



# Procedural justice in flood risk management

Teun Fiers (931230240070)  
MSc Thesis Climate Studies  
Environmental Policy Group, Wageningen University  
Supervisor: Martijn van Staveren  
12-10-2018



## Table of Contents

List of figures .....	3
List of tables .....	3
Acronyms and translations .....	3
Abstract .....	5
Preface .....	6
<b>1. Introduction.....</b>	<b>7</b>
1.1. Context.....	7
1.2. Research aim and questions.....	8
1.3. Methods.....	11
1.4. Outline of the report .....	12
<b>2. Literature review .....</b>	<b>14</b>
2.1. Development of FRM in the Netherlands.....	14
2.2. The conceptual context: legitimacy.....	16
2.3. Research on procedural justice .....	17
2.4. Observed dynamics in participation processes in FRM.....	19
<b>3. Case studies.....</b>	<b>21</b>
3.1. Selection of case studies.....	21
3.2. Case study A: De Noordelijke Randmeerdijken.....	23
3.3. Case study B: IJsseldijk Apeldoorns Kanaal .....	26
3.4. Case study C: Sterke Lekdijk .....	29
<b>4. Evaluation of findings.....</b>	<b>38</b>
4.1. Comparison of the case studies.....	38
4.2. Observations on national level .....	38
4.3. Level of institutionalisation .....	41
<b>5. Conclusion .....</b>	<b>43</b>
5.1. Considerations of procedural justice.....	43
5.2. Elements explaining procedural justice.....	43
5.3. Underlying value systems.....	44
<b>6. Discussion.....</b>	<b>46</b>
6.1. Analysing government perceptions.....	46
6.2. Examining institutionalisation in the Dutch FRM sector .....	46
6.3. From qualitative to quantitative analysis .....	46
Bibliography .....	48

## List of figures

1. The opportunity-capacity model
2. Overview of ongoing dike reinforcement projects in the Netherlands in 2018
3. Decomposition of the umbrella concept 'legitimacy'
4. The elements of democratic legitimacy in terms of input and throughput
5. Conditions (limiting factors) for co-production (stakeholder participation)
6. An overview of the potential limiting factors for citizens to participate in a stakeholder engagement process
7. Locations of the case studies A, B and C
8. Subprojects of the dike reinforcements Sterke Lekdijk.

## List of tables

1. Translations of frequently used Dutch terminology
2. Found elements of procedural justice
3. Subdivision of different types of resources, which determine the capacity of citizens
4. Gathered information in the research
5. Summary of procedural justice perceptions in case study A
6. Summary of procedural justice perceptions in case study B
7. Summary of procedural justice perceptions in case study C

## Acronyms and translations

When using terminology from the Dutch flood risk management domain, only the necessary terms were translated (table 1). Abbreviations were generally avoided, with exception of FRM (flood risk management).

Especially when referring to the data gathered for this thesis, a particular reference system is used. The # documents that were analysed are characterized by a D, then often a page number is added, e.g. [D2; p3]. The 11 interviews that were done are characterized by a I, mostly accompanied by a line number, e.g. [I5; 235].

**Table 1:** Translations of frequently used Dutch terminology

Dutch	English
waterschap	(regional) water authorities
omgevingsmanager	relational officer
ambtenaar	officer
ambtsbekleder (o.a. portefeuillehouder, wethouder)	official
verkenningfase	exploration phase
Rijkswaterstaat	national authorities (for water and infrastructure)
programmadiirectie HWBP	national coordination (of dike reinforcements)

## **Abstract**

Public participation has become a common aspect of flood risk management (FRM) projects in the Netherlands, like dike reinforcements. Also, citizen stakeholders are increasingly in key positions for influencing the planning, e.g. in design groups. In this context, it is increasingly important to what extent such participation processes give stakeholders a fair opportunity to have influence, in other words the procedural justice in these projects.

Previous research by Begg et al. (2017) highlighted how there is a potential deficit in securing procedural justice in FRM in the Netherlands. However, it largely remains a black box how the actual social dynamics play out during such a process, and to what extent the relational officers (Dutch: omgevingsmanagers) are aware of this deficit. This research aimed to get insight in the perceptions of the different involved public authorities, and their (lack of) motivations to enhance the participating capacity of the citizens or give attention to issues of procedural justice.

For three case studies, official documents and in-depth interviews with several relational officers were gathered in order to construct an overview of perceptions on procedural justice. Additionally, interviews with officers on the national level were conducted in order to determine the level of institutionalization of these perceptions.

Knowledge sharing is a commonly practiced way of capacity building, but support for economic or social capital is rare. Yet, relational officers seem to be increasingly aware that strategic behaviour among participating citizens that could have unjust consequences, especially in larger projects.

Small projects may exclude side-issues with conflicting interests, and reduce the representativeness of interests in the process. Larger projects most likely have more checks on procedural justice, because additional government bodies become involved. Especially municipalities appear suitable to fulfil this role. The national coordination team, as well as elected (democratic) bodies have the potential to perform an independent check on procedural justice, but are currently expected to focus more on the content of the plan. The informal character of the checks that currently exist, allows key individuals to make a significant difference regarding the level of procedural justice.

Observing the institutionalisation on a national level, there appears to be a large focus on policy effectiveness and efficiency, coinciding with a lack of attention for procedural justice. The tension field between policy effectiveness and procedural justice is found to be limited, in some cases procedural justice may even be considered a side product of policy effectiveness. A discourse focussed on mutual trust seems to propagate this idea, and the benefits of good relationships. Possibly, more attention for procedural justice issues can be obtained by adding requirements to official documents. One such possibility would be a focus on citizen capacities. Another would be by formulating a 'right to be involved'.

## Preface

The personal reason to investigate fairness of participation processes was such a project in my home city of Wageningen. I had a personal interest in this project, as a member of the rowing association Argo, which is situated on the dike that was to be reinforced. It struck me how professionally the water sports associations were lobbying in local politics, which I experienced from the viewpoint of the local section of political party D66. Thinking in line with the ideals of the party, I was wondering to what extent other citizen groups would have the same opportunity to influence the final project planning.

I experienced some citizens to be very pro-active in securing their influence in the project, e.g. by idea development and lobbying in local politics, while other citizens with the same type of affiliation to the project were barely visible. From my involvement in both rowing association and the local section of political party D66, I witnessed from different viewpoints how some mature and highly educated citizens were surprisingly well represented. I experienced them to apply their knowledge, professional experience and social network in this context. This made me wonder if the public authorities would keep track of this, and to what extent it would really turn out in some citizens having more influence than others. What norms and values would play a role? Is this a fair process and what role could I adopt in this setting? Does this suit my profession?

By doing this research, I aimed to find out if the experienced social dynamics were common and widespread, and what that actually means for the quality of public participation. I was eager to hear people in the middle of the fuzz; to what extent they think such processes are fair and is that is relevant?

As I experienced the thesis to be quite a journey, I gratefully thank everybody who supported me in this process. My supervisor Martijn van Staveren gave me insight in the practicalities of doing research, especially in the Dutch water policy domain. Finding my way through the bureaucratic organisations of the water authorities, I was often dependent on the employees who offered me a helping hand. Therefore, special thanks to Yolanda (waterschap Vallei en Veluwe) and Evelien (Hoogheemraadschap Stichtse Rijnlanden). For the emotional support, special thanks to my loving parents and partner.

Teun Fiers, 22-08-2018

## 1. Introduction

This chapter will introduce the research, which was carried out between March and September 2018. Starting from the problem description, it will elaborate on the research aim and finish with the research question.

### 1.1. Context

Participatory processes are increasingly present and important in flood risk management in northwest Europe (Mees, Driessen, and Runhaar 2014). Such practices pose new questions of equity and justice. In particular, procedural justice is not guaranteed (Begg 2018); Potentially, citizens who lack in resources won't be able to properly defend their interests in a participatory process. Little is known about the way in which government bodies, as the facilitators of the participatory process, deal with the issue of procedural justice, and their (lack of) motivations to improve it. Measures that could possibly improve procedural justice do exist (Kuhlicke et al. 2011, Barnaud et al. 2011), but are not explicitly found back in policy guidelines. It is unknown what questions of procedural justice are posed by government bodies to themselves and how these are answered.

#### 1.1.1. *Increasing public participation in flood risk management*

The emergence of participatory processes in flood risk management can be characterized in a general trend; *"from government to governance"*. This trend is not only observed in flood risk management, but in the realm of environmental policy in general and beyond (Ostrom et al. 1961, Peters and Pierre 2001, Termeer et al. 2010). In the Netherlands, flood risk management increasingly has governance traits (Warner et al. 2013b) and is the arena for an increasing number of bottom-up initiatives (Van Buuren et al. 2010), which fits perfectly in this transition. Therefore, the issues of equity and justice as discussed in this research are likely to be indicative for the issues of equity and justice in a *multi-level, multi-actor* governance society in general. Background on paradigm shifts and the transition *from government to governance*, specifically in the context of the Netherlands, can be found in section 4.1.

#### 1.1.2. *New questions of equity and justice*

In the 'traditional' type of flood risk management, where responsibilities are centralised on a national level, the government gains her legitimacy solely through democratic representation. By proponents of public participation, it would be argued that this type of policy is too distant for citizens, but at least every citizen has the same vote. As described by Van Buuren et al. (2012), public participation creates additional, inherently different types of democratic legitimization.

As the opportunities for participation increase, it may not be possible for every citizen to make full use of those opportunities (Mees et al. 2017). In this context injustice can be defined, if stakeholders are not appropriately able to defend their interests. If some stakeholders have more possibilities to participate than others, this can be considered inequitable. Typically, this type of concern is captured in the term *procedural justice and equity*, clearly distinguishable from so-called *distributive justice and equity* which also has a prominent place in flood risk management (more elaboration on types of justice, equity and legitimacy in section 4.2).

## 1.2. Research aim and questions

In this research, I want to provide insight in how policy makers deal with the aspects of procedural justice in flood risk management in the Netherlands. In order to do so, I will analyse the perception of procedural justice by governing institutions and how they act upon it. Then, with the aim of uncovering the critical factors in pursuing procedural just policy, I want to interpret the underlying value structures.

In order to do so, I need to identify which government institutions are acting in the governance process and when these institutions consider aspects of procedural justice. Secondly, in order to explain the behaviour of policy makers, it is necessary to understand what aspects of procedural justice they consider to be relevant in the context of the project. In terms of the actual procedural justice that is achieved in the project, it is relevant to assess the influence that different government bodies have and how they evaluate and justify that influence.

### 1.2.1. Flood risk governance in the Netherlands

Considering the Dutch flood risk governance scene, multiple government actors are involved. This concerns the national ministry, the regional water authorities, the provinces and the municipality. Principally, each of those actors has the responsibility to act in the pursuit of procedural justice. From their own role, each of those government actors influences the participation process. Therefore, I consider it relevant to assess the perception of procedural justice at all involved government levels. However, the regional water authorities ('waterschappen') will get most attention, as they are the most central government body and have most of the responsibilities regarding flood risk management projects.

The Highwater Protection Programme ('hoogwaterbeschermingsprogramma'), which includes the vast majority of dike reinforcement projects in 2018, is ultimately the responsibility of the minister of 'Infrastructuur en Waterstaat', but especially regional water authorities ('waterschappen') are concerned with the implementation of the projects (Programmadirectie Hoogwaterbescherming 2015). I want to analyse what elements of procedural justice were included in the guidelines from overarching bodies like the ministry, the overarching body for Water Boards ('Unie van Waterschappen'). Secondly, I want to analyse to what extent the Water Board, that is coordinating the project, applies procedural justice elements. Thirdly, I want to analyse the local and regional governments, who are stakeholders in the process. As these actors represent the interests of citizens, they can be influenced by other stakeholders and be responsible for the common interest at the same time.

**Table 2:** Found elements of procedural justice (compiled from Alexander et al. (2018), Mees et al. (2016), Skelcher and Sullivan (2017), van Buuren et al. (2012))

Equal access to information
Transparency
Accountability
Equal consideration of interests in decision making
Equal possibility to influence decisions
Equal possibility to challenge decisions
Inclusion on basis of affectedness
The goal of eliminating disparities
Promoting joint decision-making
Involvement of stakeholders in the final decision

### 1.2.2. Elements of procedural justice and equity

For assessing procedural justice, one needs a clear framework of mutually (non-overlapping) exclusive elements, that together enclose the complete concept of procedural justice. For instance, Begg et al. (2018) used the five principles of Hunold and Young (1998). Such frameworks are necessary to construct a relatively objective and comparable image of procedural justice, but they also choose a specific approach of the procedural justice concept. Especially around this concept, choosing a specific



approach is very relevant as it is conceptualized in various disciplines of science, e.g. philosophy, law, sociology, organizational psychology and social psychology.

