems that the respondent had no problems with the content of the current compensation policy. The respondent also mentioned "the Hertenkamp could have been implemented differently, but they wanted to reach the maximum. This is possible because the openness within the province is so large and the communication is very good. A good relation exists. Finally consultations with the province (i.e. Harry Smit) take place and plans are inspected on their attainability. It is examined if the plans are conform the policy requirements." It is clear DZH follows the compensation policy. DZH seems to be content and has a good understanding of it (i.e. also through the good relation with the province). It seemed no changes in content of the compensation policy were desired.

During this study on output legitimacy it became very obvious that DZH is very content with the achieved results and the process leading to it. Over and over it was emphasized how open communication was possible and good relations existed. All the elements that make an policy effective are sufficed, according to the respondent. It is clear, consequent, frequently plays a role in daily activities and dedication to policy objectives exists. The compensation policy is accepted and DZH not only creates plusses for nature, but also gains from it themselves. Ultimately compensation was realized according to the plans. Many involved parties have already reacted positively about the Hertenkamp project. People make use of the walking paths and a range of flora and fauna species can be detected in the area. Photographs will be taken from the air to view how developments proceed in the area. An evaluation still needs to take place (including air photographs). However on ground inventories are already obtained. In the end the respondent indicated to be content with the compensation policy and no changes seem to be desired.

Throughput legitimacy

This level of legitimacy is closely connected to how the compensation procedures were experienced. Was the initiative taker initially aware of where to find information on the compensation policy? The next step involves the appliance of procedures and if these were

clear or not. Finally custom made measures are created by the province, municipality and initiative taker. Have the interests of initiative takers been taken into account during the design of custom made measures? Was this a legitimate process? And could a financial framework behind the compensation policy increase the legitimacy of implementation practices? The table below shows to which degree compensation procedures were experienced as legitimate.

Concepts behind Throughput Legitimacy	Explanations of respondent
<p>Was the initiative taker aware of the provincial compensation policy and the phases of the compensation process? Which channels were used to possibly gain clarity when necessary and how was the compensation policy applied?</p>	<p>The respondent was aware of the provincial compensation policy and noted “the provincial environmental ordinance was also of importance. It was all about the bulb cultivation in a water collection area (i.e. affecting the water quality), and finally the removal of bulb farming also made improvements to the NEN. Besides the dehydration policy required improvements to the hydrological ground water quality.” The respondent was well aware of all the policies DZH needs to suffice. The respondent also mentioned “DZH has always applied a certain behavioural rule, involving no work to be executed during the breeding season. This was even before the FF-wet came into being. For instance Meijendel is listed in the top 10 of Dutch nature areas and many red list species are present.” Thus the FF-wet is being kept in mind and from the first of March till the first of September no activities are executed in the area, which is essential to process in the planning of projects. Next to this the respondent indicated “to keep updated on local/provincial developments regarding the status of their dune area. They like to stay informed on the policy aspects. They do not only do this for their own grounds but also developments in neighbouring areas are followed. DZH also has close contact with the province and hears from the contact person which developments are taking place on provincial level. Also including developments of where we are heading in a political sense and visions are shared. Then DZH can share these visions with for instance Stichting Duinbehoud and they can tell it to others etc. This is making use of the existing network. In the past this was called the green mafia, which is not negatively meant, but it involves a network of contacts that works together very closely.” The importance of the proper contacts and making use of a network can be noticed during the whole interview. Thus certain channels are used to gain information on the compensation policy and again good relations with different contacts are essential.</p>
<p>Were the procedures clear during the appliance of compensation policy and how were these procedures experienced by the initiative taker?</p>	<p>In first instance a certain degree of pressure was put on DZH. The respondent noted “the province indicated that infiltrating every year has a certain effect and this needed to be compensated.” As the respondent stated ‘the polluter pays’. It is quite interesting that DZH mentions this statement on the polluter pays principle. DZH seems to accept the consequences that are connected to this principle and agrees with it. Next in the initiative stage preconditions of plans are discussed with the province. It finally comes down to this according to the respondent: “(A) do you suffice the preconditions of the compensation policy and (B) if you suffice the preconditions than you go into the permit circuit and you want to inform people in an early phase.” How people were involved was covered with the processing of input legitimacy, and people were involved in the initial phase of the compensation process. The respondent indicated that “DZH wanted to show what they were planning, with the goal behind it to receive the acceptance of these people and to gain support for the plans. By doing this it becomes visible if the plans will not cause problems. Again coming back to open communication.” This shows how DZH takes preparations before applying for the permits and support for plans can be of use in the compensation process (i.e. resistance can hold up projects). The respondent noted “ultimately the improvements, concerning nature, need to be conform the guidelines/policy objectives. The Hertenkamp sufficed the compensation policy, including the arrangement of the hydrological system (dehydration policy), plusses for nature, removal of pollution. It all</p>