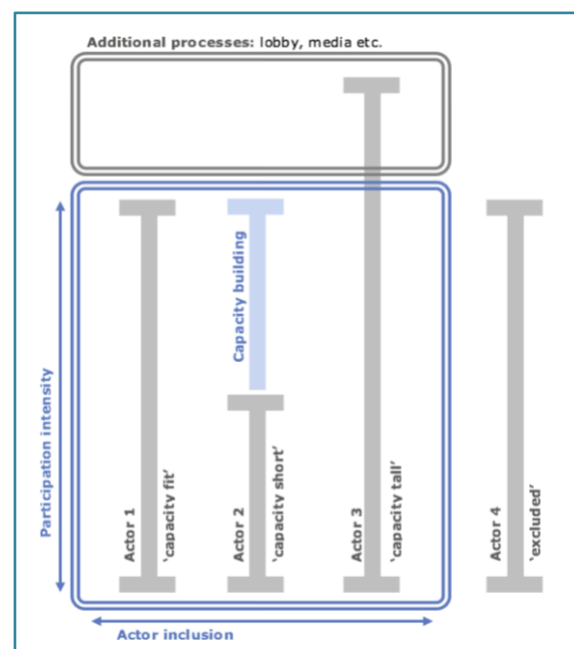
**Table 3:** Subdivision of different types of resources, which determine the capacity of citizens

<b>Knowledge</b>	Technical knowledge / expertise
	Procedural / practical / social knowledge
<b>Social capacity</b>	Network / social capital
	Level of organisation
<b>Economic capacity</b>	Time / human resources
	Finances

As I aim to assess the government perception rather than the procedural justice itself, it would be limiting and steering the results by choosing a certain framework beforehand. Instead, I want to observe and interpret how government bodies conceptualize procedural justice. However, I do need to know what aspects can possibly be contained within the concept. The aspects of procedural justice that I found in literature are presented in table 2.

The concepts named above are too general to assess. A lot of them could be considered inherent qualities of participatory processes. I would like to focus on the incongruity between the opportunities and the abilities of citizens to participate as a stakeholder. This tension field is schematically illustrated in figure 1. Typical questions that come forward from this representation regard the extent to which actors are able to make use of their opportunities, and where differences between actors' capacities can originate from.

When talking about the capacities of citizens, three basic types of resources can be distinguished (table 3). What is important to recognize, is that these resources are interchangeable to a large extent: knowledge and social capacity can be gained by investing economic capacity, finances or human resources can be attracted by a network etc. This makes it difficult to assess the actual capacity of stakeholders, and more sensible to present them as a single size (as in figure 1). Also, portraying citizen capacity as one-dimensional is a major simplification, as it consists of several elements (table 3).



**Figure 1:** The opportunity-capacity model. An illustration of the ways in which the facilitating actor can influence (in blue) the performance of citizens. Elements of the perceived role by citizens are not represented.

### 1.2.3. *Institutionalisation of procedural justice and equity*

The current perception of government perception of procedural justice, especially in a few case studies, may not necessarily give a representative image for all participation processes in flood risk management at this moment, let alone in the future. In order to get a sense of the extent to which procedural justice is rooted in policy making, it is most relevant to assess the institutionalization of procedural justice elements.

Constitutive features of interactive governance in general, of which procedural justice could be considered a product, has been theorized in the past to be an 'institutional void' or found to be an institutional deficit (Hajer 2003). As elaborated on by Sorensen (2010), this is not necessarily the case. Instead, institutionalisation in network governance can be subtle and informal. The underlying 'logics of appropriateness' (March and Olsen, 2008) are not necessarily reflected to their full extent in government institutions. In the policy domain of flood risk management in the Netherlands, one could easily argue that the governance, though increasingly interactive, is highly institutionalized in rules and regulations. Therefore, I think this policy domain provides a particularly suited case to find out how procedural justice can or cannot be embedded in interactive governance.

### 1.2.4. *Research questions*

The main research question that I will try to answer in this thesis is the following:

***How is procedural justice institutionalized in policy practices in participation processes in flood risk management in the Netherlands?***

I will answer this question by the following subquestions:

- 1. Where and how is procedural justice considered in the participation process?**
  - a. At what policy stages are elements of procedural considered?
  - b. How is procedural justice perceived by government and non-government stakeholders?
- 2. What dynamics influence the appearance of procedural justice issues?**
  - a. What elements/characteristics of the participation process influence whether procedural justice issues are substantial?
  - b. What dynamics determine how procedural justice issues is perceived?
- 3. Why do procedural justice issues appear in the participation process as they do?**
  - a. What views of the role of the government and value structures are underlying?
  - b. What policy structures and practices of governance are explanatory?

The word 'institutionalized' in the main research question may be slightly misleading, suggesting that procedural justice is a standard element in this specific policy domain. However, this may not be the case, as procedural justice elements may be barely considered by the different stakeholders as well as facilitators. The research question therefore aims to explore where procedural justice elements (potentially) appear, and reveal the constituting social mechanisms and institutional structures.

By answering question 1, I aim to describe the appearance of procedural justice in the analysed case studies. In question 2, I aim to reveal the causal relationships in the participation process, that contributed to the appearance of procedural justice issues. Dynamics of participation processes, as described to be relevant in literature, will be applied. In question 3, I aim to find key institutional elements or underlying structures that give rise to the observed dynamics. Potentially, such elements

can be generalized to other situations and forms of participatory governance. The theories that are potentially applicable to this question are discussed in section 4.3 and 4.4.

I decided to address procedural justice and equity in general in the research questions, rather than specifically addressing the opportunity-capacity incongruity (section 3.2.). The reason for this decision, is that I found that many elements of procedural justice (table 2) can overlap and strongly interact. Therefore, the way in which opportunities and capacities do (not) fit, is not likely to be so clear-cut as figure 1 may suggest. Also, the opportunity-capacity incongruity concept has not been described as such in literature, though a potential lack of resources for stakeholders was pointed out by Beggs et al. (2018) and Thaler and Levin-Keitel (2016).

### 1.3. Methods

The execution of the research will be executed in four steps: (1) selecting the cases, (2) analysing policy documents, (3) interviewing and (4) structuring the information. Generally, I will have a deductive approach by observing the procedural justice issues; trying to find procedural justice elements as described in the research objective. Regarding the perceptions, reasoning and justifications by policy makers, my research is inductive. I will try to compromise those observations when analysing.

#### 1.3.1. Selection of cases

Most, possibly even all large-scale flood risk management projects in the Netherlands are currently assembled under the national ‘high water protection programme’ (hoogwaterbeschermingsprogramma). Most of the currently ongoing projects have been characterized in levels of participation (programma bureau hoogwaterbescherming 2017). The categories have been adapted to the classical *participation ladder* (Arnstein, 1969) and explain to what extent citizens are part of the decision-making process. The categories range from no public involvement at all to self-governance by citizens. Most flood risk management projects in the Netherlands have participation in category 2, where citizens are able to give their opinion and ideas about the plans (figure 2). The projects in category 3 allow citizens to contribute to the planning alternatives (co-creation) and have a say in the decision (co-decision).

I chose to investigate projects in the “category 3: deciding together” (displayed in figure 2). I prefer this level over “category 2: public consultation”, because it is a higher level of participation, and thus requires more capacity for the citizen in order to participate fully. Therefore, the opportunity-capacity incongruity is likely to be more apparent. As the time for this research is limiting, I expect to analyze the cases in-depth only when I stick to one category.

#### 1.3.2. Analysis of policy documents

Prior to interviewing, I want to analyse all policy related documents available on the case studies. Essentially, aspects of procedural justice which are embedded in documents could be considered formally institutionalized. It is important to have this as prior information for the interviews.

From the policy documents, I want to filter out any elements that could be assigned to procedural justice or equity. The list of elements of procedural justice (table 2) will be checked. Also, I will interpret to what extent the different types of stakeholder capacities (table 3) are taken into account.

#### 1.3.3. Interviews

By interviewing stakeholders, I will get a better understanding on the state of procedural justice in the project. These will also give me an idea of the perceptions that are present among the participants. Then by in-depth interviews with government actors, I want to explore the lines of reasoning that are

applied to determine whether procedural justice is considered to be an issue and if actively pursuing it is necessary.

In order to go into depth in analysing the cases, I want to do several observations and interviews per case. In total, I expect to do 5 to 10 interviews per case study. I will record the interviews so I can later transcribe them word-by-word.

#### 1.3.4. *Interviewing government actors*

The goal of interviewing government actors is to reveal the informally institutionalized elements of procedural justice. However, by interviewing one person, I can only observe the perceptions of this person. In order to get a sense of the institutionalized elements, I want to compare the results, summarized in a table like table 4.

Basically, the government actors can be separated in national authorities (Rijkswaterstaat), regional water authorities (waterschappen), provinces and municipalities. Regional water authorities normally have the facilitating role. Depending on the participation process, it can be suitable to interview several persons that belong to the same government entity.

Ideally, I would meet the stakeholders and do observations before interviewing government actors. In that way, I can discuss situations that occurred and perceptions that stakeholders have. In that way, the previous findings will structure the in-depth interviews.

For the interview, I want to use semi-structured questions. The advantage of open questions is that it provides space for the interviewee to set their own context as a valuable part of their perception. In this way, the interview cannot be biased by suggesting certain answers.

#### 1.3.5. *Interviewing non-government stakeholders*

In order to get a complete picture of the case, I want to interview stakeholders. These interviews can be group interviews, supplemented with informal conversations depending on the situation where I meet them. However, in a group interview participants are probably not able to express their complete personal perception of the procedural justice issues, due to group pressure. Therefore, semi-structured interviews with the participants are more ideal. Preferably, I will approach stakeholders at the participation meeting. Also, I will ask for a list of involved citizen groups from the project manager.

Government actors can be stakeholders as well as facilitators in the process. Regarding the facilitating role and their profession as server of the public, the government actors bear more responsibility for the (lack of) procedural justice in the process. Therefore, the types of questions asked to government actors are different from those asked to other stakeholders.

#### 1.3.6. *Data structuring*

After the data has been collected from document analysis and interviews, it needs to be structured. In order to compare several case studies, I want to summarize each case study in one table. In this diagram, I want to register how the perception and responsibilities for procedural justice propagate through the process.

### 1.4. *Outline of the report*

Chapter 4 will introduce the main scientific information and theoretical concepts, which are used in this thesis. First, the development of flood risk management (FRM) in the Netherlands is described, as a context for this research. Then, the origin of the concept procedural justice and the different

disciplinary approaches investigating this topic are outlined. The chapter ends with a short summary of observed dynamics in participation processes that could be relevant in this research.

In chapter 6 up to 9, the case studies will be elaborated on one after another. Chapter 6 shows an overview of the documents and interviews analysed for these case studies. In chapter 7, the observations are then compared and placed in the national perspective. This analysis is then used in combination with the case study findings, in order to get a reasonable sense of the level of institutionalisation of procedural justice. In chapter 8 this analysis is used to answer the research questions. Chapter 9 discusses the validity, relevance and recommendations for further research.

## 2. Literature review

Procedural justice and equity can be seen as a subdomain of legitimacy. The concept procedural justice is approached slightly different by different research disciplines. Previous research on the government perception on legitimacy of flood risk management describes several rationales that can be applied.

### 2.1. Development of FRM in the Netherlands

Flood risk management in northwest-Europe in the past century can be characterized by a general shift *from government to governance*, among which an increase in public participation. In the past decade, research concerning these participation processes, was carried out

The concept of governance describes policy making by interaction between multiple actors, rather than a government structured, hierarchical process. Private parties and civil actors get a larger role, and take more responsibility in the decision-making process. Yet in the sixties, Ostrom et al. (1961) described the political system to be polycentric, rather than government-centred. Peters and Pierre (2001) observed that the state had become increasingly multi-level, with a larger role for subnational authorities. This change further reduced the role of the state to a negotiation partner. Termeer et al. (2010) linked the network society to a more adaptive type of governance. They identified the scale or level at which governments approach societal issues as a crucial factor. Also in the policy fields of managing environmental risks, governments have become one of the many actors in the governance process (Leroy and Arts, 2006).

In flood risk management in particular in northwest Europe, the overall trend *from government to governance* appears from an increase of public participation, mostly stakeholder engagement (Mees et al. 2014, Thaler and Levin-Keitel 2015, House 1999, Rinaudo and Garin 2005). Stakeholders are citizens, often organized in groups, with a personal interest in the local project. Such stakeholder engagement processes even give opportunity for citizens to coproduce in the spatial planning (Mees et al. 2016). In this context, coproduction means that citizens can actively propose and discuss planning alternatives. According to Glucker et al. (2013), governments can have basically three different reasons for allowing public participation in environmental risk policy; (1) to empower marginalized groups, (2) to prevent or resolve conflicts in the decision-making process or (3) to reach a better outcome decision. Along the same lines, Mees et al. (2016) describes an efficiency, resilience and fairness rationale for adopting public participation in flood risk management. Though also subjected to criticism (e.g. Cleaver 1999, Cooke and Kothari 2001), public participation and stakeholder engagement have become a principle of *good governance*, in standard prescriptions by the EU (European Commission 2001) and OECD (OECD 2015).

#### 2.1.1. Procedural justice in policy making

In recent years, a lot of research has been done on the appearance of procedural justice and equity in participatory forms of flood risk management (Begg et al. 2018, Edelenbos et al. 2017). Especially in the UK, Germany and the Netherlands projects have been analysed, and it was concluded that more issues of procedural justice arise with increasing bottom-up and co-production forms of participation. There is less known about the way that government bodies handle those issues. As stated in the previous paragraphs, it is unclear to what extent public authorities actively try to increase procedural justice or equity. This is the knowledge gap that I would like to address in this thesis.

Van Buuren et al. (2014) state that continuous learning can be considered a threat to legitimacy by policymakers, as it can slow down the process and lead to less favourable outcomes from the engineering perspective. It could also be the case that policymakers are unwilling to view the participatory process as a clash of interests, in line with Doorn (2016), who illustrates how stakeholder participation can be more effective when discussing underlying values, rather than actual interests.

Most likely, government bodies will need to balance fairness of procedures with other values. For instance, policy effectiveness or efficiency may be conflicting with procedural justice. This can occur when a fair procedure is costly or brings forth policy that is not attaining the prior set goals. In the words of Mees et al. (2017), public authorities need to increase legitimacy as well as resilience and efficiency. In this research, I want to identify the specific trade-offs in practice and how those are made. Hypothetically, making this trade-off could be a complicated consideration for government bodies, as they can have a double role: On the one hand, they are arranging and facilitating the participatory process but have a stakeholder position as well. Specifically, authorities represent the public interest, often with flood safety as their main priority. It would be interesting to have more insight in how such considerations are made, and what perceptions and motivations play a role. A more elaborate description of the political dynamics around the stakeholder process can be found in section 5.3.

### 2.1.2. Development of flood risk governance in the Netherlands

Located in a river delta, flood risk management is inherent to living in the Netherlands. Presumably because of the history of flood protection by the authorities, the national government is still very dominant in the flood risk management domain (Fliervoet et al. 2016) and flood protection is perceived by citizens to be a responsibility of the government (Mees et al. 2016). Flood protection in the Netherlands is highly integrated with spatial planning, successfully implementing the EU flood directive on that point (Hartmann and Spit 2016). Spatial aspects of FRM projects are analysed in the water assessment ('watertoets').

In the Netherlands, stakeholder engagement in flood risk management has become more common since the Room for the River projects, triggered by the record-breaking river floods of 1993 and 1995 (Warner et al. 2012) and mostly executed between 2007 and 2016 (Ruimte voor de Rivier, 2016). Stakeholder engagement is becoming a standard element of major flood prevention projects, but most often it is limited to low levels of participation, like information sharing or public consultation (When et al. 2015a), illustrated in figure 2.

According to Van Buuren et al. (2010) and Edelenbosch (2017), stakeholder engagement in the Netherlands can also be self-initiated. As described by Warner et al. (2013a), an orchestrated participation process can be a window of opportunity for citizen groups to position themselves as essential stakeholders. However, forms of coproduction are incidental and experimental (Mees et al. 2016). In the projects executed in 2018 (figure 2), the six projects which are characterized as 'deciding together', most likely have forms of coproduction.



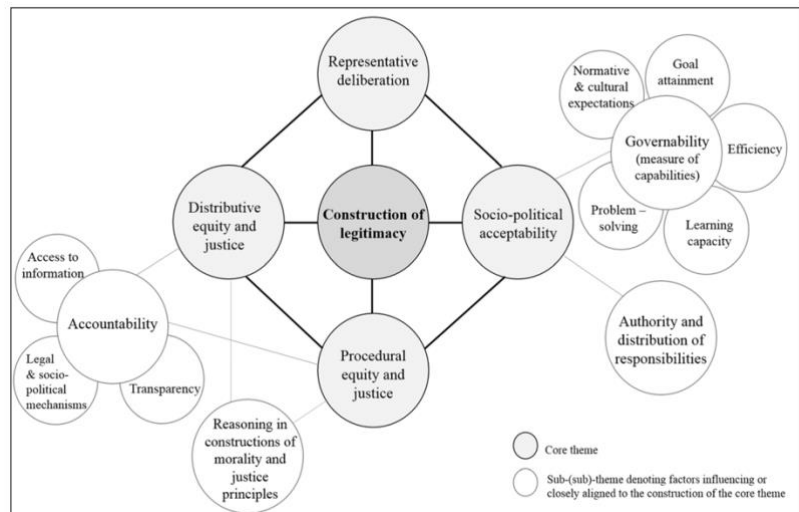
**Figure 2:** Overview of ongoing dike reinforcement projects in the Netherlands in 2018, with classified participation levels. Adapted from Programmabureau Hoogwaterbescherming 2017, p 132.



## 2.2. The conceptual context: legitimacy

The term legitimacy may appear to be rather specific at first sight, but in the broad interpretation this concept includes all qualitative aspects of flood risk management policy. In that sense, the concept of legitimacy can be considered the basic virtue behind ‘good governance’ (European Commission 2001, OECD 2015).

As outlined by Alexander et al. (2018), a lot of scholars have recently started to answer the questions of legitimacy in FRM with different approaches, especially in England, Germany and the Netherlands. As shown by them in figure 5, the umbrella concept of legitimacy can be subdivided in (1) distributive justice, (2) procedural justice, (3) representative liberation and (4) socio-political acceptability. Comparably, Mees et al. (2016) break down the legitimacy concept in input-, throughput- and output legitimacy. Roughly, input- and throughput legitimacy overlap with Alexander’s ‘accountability’, whereas output legitimacy coincides with ‘governability’ (figure 3). In order to cover the complete legitimacy domain, the following distinct but often overlapping qualities of flood risk management should to be taken in account when speaking about legitimacy: representative deliberation, accountability, transparency, access to information, clear socio-political mechanisms, efficiency, goal attainment, problem solving, learning capacity and meeting cultural expectations.



**Figure 3:** decomposition of the umbrella concept ‘legitimacy’ in FRM, by Alexander et al. (2018).

Social equity and/or justice can be considered as an underlying moral goal of legitimate FRM, although often indicated as a specific aspect. Often, a distinction is drawn between so called distributive and procedural justice. Distributive justice typically refers to the distributions of advantages and risks among citizens (“fair share”), from the intuition that nobody has inherently more rights to profit or lose from our common environment. In FRM, this type of justice can be mapped as a result of its spatial



nature, e.g. upstream versus downstream risks (e.g. Thaler and Hartman 2016), or one or the other side of the river (ref). On the other hand, procedural justice refers to the fairness of the process ("fair play") rather than the resulting distribution.

The debate on procedural justice is very close, if not largely coinciding, with the debate on democratic representation or representative deliberation (Alexander 2018). Democratic legitimacy can be subdivided in three elements: (1) accountability, (2) voice and (3) due liberation (Skelcher and Sullivan 2007; van Buuren et al. 2012). When elaborating on those elements in terms of input, throughput and output legitimacy, one can notice that the research questions in this proposal are largely fitting with the input and throughput legitimacy (figure 4). However, Van Buuren et al. (2012) seem to focus on the opportunities to participate without taking into account the capacities of stakeholders.

	Input legitimacy	Throughput legitimacy
<i>Accountability</i>	Who is accountable for organizing the participatory process? What are the formal agreements about interaction between the formal political/administrative process and the participatory process?	How is feedback in the process between process interactions and accountable actors arranged? What is the frequency and content of the interaction with elected representatives?
<i>Voice</i>	How is the involvement of stakeholders arranged at the beginning of the process (what are the selection rules for participation)? On which issues can they give their input?	What opportunities do actors have to participate in the actual process? What opportunities are there for entering and resigning from the process?
<i>Due deliberation</i>	Is there equal access to information, knowledge, etc. at the start of the process? Are the procedures transparent, clear and understandable?	How are procedures for participation entwined with more formal administrative procedures for planning and decision-making? Are actors satisfied with the transparency and equity of the process?

**Figure 4:** The elements of democratic legitimacy in terms of input and throughput. The column with 'output' has been left out. From: Van Buuren et al. 2012

## 2.3. Research on procedural justice

### 2.3.1. Different disciplinary approaches

The term procedural justice has traditions in several research disciplines. In the next paragraphs, notions from social psychology, political philosophy and planning practices will be explained.

In the social psychology tradition, procedural justice is about balancing self-interest and group value. Lawrence et al. (1997) was the first to apply the concept to public participation in the environmental domain. In the psychological context, justice or fairness is inherently subjective and only true in the 'eyes of the beholder'. Necessarily, overall procedural justice was measured by the perceptions of the individuals. Immediately, questions arise about generalizing the individual perceptions.

In the 2000's, political scientists have been answering the 'composition issue' by approaching procedural justice from a philosophical tradition. Depending on your school of thought, you could say that justice can be reached by abiding general principles in the governance system. The three schools of thought that are brought up repetitively are *utilitarianism*, *liberalism* and *egalitarianism* (e.g. Thaler and Hartmann 2016, Begg 2018). Utilitarianism focusses on optimizing the gain for society. Liberalism promotes individual responsibility over state intervention, entrusting a fair process to the free market. Egalitarianism wants equal opportunities through the equal distribution of goods. Therefore, the focus

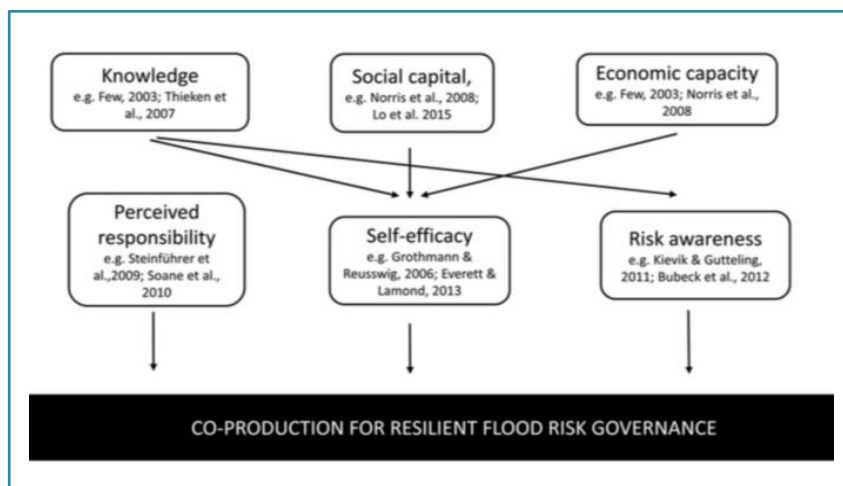
of this thesis on the 'opportunity-capacity incongruity' could be characterized as an egalitarian approach.

As described by Van Buuren et al. (2014), planners and policy makers can legitimize their public participation strategy from three different perspectives. The three perspectives that are distinguished by them are the legal, planning and network perspective. In the legal perspective, fairness depends on legislation and acting according to the law. In the planning perspective, actions are legitimate when they serve the end goal, in this case often flood prevention. In the network perspective, democratic representation is valued the most. Values of *egalitarianism* fit the most in a network perspective.

### 2.3.2. Conditions for participation

The strategies applied by citizens are found to be a critical factor for effectiveness of stakeholder groups (Edelenbos et al. 2017), especially in self-initiation of participation. The next question is then: what factors determine if stakeholders use effective strategies? Several aspects of the stakeholder engagement process can limit the possibilities for citizens to defend their interests as shown in figure 5 (Mees et al. 2017).