	<p>corresponded with the provincial plans." From these statements it appears that the procedures were clear and DZH does not seem to have any problems with it.</p>
<p>Has the initiative taker noticed a financial framework behind the compensation policy?</p>	<p>The respondent agreed that you would expect the same costs when people are in exactly the same situation. He was also asked if a financial framework, connected to the compensation policy, was present. However no tangible financial framework was noticed. Although the respondent mentioned "applications for grants require plan specifications with information on the activities and related costs. This needs to suffice preconditions set by the province. These specifications involves a report from the contractor, with information divided in themes and showing price per unit and sizes of surfaces. This results in a total amount, which is the estimated sum. The estimated sum is indicative for DZH and the province." The respondent noticed that this could possibly be seen as guideline. In the end the financial preconditions are gathered in a report, which should suffice the provincial guidelines and this is approved or not. The respondent indicated "it needs to be shown if the money is actually spend according to the rules of the game. Often with these cases (concerning finances related to grants) progress reports need to be written every quarter of a year. Possible problems can be described and if the project is delayed." DZH had to do this with the 3 hectares that was realized by taking over compensation duties of the province. This financial background behind the Hertenkamp and DZH compensation projects is very interesting, but it will still differ per case and a general guideline behind the costs cannot be detected. The respondent was asked if a financial framework was desired and he answered "it would be really nice if you could see how much costs should be paid per hectare on a basis of compensation projects. A couple of years ago DZH worked on such financial guidelines with Kiwa, situated in Nieuwegein. We wanted to design a model that could make financial calculations, like for instance you have 12 hectares of a certain area with those ecological parameters + other parameters, and if everything is accurate, what will the managing costs involve and the project costs per hectare. It would be nice for the manager to have a model that you can fill with data and hands over which kind of plusses are possible. It is like a blackbox in which you can put several measures, the surface and in the end this framework could tell in which area compensation is possible with the related costs. It could be a kind of reference, but we have not succeeded in designing such a model." So many factors have a role. The respondent noticed it depends on the terrain and so many parameters are needed in such a calculation. It is a pity no financial framework was possible yet, but perhaps in the future such a large/complicated model can be designed.</p>
<p>How did the province, municipality and initiative taker come to the custom made measures, which should suffice the compensation requirements. And have interests of the initiative taker been acknowledged during the design of these custom made measures?</p>	<p>During the interview it continually became visible how good relations were and the possibilities for open communication. This created an atmosphere in which all involved parties could participate and negotiate. DZH closely worked together with the province. This resulted in a special collaboration, concerning the land dividing road, which shows how the province took the interests of DZH into account. By taking over provincial compensation duties it was possible to receive grants and this could be used to implement a part of the compensation measures in the Hertenkamp. It shows to which extent custom made measures were possible during this compensation process. Custom made measures were applied for all the projects connected to the IB, from which the Hertenkamp is one example. Finally the custom made measures in the Hertenkamp did not only result in plusses for nature, but DZH also benefitted with an improved situation for water collection (removal of bulb cultivation that caused eutrophication), and the province benefitted from contributing to a project that gets many positive reactions. It seems that the creation of custom made measures went very well and that several interests were kept in mind.</p>

The compensation process seems to have gone very well in the Hertenkamp project. DZH was very positive about the contact with the province. They have a mutual understanding and seem to work together well. Besides DZH seems well aware/informed of the compensation policy and other policies/guidelines related to this topic. The procedures seem to be clear and their interests have been taken into account. The process surrounding the Hertenkamp almost looks impeccable. Everyone seemed to have gained (e.g. nature, DZH, province, neighbouring citizens, recreants, etc.). Finally DZH did not really seem to notice a financial framework behind the provincial compensation policy. Such a framework could provide equity, because then everyone has certain guidelines to follow instead of custom made measures that differ per project. Although DZH (in collaboration with Kiwa) has put thought into a model that could indicate the costs when damage to a certain area needs to be compensated. Unfortunately this was not possible yet, but it is an interesting fact that people are looking into such an option. Perhaps in the future an extensive model is designed, which can be used to predict compensation costs and it could possibly be used as a reference.