First of all, the arrangement of the participation process shapes the opportunities for citizens to participate. Generally, forms of bottom-up co-planning are considered to give citizens more influence than a single interactive presentation at the end of the project designing phase (e.g. by Few et al. 2007). The particular citizens invited can make the process more or less inclusive, and the quality of communication can make it more or less accessible (Alexander et al. 2016). Also, stakeholders may not always have the true say in the end decision. This may be the case

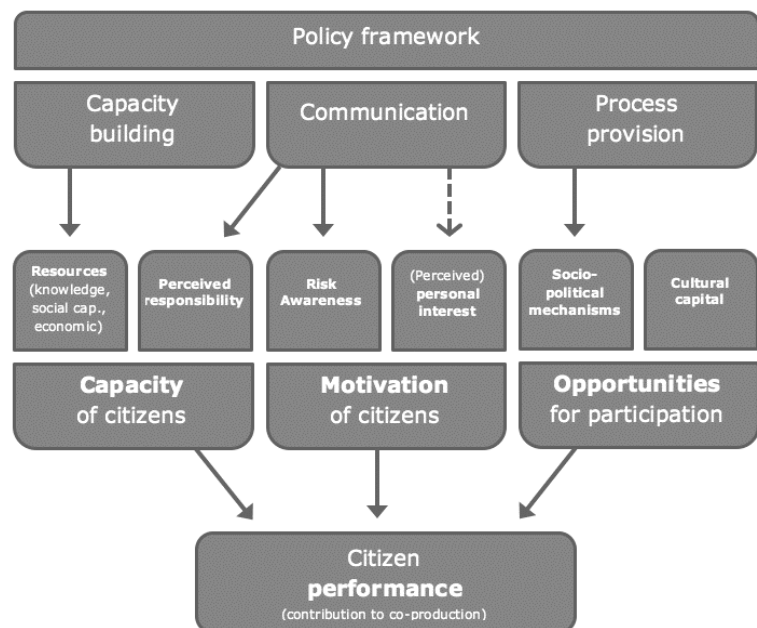


**Figure 5:** Conditions (limiting factors) for co-production (stakeholder participation) by Mees et al. (2017)

when a cacophony of opinions arises (van Eeten 2001) and when the decision is depoliticized in a fuzzy process (Vink 2015, Roth et al. 2017). Further elaboration on the dynamics in participation processes can be found in section 7.2. Secondly, citizens appear to have a certain perception of their responsibility in order to perform; they need to know their role and they need to be aware of their own interests. For some citizens, their role might be more self-evident than for others. Therefore, a well-communicated and clear responsibility distribution are essential to establish procedural justice as well as equity. Third, effective stakeholder engagement may require a lot of *resources* (Thaler and Levin-Keitel 2016): knowledge, social capital, time and finances. Stakeholders may fall short in one or more of these, and most likely some may have more resources available than others. This mismatch of opportunities and capacities is a central hypothesis in this thesis, and therefore elaborated on in section 3.2.

### 2.3.3. Policy for procedural justice and equity

Theoretically, the conditions for justice and equity in participation can be met by government measures and policy design, or at least the situation can be influenced (e.g. Sampson et al. 2014) as shown in figure 6. Such policies are characterized as capacity building (Kuhlicke et al. 2011), striving for empowerment of stakeholders (Rowlands 1995, Barnaud et al. 2011). Globally speaking, a well-designed participation process is inclusive and just, and provides equal opportunities to all stakeholders. For a clear perceived responsibility, communication by the facilitating body is essential. A lack of resources can be supplemented by so-called social capacity building and empowerment, which can come in many forms depending on the lacking resource. For instance, a lack of technical knowledge may require an expert lecture, or a lack of social capital (Twigger-Ross 2016) can be improved by networking activities. However, it is currently not well described in literature to what extent such measures are applied.



**Figure 6:** An overview of the potential limiting factors for citizens to participate in a stakeholder engagement process, with the potential interventions by government actors in the top row.

Noted by Van Buuren et al. (2012), communication is often done very professionally, especially in the case of the 'more modern' governance. It could be that the communication is done very well at the highly participatory projects, because of their experimental status.

### 2.4. Observed dynamics in participation processes in FRM

In making trade-offs about procedural justice, governments have to deal with *normative uncertainty* about future scenarios (Vink et al. 2016). Their notion is that government officials cannot know beforehand what values and norms they will be held accountable for. The suggestion made by Vink et al. (2016) is that governments deal with this uncertainty by *puzzeling*, the process of interpretation and meaning-construction, and *powering*, exercising political power, drawing on theory by Hoppe (2011).

Paradoxically to its open and transparent nature, stakeholder engagement may reduce the clarity of the public debate. As described by Van Eeten (2001), plenty of opportunities to voice interests may reduce the debate structure. In a cacophony of opinions, stakeholders may be unable to position themselves and formulate arguments strategically, as it is unclear who their real opponent is. The transfer of responsibility from government actors to the stakeholders makes it difficult to protest or resist against the dominant development of plans. This situation may even lead to a *political bystander effect*, where all actors hesitate to take a political stance and stick to non-political frames. It may then be most prevalent to frame the issue as a technical problem. Along the same lines, Vink (2015) and

Roth et al. (2017), describe the stakeholder engagement process as a fuzzy process that depoliticizes debates between clear differences of interest.

As described by Van Ast and Gerrits (2017), there is often no obvious division between stakeholders and experts. In some situation or specific issues, stakeholders may be experts. On the other hand, actors that are brought in as experts are often connected to an organization with a specific interest, thus acting more as a stakeholder. Also, as knowledge of experts is often presented as uncontested, the more expert knowledge is provided, the less space for debate and public participation remains.

Michels (2016) notes three lines of argument among policymakers for involving the public in flood risk management: the first argument focussing on awareness and responsibility, the second argument states that participation increases support for policies and the third argues that participation stimulates innovation through social learning. It was observed that the arguments for awareness-raising were most dominant. Glucker et al (2013) also notes a specific rationale that focusses on empowering marginalized groups. Mees et al. (2016) distinguishes the resilience rationale, the efficiency rationale and the fairness rationale in legitimizing stakeholder engagement. Maybe, these reasons for adopting participation processes in flood risk management projects can be traced back when talking about the legitimacy of the participation.

### 3. Case studies

In order to answer the research questions, the public participation of three dike reinforcements in the Netherlands were examined. The analysis consisted of formal policy documents, combined with interviews. The primary interview subjects were officers who are responsible for the participation process. An overview of the analysis is presented in table 4.

This chapter will start by elaborating on the selection of case studies in section 3.1., then presenting the results of the case studies A, B and C in the next three sections. Each of the case study analysis will describe the documents and the interviews respectively. At the end of each section, general findings are summarized.



**Figure 7:** Locations of the case studies A, B and C.

**Table 4:** gathered information in the research

Case study A: Noordelijke Randmeerdijk	Case study B: Apeldoorns Kanaal	Case study C: Sterke Lekdijk Wijk bij Duurstede - Amerongen	Analysis on national level
Moderate size project, independently organized	Moderate size project, independently organized	Moderate size project, part of series of projects	n.a.
Participation by open sessions and a citizens' group	Participation by open sessions and a citizens' group	Participation by open sessions, a designing group and subgroups	
2 documents	2 documents	5 documents	1 document
1 interview	2 interviews	7 interviews	2 interviews

#### 3.1. Selection of case studies

The first selection of case studies was made according to the participation level, described in section 4.3.1. After that, it was narrowed down to three case studies on the basis of practicalities, in conversation with the regional water authorities.

Several projects that were on the original list, were eventually not researched. The Grebbedijk project, at *Waterschap Vallei en Veluwe*, was not looked further into as other researchers of Wageningen University already planned to investigate this case. To prevent any disturbance of this research, I was advised not to contact the project management and I followed this advice. Further looking into the project *Dijktraject Gorinchem-Waardenburg* of *Waterschap Rivierenland* revealed that the level of participation appeared to be less intense than expected. From the project communication, it was deducted that it consisted mostly of presentations to the public and expert meetings. Therefore, the project management was not contacted at first instance. As it turned out I had plenty of opportunities to investigate other projects, it was left uninvestigated. It appeared that the exploration phase of the Alexanderhaven project at Roermond of *Waterschap Limburg* was finished, and that it had been mostly local corporations that had been involved. As this research focusses on interactions between governments and citizens, this project was found not to be suitable.



### 3.1.1. Selection of case study A

Originally, the dike reinforcements of de Noordelijke Randmeerdijk (NRD) were planned to be a major plan within the Hoogwaterbeschermingsprogramma. Because of the intensity of the measure, an elaborate participation process was meant to be set up. An elaborate inventory of the interests of stakeholders was made in 2017.

However, in conversation with the project management, they explained that most of the elaborate participation process will not be executed as planned. This was decided because the exact calculations on the dike strength proved that less intense measures will be needed in this area. The preparation phase of this project is elaborate and completely finished, but it is not very sensitive because of the limited actual participation process. For this reason, the case study provides an excellent opportunity to investigate the preparation of the participation by the regional water authority (Waterschap Vallei en Veluwe). An interview was planned with the relational officer and an advisor to discuss the preparation phase.

### 3.1.2. Selection of case study B

This case was brought to attention by the project managers of the Noordelijke Randmeerdijk project (case study A, at the same regional water authorities). In February 2018, the preference scenario (voorkeursalternatief) has been approved for this project. Therefore, this case is ideal in order to look back at the complete exploratory phase, that led to the preference scenario. Contact with the relational officer was arranged through the regional water authorities, and resulting from that an additional interview with the independent chair of the citizen group was performed.

### 3.1.3. Selection of case study C

At the moment of this research, the project *Sterke Lekdijk* is the largest representative projects where a participation level of 'deciding together' is carried out. It is carried out by the regional water authorities hoogheemraadschap De Stichtse Rijnlanden (HDSR). This project consists of several subprojects, each concerning a separate part of the dike.

The two subprojects that were carried out at the time of my research, were subtrajectory Wijk bij Duurstede-Amerongen and subtrajectory Salmsteke (red and pink in figure 8). Both of

them are in 2018 in the exploratory phase. In a discussion with managers of HDSR, I came to an understanding that the trajectory Wijk bij Duurstede-Amerongen was by far more suitable for my research than the subproject Salmsteke, as in the first there is a larger variety of stakeholders and stakes and more opportunities for additional initiatives. In the subproject Salmsteke, it mainly concerns farmers and state actors, so there would be fewer interactions between different citizen groups.



**Figure 8:** Subprojects of the dike reinforcements *Sterke Lekdijk*. The subproject Wijk bij Duurstede – Amerongen is in red and Salmsteke in pink.

Starting with the relational officer, and using his contacts for other stakeholders, six interviews were eventually performed in the subproject Wijk bij Duurstede-Amerongen. Occasionally, some stakeholders referred to the other subprojects among which subproject Salmsteke.

### 3.2. Case study A: De Noordelijke Randmeerdijken

The analysis of case study A consists of two documents and one interview. The first document is a report called 'omgevingsanalyse', analysis of relations. The second is an infographic in which all the relevant stakeholders are listed. The interview was conducted with both the relational officer of the project, and her advisor.

#### 3.2.1. Project description

The project of De Noordelijke Randmeerdijken is being governed by Waterschap Vallei en Veluwe. In its original form, the project concerns a dike reinforcement of about 40 kilometres. Originally, this dike protected the land from a shallow bay called the Zuiderzee (Dutch for 'Southern Sea'). Since this sea was closed by the Enclosure Dam in 1932 and part of the bay was reclaimed to be the province of Flevoland, it is no marine dike any more. Instead, a band of narrow lakes remains between the reclaimed land of Flevoland and the mainland, the Randmeren ('border lakes'). At the Noordelijke Randmeerdijk, this concerns the Drontermeer and the Veluwemeer.

#### 3.2.2. Analysis of documents

The documents gathered in case study A is limited to an 'analysis of relations' and a detailed overview of stakeholders. Because of the early stage of this project, no other documents were available.

##### a. Analysis of relations

The analysis of relations (Dutch omgevingsanalyse) was made as an inventory in the beginning of the exploration phase, before inviting citizens for a first information session. The document was composed by the relational officer and her advisor.

In the document, it is stated that the aim of the participation process is to get an overview of all interests and preferences of stakeholders, to generate public support (draagvlak), to generating cooperation from all relevant actors and to increase the quality of the design. As one of the general starting points of the participation process, it is stated that *the legal opportunities for participation are the closing piece of the process, but insufficient for taking the interests into account early and seriously*. [D1; p11]. It is clear how the objective of the relational management is to gather information for the decisive body. It is even explicitly stated how *relational management is not about decision making* [D1; p6]. However, apparently conflicts of interest are to be discussed. [D1; p7]. It is unclear what should be the result of this discussion if the decision is not to be made.

Several aspects are considered in description of types of stakeholders. A basic distinction is made on interests (nature, culture, recreation, agriculture) and the opportunities for synergy (meekoppelkansen) are outlined for all stakeholders. Regarding the capacities of citizens, these are not explicitly named, but it is stated that *it is the responsibility of the project management to create a safe and creative space where all different types of stakeholders can take part in the designing process*. [D1; p11]

##### b. stakeholder analysis

The second document consists of a schematic overview of all stakeholders considered that somehow involved in the project. In line with the description of different types of stakeholders, all stakeholders are specified.

### 3.2.3. Analysis of interviews

In case study A, one interview was conducted with both the relational officer and her advisor. Findings regarding procedural justice are described in the next section, and summarized in table 5.

**Table 5** : summary of the procedural justice perceptions in case study A

	Perception of relational officer and advisor
Perceived elements of procedural justice that are relevant	Good citizen representation. Knowledge and time are relevant to the extent that no one complains about a lack of knowledge and time.
Perceived level of procedural justice	All relevant citizen groups were represented.
Perceived responsibility to influence procedural justice	Elaborate information should be provided. The timeframe of the meetings should be accessible. Officials of other government actors should be on the same line. For as long as no one complains, no further action is to be taken.
Perceived ability to influence procedural justice	If citizens choose themselves not to participate, we cannot force them to.
Perceived success of influencing procedural justice	As all citizens had the opportunity to voice their concerns, and the democratic board would weigh their input in the final decision, the procedure is justified.

#### a. relational officer and advisor

Inclusion of citizens, by representation in the citizens group, was considered by the relational officer of the regional water authorities. Other aspects of procedural justice, were apparently not dealt with explicitly. In the interview with the relational officer and her advisor, a lot of assumptions were (implicitly and explicitly) posed that would reduce the risk of any justice issues.

For example, when asked for the informal ways that citizens can influence the project, the relational officer states

*They can call us. They can call us and tell us what they think. [I2; 69]*

Then when asked if that actually happens, the advisor explains that they receive this type of feedback from citizens primarily on information evenings. When asked for the alternative ways that citizens could have influence on the planning, she answers with another assumption that different types of interests will be heard.

*There are several types of people [...]. So it (essential information) reaches us. [I2; 82]*

Then, the advisor adds that a good representation in the citizens' group will result in opinions being heard:

*"And the representatives were chosen by themselves. So we didn't select those. (So it was legitimate / so all citizens were heard)" [I2; 84]*

When asked about the knowledge of citizens, the relational officer explains that the plenary meetings are meant to inform them about course of the participation process [I2; 128]. The advisor explains how they try to make the technical knowledge understandable, *so your father or mother would be able to understand it. [I2; 139].*



“The citizens are not stupid, so to say.” “Indeed, they are rather smart people.” [I2; 141]

“We said to the people in the citizens group, that they are not there for their individual interest, but that they are there as a group.” [I2; 166]

“The citizens also know that they can have a conflict of interests, that is no taboo, you can just talk about that.”

When asked about the time requested for participating, the relational officer stated

*“You see that the members of the citizens’ group have an average age above 65. So there are many retired people that have a lot of time.” [I2; 111]*

With this statement, she meant to say that the time requested would not be an issue, but she implicitly provoked more questions than answers: Would younger people than not be in the citizens’ group because they lack time? Regarding that the timespan of the project is limited this is unlikely to be the case, but the relational officer showed clearly that she didn’t bother so much about representation of different age groups.

These type of assumptions, that the relational officer made, can be interpreted in various ways. Firstly, assuming that the relational officer has a good overview of what is happening in the social environment, it can be seen as a strategy of not making these issues worse by mentioning them. Secondly, it could point at a ‘blind spot’ in their relations management.

The relational officers also seem to think that social dynamics are anticipated on by good representation in the citizens group. When asked for informal ways of communication, the relational officer points to the key role of the representatives in the citizens group. [I2; 76]

#### 3.2.4. Overall analysis of case study A

In the documents, none of the aspects which directly relate to procedural justice can be found back. Even though, the analysis of relations contains a sentence stating that it is the goal to create an environment where different stakeholders can take part. In one interpretation, the capacities of citizens should be considered as they can be a limiting for participating in this environment. From the documents it became also clear, how the project management sees the participation by citizens as information gathering rather than actual plan development. Even though, a designing process is mentioned, which suggests that citizens would be included when decisions on the design would be made.

The relational officer gave the impression that they were expecting little social dynamics and strategic behaviour. They trusted very much on the representativeness of the citizens’ group to result in fair reflection of different citizens’ interests.

Besides knowledge transfer to the citizens’ group, no forms of capacity building were considered in this project. The appointment of an independent chair, as will be shown in case study B, could result in the development of citizen representation; but his role is not expected by the relational officer to deliver this.

### 3.3. Case study B: IJsseldijk Apeldoorns Kanaal

The analysis of case study B consists of two interviews and one document. The document is the officially formulated 'preferential alternative', the basis for the project plan. The interviews were conducted with the relational officer of the project and the independent chair of the citizens' group.

#### 3.3.1. Project description

The regional water authorities (waterschap) Vallei en Veluwe are responsible for the dike reinforcement along the westbank of the river IJssel, of which the IJsseldijk Apeldoorns Kanaal is one.

The dike concerned in the project IJsseldijk Apeldoorns Kanaal is the primary protection to flood of the IJssel river (to the east) and the bank of the Apeldoorns Kanaal channel (directly to the west). The citizens, who were assembled in a citizen group, consisted mainly of people having their house on the dike or just on the floodplain. An independent chair for the citizen group was hired by the relational officer, though he didn't want to be paid to secure independency.

The independent chair of the citizen group also represented the citizens in the officers' working group. As explained by the chair himself, this was no pre-designed governance structure, but the citizens just preferred him to take that role rather than one of themselves.

#### 3.3.2. Analysis of documents

The one document analysed in case study B is the preferential scenario, the result of the exploration phase.

##### a. Preferential scenario (voorkeursalternatief)

Relational procedures are not elaborated in the preferential scenario. It is only stated that "the interests of citizens and opportunities were balanced" and "the advice is supported by the citizen group and the officials meeting". Essential parts of the technical information we summarized in the previous section. This is an important observation though, because this document is the main information that the elected body of the regional water authorities, when they decide whether the project can continue to the planning phase.

#### 3.3.3. Analysis of interviews

In the analysis of case study B, two interviews were conducted. First, the relational officer of the project was interviewed. The second interview concerned the independent chair of the citizens' group, who worked with public participation in daily life but fulfilled this role on voluntary basis. The perceptions of these two government actors is compared in table 6.

##### a. Relational officer

According to the relational officer, informing citizens is one of her core tasks. She explains how there can be large differences in background knowledge among citizens, both on the content and procedure. She explains how people have different preferred ways of communication.

*The goal is to be clear and transparent [...] about when someone can or cannot have an influence [...] [I5; 70-73]*

The relational officer explains throughout the interview that she aims to accomplish that by information meetings to all citizens involved, and by personal conversations if necessary.

*I rather have them (citizens) bringing in something (ideas) at the right moment [...] than having them feel that they are not heard because they don't know when to bring it in. [I5; 78-80]*

**Table 6:** summary of the procedural justice perceptions in case study B

	Perception of relational officer	Perception of independent chair of citizens
Perceived elements of procedural justice that are relevant	Knowledge about procedure. Little time needed. In the social context, everybody should have a fair opportunity.	Knowledge is provided. Little time needed, though could have been more efficient. Transparency is key.
Perceived level of procedural justice	All citizens had plenty of opportunity to express their concerns. There was a difference in knowledge among citizens. Difficult and unnecessary side issues were untouched.	Formally it is all arranged properly, but practice is most relevant. Open and transparent social dynamics are no given, though largely achieved.
Perceived responsibility to influence procedural justice	Informing citizens about the process is a key goal of participation. Citizens should have the opportunity to voice their concerns. Contradicting interests should be expressed. Communication should be adapted to the citizen.	To give expression opportunities. To create an atmosphere of collaboration and unrestricted speech. Taking concerns seriously.
Perceived ability to influence procedural justice	To give fair opportunities to citizens for expression. To keep all relevant citizens interested.	The extent to which officials are willing to take effort (formal authority) and be transparent.
Perceived success of influencing procedural justice	Decisions were generally made in accordance with citizen advice.	Fair opportunities for citizens. Transparency present, limited by political dynamics.

Both by the relational officer and by the independent chair, differences in background knowledge and experience among citizens were noticed. As the relational officer says it:

*What you see is that some people are more used to cope with larger projects from their profession [...] [I5; 300]*

The independent chair explains more detailed that one particular citizen was retired from working at the national infrastructure authorities, and one citizen had been in a long-lasting procedure with the province in order to get the proper permits for his company.

On the timespan that the participation requires, the relational officer states:

*In phases it is rather intensive, because [...] it is then one Monday evening, and also the next week Monday evening.*

The relational officer recognizes that not everybody is able to attend all meetings:

*Other people think something like “I will hear it from my neighbour [...]” And for them it requires way fewer time, because we then come to have one-to-one meetings.*

In this process, the relational officer took additional effort to make sure that citizens who were absent at the information meeting, were informed. She kept track of the attendance at the public meetings and made visits or phone calls if people were absent.

It is worth noticing that due to the limited project size (or the limited way in which the project was defined), some side issues were left untouched. At least, a bicycle or footpath would be left out of the discussion. In the short explanation about this, it appears that the relational officer ignored the topic on purpose, in order to avoid a conflict of interests among citizens.

*It is not so bad with real tensions [between interests], but there are a couple of things, well you do not need to nail those down in an exploratory phase. [I5; 263]*

This seems to contrast strongly with the idea of incorporating ‘connection opportunities’ (Dutch: koppelkansen), which is a more prevalent practice in projects with an intensive participation process.

#### **b. independent chair of the citizens’ group**

In comparison to the relational officer, the independent chair thinks of communication to citizens as less one-directional. He emphasises several times in the interview that trust between citizens and the government actors is no given. For instance, he explains that there was scepticism among citizens towards the participation process as such.

*Some residents really had that feeling “you already know the result of this process”, so we dwelled on that for quite a time, because.. to make clear that the authorities really did not have a preconceived plan. [I10; 44-46]*

Additionally, when citizens started questioning the necessity of the dike reinforcement, the independent chair explains this as an issue of trust:

*[..] also with the citizens we had to consider “What is really the problem? And is it a problem? [...] You need to be able to explain that to each other. [I10; 98-100]*

He explains how he built this trust in the community and asked for a similar type of trust from the government actors. As shown in the following citations, he called for the official and the relational officer of the water authorities. He made independent chair clearly stated that this was needed in order to secure their legitimacy.

*And then I said to the responsible official “now you need to be present. I want you to be at the next [citizens] meeting, because [...] this is a question of necessity.” [I10; 67-69]*

*for example this particular resident that had been working for the national infrastructure authorities, I told the relational officer “[...] you need to show him all information that you have. [...] Take him along. [...] If you don’t take him along, you create the impression that you have something to hide, and that will result in problems.” [I10; 270-275]*

Though this trust building can be considered to be a typical task for an independent chair, not every chair may approach the situation this way. It is notable how the relational officer never mentioned this dynamic, and it is also never mentioned in the official documents.

About the time, that citizens need in order to participate, the independent chair seems to agree with the relational officer that citizens were able to find that time.

*Well, if your house is on that dike and then you have a large interest and you make time for it. [I10; 350]*

The independent chair thereby assumes that citizens, who weren't present at the meetings, would not have such a significant interest in the project.

#### 3.3.4. Overall analysis of case study B

The relational officer and the independent chair both adapt their communication to the individual citizens.

Little to no conflicts of interest between citizens came up during the exploration phase, though there are indications that at least one sensitive topic was excluded from the discussion.

The independent chair illustrated several times in the interview how he personally contributed to transparency and accountability during the participation process. This seems to be largely his own interpretation of this role, as his tasks were not specified in any of the documents or by the relational officer.

### 3.4. Case study C: Sterke Lekdijk

The analysis of case study C consists of 5 documents and 6 interviews. The documents range from an official outline of the participation process to minutes of meetings with stakeholders. The interviewees consist of the relational officer of the project and his contact officers in the two involved municipalities, the province and the regional rural cooperative. Additionally, a citizen group was interviewed.

#### 3.4.1. Project description

The project regards reinforcement of the winter dike on the North side of the river Lek, a delta branch of the Rhine. The project is directed by the hoogheemraadschap (regional water authority) Stichtse Rijnlanden in the province of Utrecht. The project has been divided into five subprojects, each with their own planning and governing. For instance, each subproject has a different relational officer (omgevingsmanager) and responsible director (portefeuillehouder). The subproject Wijk bij Duurstede – Amerongen (WAM) is one of the first to be executed. The dike in this project is located in two municipalities, Wijk bij Duurstede and Utrechtse Heuvelrug.

In the project, a large variety of citizen groups have a stake. There are farmers, residents, a leisure area, a nature organisation, two marinas and commercial sand extraction. Most key citizen groups in the municipality Wijk bij Duurstede have in the past years been involved in the Lunenburgerwaard nature development. Key citizen groups have been met by the relational officer of the project once or twice. In these conversations, the contacts, interests and ideas of the citizen groups were discussed.

#### 3.4.2. Analysis of documents

For case study C, the main analysed document is an outline of the approach. Then, a couple of documents are discussed that provide additional information about the participation process.

##### a. Approach – Together with the relations

The document 'PvA – samen met de omgeving' (Approach – Together with the relations), is an outline of the participation process at case study C, written by the relational officer and his assistants of the regional water authorities. It is a chapter of the project proposal, that was made in preparation of the exploration phase.

It is explained how the management of relations is based on the *Strategic Management of Relations* (Dutch: Strategisch Omgevingsmanagement, SOM). In this approach, the relational officers adapt their strategy to the individual. Also, the method is focussed on identifying all *issues* (tensions, disagreements or conflicts) among stakeholders, and aiming to solve those issues rather than avoiding

them. Then, in the principles of behaving towards stakeholders, a simple answer is given to the question 'how do you solve those conflicts?'. Namely, it is stated that *we strive for additional value for all parties* [D8, p2]. As explained, the relational officer would rather choose to find a solution which benefits all, rather than making a trade-off between the interest of one and another. Furthermore in the principles, it is elaborated that the authorities want to make an informed and transparent decision. The participation process is largely aimed at gathering viewpoints of stakeholders as early as possible. Also, it is described that the preferences of individuals should be documented properly, so a decision based on one of those preferences would be traceable.

Further on in the chapter, it is outlined what type of opportunities for synergy ('koppelkansen') are expected, and how these are dealt with. A list of projects, governed by other institutions, mostly governments, is described. It is also outlined how the project aims to be open for initiatives of citizens, and in that way 'working in the line of thought of the participation law'. The actual strategy to do so, is engaging the citizens in the spatial design of the project. However, initiatives have limitations. Later in the report it is described how *opportunities for synergy must have an 'owner'. Owners must in principle arrange themselves that their desires and ideas are 'executable, permitable and financable'*. [D8, p10]. In this practice, the initiator should either pay for the initiative, or they hand over the decision to the government institution who pays.

At last, the communication strategy is discussed. It is stated that there is no communication plan, because *communication is no goal in itself. Yet communication is a means to create the right 'feeling' for stakeholders* [D8; p10].

#### **b. agenda of a meeting of officers**

This document is an agenda for a meeting of the officers of the governments involved in the project, in particular the regional water authorities, the province, the municipalities and the rural cooperative. The document is included in the research, because it gives a clear outline of the structure of the participation process, during the exploration phase.

The central point of gathering information is the design group (ontwerpgroep), which consists of non-government local stakeholders in the project. Then in at least one round of specific sessions, stakeholders concerning a specific topic would meet in order to acquire in-depth knowledge. After each round of specific sessions, the design group would meet to integrate the knowledge, and make proposals for the spatial plan.

#### **c. introduction presentation for the design group**

A visual presentation for the first meeting of the design group was analysed in order to verify the way of communication to citizens. Generally, the presentation gives a very open and inviting to citizens. When it comes to the responsibility of citizens, the citizens are asked explicitly to show their interest, and encouraged to show friction. Apparently, conflicts of interests are expected to be visible, at least not hidden. This aligns with the strategic relational management (SOM) approach, where all *issues* should be visible.

Also, the participation process during the exploration phase is outlined further in this presentation. It shows that the design group is meant to meet at least nine times in just more than one year, and three open sessions will be scheduled. The subject specific sessions are not mentioned.

#### **d. minutes of meetings with a citizen group**

As a matter of validation of the perception of the government officers in this project, a citizen group was interviewed. In preparation of this interview, two minutes of meetings were analysed. At the meetings, three representatives of the regional water authorities were present, the relational officer,

his assistant and the official of the water authorities. The citizen group was represented by two people. The meetings took place before the exploration phase started, several months in advance.

In the meeting, a broad variety of subjects is discussed: the interests of the citizen group, other stakes regarding the dike reinforcement, opportunities for synergy and other stakeholders. A lot of details are discussed regarding these topics. It is unclear from the minutes who brought up all those details, but it is clear that the citizen group knew a lot about the process and the technicalities before the exploration phase started. Especially in the second meeting, several ideas are mentioned that could be part of the spatial design. It is also discussed who will represent the citizens group in the design group.

### 3.4.3. Analysis of interviews

For case study C, officers of all involved governments were interviewed. These officers are having regular meetings in an officers' working group, so they all knew each other. In total, it concerns five interviews, as summarized in table 7.

#### a. The relational officer [11]

The first interviewee was the relational officer of the regional water authority Hoogheemraadschap Stichtse Rijnlanden.

Judging from the conviction in his words, the relational officer had a clear vision on the relevance of the participation process. Remarkably, he started off by explicitly denying an efficiency rationale:

*Well, I will tell you first what I think is not the aim (of the participation process). That public support (Dutch: draagvlak) is the aim, I do not think so. [...] That is because we serve the public interest, water safety [...] which may be conflicting with local or private interests. Therefore it can happen that someone disagrees strongly, while it is still just a good plan. [11; 16]*

In the next minute, the relational officer lists three aims of the participation process. Firstly to get an overview of the interests at stake, in order to take those interests into account in the plan [11; 30]. Secondly because *people like it to be involved* [11; 33]. Third, because *a lot of people often have good ideas, so have knowledge that can improve your initiative or plan* [11; 35].

A couple of interpretations are relevant for how the relational officer defends his argumentation. Firstly, he seems to be reacting on people who state that public support is the goal of the participation process. As it will be shown in other interviews, government officers do indeed often argue that public support is the driver behind citizen participation. A possible reason why the relational officer does not like this line of reasoning, is that it could evoke opposition among citizens, who could think that they eventually have no other option than to agree. This relational officer explicitly gives citizens the right to disagree. In this context, it is worth noting that the officers does admit further in the interview that he is indeed trying to avoid juridical conflicts, and therefore in some sense aiming for an efficient process.

*(You need to make clear where opportunities for influence are, because otherwise).. Uhm, you have the risk that in the end, people.. if they don't agree, that they use this as a point of criticism [...] or will try to defend their ground on a formal base, which is legitimate by the way. [...] But that is a risk for such a project despite that you did it very well (have a good plan).. if that is a risk, that is a waste.*



Denying an efficiency rationale, could thus be considered nothing more than a communication strategy. However, the officer seems to be really aware that he has to find serve the public interest, while also taking private interests into account, the first goal of the participation process. Having this idea in mind, the concept of legitimacy could be well-applicable. By referring to the *public task* [11; 18], the officer might as well be hinting at the democratic pillar of public legitimacy; and adding discursive or deliberative legitimacy is required by public participation. In line with the principle of democratic legitimacy, the officer stresses several times role of the elected body of the regional water authorities:

*We think it is very important, and that is also why is stated in the law.. that the complete decision on the resulting plan, that it is a democratic decision [...] the point is that the most important, most influential decisions, that we submit these to our board. [11; 117]*

Regarding the capacities of citizens to participate, the officer recognizes knowledge and devoted time as conditions to participate properly [11; 163]. He states explicitly that *it is the responsibility of the government to be concerned that people are capable to do so (to grasp what their interests are in the project) [11; 171]*. Explicitly he states that less intelligent or less educated people may have troubles in understanding what is at stake [11; 182]. After recognizing this risk, he states that it is the democratic government to account for the interests of those people. The relational officer thus views the democratic legitimacy as a safeguard for deliberative legitimacy.

In agreement with recognizing knowledge as an essential capacity for citizens, the officer explains how they provide information provision in the participation process [11; 206]. In his line of reasoning, this sharing of knowledge is also essential when the citizens are expected to contribute to the planning on content [11; 220]. Despite recognizing the time and commitment that is required of participants [11; 163, 229], the relational officer seems to ignore the role of organisational capacity and network to be able to deliver this commitment. At least, the officer appears to be unfamiliar with the term social capital in the context of the participation process [11; 235]. He seems unwilling to interfere in the existing social structure, by describing the use of social networks as *basal human behaviour* [11; 250] and refusing the role as mediator between groups of citizens [11; 383].

The relational officer states several times that water safety cannot be compromised on, in his argument because the water safety is de raison d'être of the project [11; 382, 399]. In his argumentation, this is why he does not want to get himself involved in conflicts between participants [11; 383-395]. In such cases, the officer seems to be focussed on maintaining trust of citizens in the authorities. Throughout the interview in general, the officer stresses the value of good relationships and the role of trust in this context several times throughout the interview. He argues that maintaining trust is the main reason to be transparent about the motives of the water authorities [11; 196-300]. In these lines, he generalizes the meaning of trust, saying that without trust from the people, *the public case goes bankrupt*. [11; 299]. Why the officer may value trust from citizens so highly, will be evaluated in section 6.2.

In the interview it appears that the officer is well-aware and prepared for *subtle forms of influence* [11; 79], in particular individuals with a network in local politics [11; 366]. The way that the relational officer seems to let the end decision be democratic:

*(in case of a fierce debate) [...] I think we then have the responsibility to give people the space to defend their interest, but at a certain moment, in my opinion the*



*government needs to dare to take a decision. [...] Otherwise it would mean that the people who shout the loudest, can defend their interests the best.*

At the end of the interview, the officer states that his personal views have a significant influence on the design of the participation process. He states:

*I believe that the people have knowledge, which we can use. Well, that is my personal conviction, that is the reason that I chose to apply a far-reaching form of participation. We could have done that very differently in the organisation. [I1; 502].*

As the relational officer phrases it himself, *sometimes individuals can have a disproportional influence on such process. [I1; 511]*. To what extent the process would have been really different with a different individual in this position, will be evaluated in section 6.2.

### **b. A highly involved citizen group [I6]**

As a matter of validation of the perceptions of the relational officer, an interview with two representative of an active group of citizens was conducted. This particular group was responsible for a recreational area in the floodplains, suited for swimming, sunning, hiking and dog walking in the summer season.

In the interview it became clear that the citizen group was very well prepared for the participation process. They had two or three meetings with the relational officers, and one of the elected officials at the regional water authorities. They had basic knowledge on the technical issues regarding water safety [I6; 141], knowledge on relevant policies [I6; 362], and they knew other stakeholders in the area, both citizens and government bodies, and what their basic interests were [I6; 108-131, 170-186]. The citizen group admitted that they applied this knowledge strategically, for instance by reminding the water authorities that they want to be involved:

*Yes, we had several conversations [...] And because we consequently impose ourselves, they know we exist and that we also want to participate. [I6; 61]*

Also, the citizens group was explicitly aware of their capacities, and how they would need those in the process. They were well able to invest the time needed:

*We are with seven people, and I think five of those are full-time committed (to voluntary work), [...] so this project is a piece of cake, we just deal with it additionally. [I6; 288]*

Also, the citizen group was very aware that their expertise knowledge and network were relevant:

*We are actually involved in every big project of the municipality, [...] [I6; 301]*

Combined with the minutes of meetings between this citizen group and the regional water authorities, it is concluded that this citizen particular citizen group had a lot of knowledge about content as well as the process, before the exploration phase had even started.

### **c. Municipalities [I3, I9]**

Secondly, the representatives of the two involved municipalities were interviewed. Their interviews were separate, but their views on their views on the project were comparable. Both the officers explained how there was a tension between the water authorities and the province on the one hand, and the municipalities on the other hand. The water authorities and the province viewed five dike

trajectories as one project, aiming for a universal appearance of the 55-kilometre-long dike. On the other hand, the municipalities were mostly focussed on the dike trajectory that was in their territory. This led the water authorities and province to put certain requirements on the dike, like the road type and bicycle lane, while this is officially a responsibility for the municipalities and they need to finance such infrastructures. A similar issue holds for natural areas. Both the municipality representatives expressed a pressure on them to find financing in their organisation, even when it was still to decide in the public participation process, how these finances would be spent.

On the topic of procedural issues in the participation process, both representatives stated that the core responsibility is with the regional water authorities [13;159]; [19;219]. Also, both municipality representatives state that they are aware of social dynamics among their citizens, as this also takes place in the participation processes organised by the municipality.

One of the municipality officers explains how she checked the presence of citizens groups on the invitation list. She also explains that several officers of the municipality may fulfil this task later in the exploratory phase, when citizens will participate in thematic meetings

#### **d. The province officer [17]**

In the interview with the province officer, it appeared that he had a minor role regarding the citizens in the participation project. Moreover, this officer was very aware of the roles of the involved government organisations. In his words, *it is a game of chess, and the board on which we play is between the several municipalities*. [17; 119]. In this context is important to note that a total of six municipalities is involved in all the sub-projects. Because the officer is responsible for all these projects, his in-depth knowledge about a specific project, like Wijk bij Duurstede-Amerongen as analysed here, is limited.

The officer states repetitively he considers participation of citizens to be very important, but he leaves the responsibility for this process to the regional water authorities. He does state, without any specifically asking for it, that the municipalities would occasionally point out if *something misses* [17; 276]. He literally states that he considers this to be the role of the municipalities [17; 284].

The officer stresses how the province authorities do not aim to promote a specific type of public participation. In his words, *we have no blueprint*. [17; 357]. He states that the bottom line is defined in the law [57; 332]. When asked, the provincial officer explains that their elected council serves as an extra controlling body, but the officer never mentions if they would be concerned about the participation process.

#### **e. The regional rural cooperative project manager [14]**

In this project, an additional government organisation was involved: the regional cooperative (Dutch: gebiedscoöperatie). This organisation is a cooperative in the sense that any stakeholders owning a part of the rural area, ranging from individual farmers to municipalities, are members. At the same time, it is a government organisation as it executes a lot of projects commissioned by the province. Most of those projects involve some type of nature development. In the case of the Sterke Lekdijk, it concerned nature development in the floodplains between the dike and Lower Rhine river. The planning phase of the nature development was already finished, before the participation process of the dike reinforcement started. Most stakeholders from the nature development planning, were now also involved in the dike reinforcement. Therefore, the project manager of the regional cooperative, who was interviewed, had a good overview and in-depth knowledge about the interests of most citizens in the area.

The project manager explains that she does not have a large stake in the content of the dike reinforcement project, as her own project has been planned already:

*So I am really there (in the dike reinforcement project) as cooperative employee for the stakeholders, but... and I thus bring in that knowledge (on stakeholders), so we don't want to bring in a lot on content, for designing the dike reinforcement, that's not what we do."*[14; 91]

Thus, the project manager perceives her main role to provide information about the interests and the dynamics among the citizen stakeholders. As she stays in the working group of officers during the project, she has the right background information to keep track of the citizens in the participation process. Also, she has an interest that the citizen stakeholders will be satisfied about the dike reinforcement, as she needs to cooperate with them for the realisation of the nature development.

In the interview, the project manager shows her insight in the interests of stakeholders by naming an ongoing rivalry [14; 174] and stakeholders who use their personal network to have influence [14; 261, 383], and the relative influence of different types of stakeholder [14; 411]. Her incentive to keep track of social networks, is not motivated by a fairness principle, but rather to stay in control of the project and to secure a smooth process:

*... (I need to) stay in continuous contact with everybody, because they could suddenly have shared their information without me knowing it. [...] That could evoke statements about my organisation or my personality, or.. decisions that were still pending, are suddenly taken..* [14; 291]

Earlier in the interview, she admits rather explicit that efficiency is the motivation for involving citizens.

*running into juridical conflict procedures [...] that's just a waste of time. So what we do, from a efficiency point of view, is making sure that everybody is supporting the plan."*[14; 165]

Thus, the motivation of the cooperative's project manager is essentially the same as the water authorities' relational officer.

#### 3.4.4. Overall analysis of case study C

Case study C involved a high number of governmental organisations. This leads to an additional financial negotiation between those governments, but has also implications for the participation process. The municipality officers appear to feel responsible for the citizens in their municipality, and are recognized by others to provide an additional check on the involvement of those citizens in the participation process. However, the municipality officers lack in overview of the project, as they are dependent on what they hear in the officers' meeting. The relational officer of the parallel project appears to have a lot more overview of all stakeholders involved.

Despite the relational officer of the regional water authorities denying that public support would be the goal of the participation process, all interviewed officers adopt some type of efficiency rationale, when asked for the goal of the participation process.

The citizen group, who were analysed in a matter of validation, fits very well in the perceptions of the relational officer. Specifically, the responsible persons of the citizen group are very aware of the issues and interests at stake. Also, this group is well organized and builds upon a network of specialists. Thus, for this group it is unlikely that capacities will be a limiting factor in their contribution to the

participation plan. An important question to ask is whether this particular citizen group was representative for all citizens involved, and this seems to be highly unlikely.

**Table 7** : summary of the procedural justice perceptions in case study C

	Perception of relational officer	Perception of representative of province	Perception of representative of municipality 1	Perception of representative of municipality 2	Perception of relational officer of parallel project
Perceived elements of procedural justice that are relevant	Time and knowledge. Social capital in is many ways influential.	Social capital, regarding direct connections to politics.	Knowledge, social capital. Time to for research.	[not specifically asked for in the interview, and it is not spoken of spontaneously]	Knowledge, network are relevant. Citizens will make time when enthusiastic.
Perceived level of procedural justice	As so far, all relevant citizens are heard.	Impressed by the amount of participation of the regional water authorities.	Unsure of what to expect, as it is unusual that another government actor is responsible for the participation.	Unsure of what to expect, as it is unusual that another government actor is responsible for the participation.	Recognizes that some citizens may be more influential than others.
Perceived responsibility to influence procedural justice	To inform citizens about procedure and technicalities. To secure that citizens are aware of their interests. To pass on the main decisions to the democratic board.	To check whether the regional water authorities deliver a plan with public support.	Core responsibility for the regional water authorities.	To check with municipality officers whether all stakeholders are involved.	To deliver prior information about the stakeholders.
Perceived ability to influence procedural justice	To bind citizen groups to the project. The need to stay transparent (trust) limits influence possibilities. Social dynamics are a natural phenomenon. The dike reinforcement should be preserved as a goal.	Dependent on information from regional water authorities.	Regular conversations with some citizen groups. Advises the regional water authorities on specific groups.	Advising the regional water authorities. Giving input and direction to the specific topic working groups.	Close contacts with the regional water authorities provide a large ability for influence, but the officer does not feel responsibility to interfere.
Perceived success of influencing procedural justice	[process is largely to come]	Trusts very much on the regional water authorities	Expects certain citizen groups to take strategic positions.	Uncertain how it will turn out	Trusts on the regional water authorities.

## 4. Evaluation of findings

This chapter aims to place the observations of the case studies in perspective in order to get an insight in the level of institutionalisation of procedural justice. First, comparable elements of the case studies are analysed to find patterns. Secondly, the observations on the national level are presented. Finally, these findings are analysed to find out, to what extent procedural justice is institutionalised in the Dutch FRM sector.

### 4.1. Comparison of the case studies

In all three case studies, procedural justice remained a concern during the process, by the team of officials who orchestrated the process. In case study B, the independent chair turned out to be an additional channel for opening discussion about the procedure. In case study C, the variety in government actors involved can give rise to discussions about the fairness of the procedure.

The relational officer of case study A seems to be unaware that social dynamics, strategic behaviour and the use of social networks may play a role during the participation process. The officer of case study B is aware, but explained how the dynamics were limited because the project was relatively small and straightforward. The officer of case study C is very prepared for participants to use their social capital.

The goal of the dike reinforcement appears to be a goal that is not open for negotiation by the relational officers of all three projects. This appears to be in line with the efficiency rationale that is generally noticed among officers. Especially the officer of case study C elaborates how he refuses to function as a mediator between citizens, because this could increase the risk of losing trust of (part of) the citizens.

In case study C, the municipalities appear to have a larger role than in case study A and B. This seems to be rooted in the defined *opportunities for synergy* between governments, which makes municipalities (financially) responsible for part of the project. Consequently, the municipality officers and elected council appears more likely to keep track of the participation process, and thus perform a type of 'second opinion' on the inclusion of their citizens.

Case study C was in general more open towards the inclusion of secondary issues, actively looking and asking for *opportunities for synergy*. Most likely, the regional water authorities decided so, because of the size and complexity of the project. The new law on participation, though not in force yet, also played a role, as the water authorities claim to anticipate on the law. As a result, the chance of exclusion of a certain issue, like it was observed in case study B, is small.

### 4.2. Observations on national level

Institutionalisation of practices in relational management can take place on different levels; it can be embedded in the working procedure of the regional water authorities and it can be guided from a national level. Considering dike reinforcements, the 21 regional water authorities ("waterschappen") and the national department of waterways and public works ("Rijkswaterstaat", from now on "national department") are united in an alliance called "hoogwaterbeschermingsprogramma" (from now on "HWBP"). The main goal of this alliance is to redistribute the finances for flood prevention according to the necessity for such public works. In this function, the HWBP acts as a quality assurance check, because whenever the regional authorities apply for a grant, they have to demonstrate the quality of their plan to the HWBP.

#### 4.2.1. Interview with trainer for relational officers

The contact information for the trainer, who was interviewed, was provided by one of the officers of the case study C. Prior to the interview, I made it clear that I wanted to talk about the role of the trainer and how he used his own experience as a relational officer. During the interview, the trainer referred

a lot to the cases where he had been working on himself. Repeatedly throughout the interview, I asked him if he would also use those examples in a training. I asked if the starting points that he prayed like his personal belief, were also starting points thought in the training for relational officers. He repeatedly answered that this was in agreement. However, it is important to note that he also expects his students to make their own trade-off in their own cases, as explained near the end of this section.

The trainer took examples from extreme cases where he had been acting as a relational officer himself. In these cases, conflicts of interest among participants were abundant and a clear opposition between the public authorities and (part of the) citizens had arisen. The trainer did explain such a divide as a lack of trust:

*They (citizens) don't believe anything anymore. They're angry. And then you need conversations, and you really need to regain the trust, literally step by step."* [I8, 169]

The trainer emphasised the aim for trust a lot in his discourse. Somewhat confusingly, he stated trust was the ultimate goal of the participation process, rather than a means:

*Well, we are convinced, the people who I work with and I, that "trust building is the key, it is the core." [...] Even when it [personal interests] is opposing, it can be in your personal interest to cooperate, with trust. [I8, 376]*

During the interview, it became very clear that the emphasis of trust was aimed at building relationships with the involved citizens. Also, the trainer stated eventually that his aim was to smoothen the planning and implementation process.

*- Interviewer (summarized): can't you just inform the citizens properly, if that is your task? They don't have the right to complain afterwards, do they?*

*- Trainer: Well, people decide for themselves if they start complaining afterwards. And the point is that we are hindered by that. Then you (the water authorities) have the risk of getting sued. It then does not matter whether they (citizens) were treated justly. [...] Someone who is angry, will always find a juridical loophole to sue you. [I8; 330]*

Regarding the different types of capacity that citizens may need to participate, the trainer recognized knowledge, economic capacity and social capital in his examples. In his states to be committed to all types of capacity building:

*It can occur, that I help people to establish a neighbourhood association, so the neighbourhood can be represented [...]* [I8; 352]

This seems to be a perfect example of capacity building for differences in social capital. For compensating for a lack of economic capital, the trainer was less specific how this could be solved.

*Yes, those who are rich, they talk back. (Dutch: 'die zijn mondig') [...] In this certain case, we were really looking for ways to.. [...] in the end, we had more than just the rich being present. [I8; 398]*

Presumably, the trainer aimed to solve a lack of engagement of the relative poor in this case. Without supplying the poor in economic means, he seemed to have raised awareness among the poor that their

interest was at stake. This seems to be in line with the arguments that were made in case study A and B, that motivated people will always find the time to commit themselves.

When asked why such forms of capacity building were barely applied by other relational officers in less extreme cases, the trainer explains that there is a trade-off to be made in the intensity of the participation process:

*[...] You would be able to make a traffic light, with red, green and orange, and this case then is in red. Then you need to apply the most intensive type of participation in order to reclaim the trust. [18; 205]*

The trainer explains that it is hard to check the quality of the participation process. When asked if the project management or the national authorities should have foreseen a certain situation to run out of control, he answers:

*They (project management, national authorities) realize how important participation is, they really asked questions about it in this case. [...] In this sense, they didn't do much wrong, but it is the way in which they answer questions (of citizens), the tracability, many uncertainties coinciding, the tone in which you answer people. At these type of minor points, it goes wrong.*

#### 4.2.2. Interview with officer of national coordination

With the officer of the national coordination, it is discussed how relational officers obtain their knowledge. The officer points out that relational officers in FRM in the Netherlands are united in one of the so-called *communities of practice*, which they facilitate. The community incorporates an online platform for asking questions and sharing examples. Additionally, trainings are organized throughout the year to support in-service learning.

The national coordination provides the guides for the exploration phase, and the guide for the planning phase, which provide starting points for setting up a FRM project. At three times throughout the process, the national coordination organizes a judgement of the project: before the exploration phase, before the planning phase and before the implementation. The officer explains that for each test of the project, a suitable committee is formed. Members of this committee are partly from the national coordination, and partly selected from the working field.

The officer stated that a new document is being developed, called *from trajectory to project*, in which one of the subjects will be how to determine the intensity or extensiveness of the participation process. The national officer explains that the development of this document originated from problems that were encountered in cooperation with other government bodies. Especially when finances from municipalities or provinces needed to be reserved, these authorities need to know that in advance.

#### 4.2.3. National guide for the exploration phase

The document, which was analysed for the national scale is the 'guide for the exploration phase' (Dutch: handreiking verkenning). The document is composed by the national coordination of the HWBP, and updated each year. The version analysed dates from October 2017. In the document, the word 'fair' is only used in the context that *relational officers should be fair about the uncertainties of the project*. [D9; p106] The word transparent is mentioned several times. Often it is referring to an objective decision framework. A few times, it is used in the context of the participation process. It is



stated that *transparency to the environment* [D9; p61] is a task of the relational officer. Also, it is stated that a so-called ‘systems engineering’ approach is used in order to make the process transparent and traceable. In the document, relational officers are encouraged several times to gather extensive information about the interests of the involved parties. Specifically, relational officers should *speak to citizen groups in to make sure that no alternatives are forgotten* [D9; p25]. Then, about conflicting interests, it is stated that these should be identified timely and posed to the elected board.

### 4.3. Level of institutionalisation

In this paragraph, the findings from the case studies will be put in to the perspective of the findings on the national level.

#### 4.3.1. *The role of personal belief of the individual*

In several interviews, officers stress how their personal belief determines how they deal with citizens. This is specifically the case for the independent chair of case study B and the relational officer of case C. On this topic, it is questionable whether this perception makes sense in reality: would a different person in the same function result in a significantly different participation process? The answer is that on a national level, little criteria are used to test the quality of the participation process. For as long as the project management defends the choices they made, and no sounds of unsatisfied citizens reach the controlling committee, a relational officer can make different choices regarding the participation process.

#### 4.3.2. *Controlling role of municipalities*

Comparing case study B to C, a couple of observations can be made about the role of municipalities in the multi-government participation process. As described in section 6.4.3., the municipalities representatives in case study C claim to have a quality-assuring role in the process. Based on observations of the relational officer in case study B, officers of the municipality were not able to keep up with the process, and may therefore not be able to fulfil this goal (as good). Presumably, small municipalities have less officers specifically assigned to such projects, and may experience stress more often than large municipalities.

The officer of the national coordination agreed that some officers’ departments of municipalities may not be able to deal with large projects, and that this results in a more single side controlled projects. He named specific case where a municipality assigned a parallel relational officer to the officer of the water authorities, and how this resulted in a success-story of relational management.

#### 4.3.3. *Changing discourse: from public support to trust*

The shift in discourse may be related to a shift from aligning personal interests to aligning underlying values (like found by Doorn, 2016). Thus, it may be part of a communication strategy to contain conversations in the realm of understanding rather than opposing interests. At most, it flags an increase in understanding of what is indirectly in the interest of the government, and how that is served by serving the interest of others. In other words, a transition from isolated self-interest to well-understood self-interest.

The discourse of trust can also be in indicator of the importance given to relationship-building and the fit-to-person communication. By centralizing trust, the relational officer emphasises how building relationships is delicate process that requires commitment of both parties. It also aims to create an atmosphere where issues of justice (anything perceived to be unfair), can be brought to attention and dealt with.

It is striking how explicitly relational officers state that they want the interests of citizens to be visible in the participation process. This seems to contrast with the advice of Doorn 2016, who states that

“effort should be put into preventing these stakeholder projects from becoming negotiations”, that more focus should put on values and goals rather than interests. Also, relational officers appear unaware that their process can be depoliticising, as described by Vink (2015) and Roth et al. (2017). At least, in their own perception the process is rather politicising.

## 5. Conclusion

Based on the analysis in the past chapters, the following answers to the research questions were formulated.

*Main research question: How is procedural justice institutionalized?*

Procedural justice as a concept, or any of the related concepts (table 2), are barely named explicitly in FRM in the Netherlands. Even though, the increasing intensity of the participation process seems to bring along an increasing amount of checks and balances on procedural justice. In this trend, procedural justice is a side product when striving for policy effectiveness and efficiency. However, the risk of procedural injustices remains present, because these checks and balances are largely informal. Securing procedural justice would require a more explicit approach, for example by analysis of citizen capacities or the formulation of a 'right to be involved'.

### 5.1. Considerations of procedural justice

*Research question 1: Where and how is procedural justice considered in the participation process?*

In the vast majority of observations, procedural justice or any related concept, was no standard and explicit point of consideration among policy makers. In documents on the national level, requirements on technicalities are stricter and more quantified than requirements on public participation. On the project level, the participation process is defined in descriptions, rather than aims or guidelines. Also, it is not explicit who is responsible for a fair process, and who will check this. In the communication towards citizens, there is a strong focus on the content of planning, as observed in case study C (section 5.4.3.a, b).

When it comes to the capacities of citizens, knowledge is the most recognized and supported in the participation process. Sharing information about the content and the process has, apparent from the case studies, become a standard element of the participation processes examined. From plenary sessions and individual communication, relational officers seem to notice differences in background knowledge and seem to anticipate on those to a large extent. When it comes to economic capacities, the timespan that it takes participants to be involved is generally expected to be surmountable for the citizens who have a significant interest. Mechanisms that would support stakeholders in their time devotion are, in ordinary cases, not even considered. The same counts for organisational support and networking capacity.

Other government actors in the project, generally state that it is the responsibility of the relational officer to make sure that the process is fair. This counts for the municipality as well as province officers. They emphasize that it is the water authorities who have the lead in this process, and do the communication with citizens (section 5.4.3.a). When analysing the view that relational officers have on the fairness of the participation process, a large variety was found. The officer in case A seemed to think that the process was fair as long as citizens were well represented in the citizens group (section 5.2.3.), the officer in case C put more attention on the relations and communications between stakeholders (5.4.3.a).

### 5.2. Elements explaining procedural justice

*Research question 2: What dynamics influence the appearance of procedural justice issues?*

Characteristics of a project largely determine the risk for procedural injustices. Conflicts of interests should be significant, in order for procedural injustices to be a serious problem. Small projects therefore have fewer procedural injustices in general. Side issues that would accompany a conflict of

interest among citizens may be excluded from the project. However, a trend towards issue inclusion may be developing, especially in larger projects (section 6.2.).

In the observations, several possible feedback mechanisms (checks and balances) for procedural justice were identified. Generally, the external control on the relational officer increase when multiple governments are responsible. It was found that specifically municipalities can provide a check on the inclusion and right treatment of their citizens. When dealing with specific working groups, like in case C, municipality officers specializing in these issues may be able review how their citizens are treated during the process. However, the municipality officers were uncertain if this may be the case (section 5.4.3.c). In the most desirable case, two relational officers from two separate government bodies share responsibility.

Elected bodies can potentially test the procedure of a participation process, because they legally need to approve the plans. This concerns the general board of the regional water authorities, the municipality council and the provincial council. All officers working for such bodies mentioned this controlling role of their council, but the official documents often rarely contain any information about the participation process, let alone procedural justice. These documents focus on the plan and explain the details. Therefore, it is most likely that elected bodies will also focus on the technical issues rather than the (fairness of) the participation process. Similarly, to the review by elected bodies, the official review by the national alliance does include the quality of the participation process. However, these types of checks are more focussed on technicalities as well. As mentioned by the officer on national level and the trainer, questions are asked about the participation process but not a lot of details is required for approval. When Begg et al. (2018) assessed procedural justice in the Netherlands, democratic legitimacy was said to be secured by the democratic bodies of the Dutch water authorities. In the light of this thesis, this conclusion seems oversimplified. Arguably, the practice of democratic governance cannot be left out of such assessment.

The feedback mechanisms on procedural justice posed previously can be considered largely informal, because they don't discuss procedural justice explicitly. The extent to which procedural justice included in the review, largely depends on what the official perceives to be fair, reasoning by himself. With procedural justice being largely undefined, individuals that have a certain role can make a significant difference in how procedural justice issues develop. This was demonstrated by the independent chair in case study B (section 5.3.3.b) and the relational officer in case study C (section 5.4.3.a), who fulfil their role largely as they consider good in their personal belief.

### 5.3. Underlying value systems

*Research question 3: Why do procedural justice issues appear in the participation process as they do?*

Generally, there appears to be a large focus on policy effectiveness and efficiency among government institutions, coinciding with a lack of attention for procedural justice. The strong focus on effectiveness is flagged by the need for public support (section 6.2.), often mentioned as the main reason for the participation process as such. As outlined in section 6.2., a shift towards a discourse of trust is indicated by this research. However, this may be part of a communication strategy rather than an actual shift of values. The focus on trust seems to underline the importance of relationship-building. The dominant efficiency rationale is comparable to the *utilitarian* rationale, as described by Begg et al. (2018).

The tension field between policy effectiveness and procedural justice is limited, in some cases procedural justice may even be considered a side product of policy effectiveness. Relational officers often state that water safety is no point of discussion, that no concessions are possible regarding water safety (section 6.2.). Regarding the costs of securing water safety, national policy states that there is

no need to aim for the cheapest options where this does not fit in the interests of citizens. By this frame, regional water authorities limit the extent to which they have to negotiate themselves and are in a better position to facilitate the discussion. In this sense, there is no need to balance between fairness and policy effectiveness. However, this can also be a pitfall, as highlighted by the independent chair in one of the case studies (section 5.3.3.b). When citizens perceive a dike reinforcement as unnecessary, it may evoke distrust when authorities are not willing or able to explain the necessity. Showing the willingness to address the issue of necessity (e.g. about national water safety requirements) together with the citizens may increase trust.

Possibly, more attention for procedural justice issues can be obtained by adding requirements to official documents. One such possibility would be a focus on citizen capacities (as the opportunity – capacity model in section 1.2.2.). Another would be by formulating a ‘right to be involved’. Analysing, comparing, or even quantifying of citizens’ capacities for participation has not been described in scientific literature so far, and is no standard thing to do in normal practices of FRM participation processes. Relational officers currently do observe some differences in capacities, but do not regard this as a starting point for action. If capacity building would be considered in order to improve the quality of participatory processes, it would be worth trying to construct a capacity-opportunity model, and verifying expectations with the result. However, the case studies in this research have demonstrated the value of relation-building for the resulting procedural justice. Therefore, an opportunity-capacity model will never be able to predict issues of procedural justice. The capacities are just part of the initial position, and visualising them would only help in creating a fair level playing field.

## 6. Discussion

This chapter reflects on the research that has been carried out and the assumptions that were made to interpret the results. The implications of this research are shown, and suggestions for further research are made. This discussion is structured along three methodological aspects of the research: the focus on government perceptions, the investigation of institutionalisation in the Dutch flood risk management sector, and the qualitative nature of this research.

### 6.1. Analysing government perceptions

A focus on government perceptions was found to be a useful approach while investigating procedural justice. By these perceptions, the dynamics which determine procedural justice issues could be linked to the development of political rationales.

The limitation of focussing on perceptions, is that it is hard to build an objective analysis of the case study. Hence, the research provided an analysis of enabling conditions rather than an analysis of the actual procedural justice. In further research, it would be useful to validate the perceptions by the actual events in the participation process and the perceptions of participation citizens. The research was also limited by the short time span of data collection. Essentially, only a 'snapshot' of the cases studies could be made, resulting in an often-made remark 'we need to see how this turns out' or 'I will see how to react when it appears'. Therefore, for further research I advise to make observations from the preparation to the evaluation of the participation process.

Objective analysis of the perceptions in this research was established by close analysis and interpretation of the discourse used. The typical rationales as described by Glucker et al (2013) and Mees et al. (2016) provided a useful framework for such analysis.

### 6.2. Examining institutionalisation in the Dutch FRM sector

The qualitative nature of this research limits the representativeness of this research for other cases. However, by analysing the institutionalisation on a national level, useful remarks were made about the trends on a larger scale. However, as the documents on national scale did not mention only generic guidelines regarding the fairness of the process,

In order to determine the real effectiveness of control mechanisms, these need to be investigated more in-depth. It is also important to look into perceptions of other government actors than the relational officers, mainly the elected bodies, the officials, and the evaluation committee on a national level.

### 6.3. From qualitative to quantitative analysis

A general result from this thesis is that project management is generally hesitant to define 'participation rights' or 'boundary conditions for procedural justice'. Supposing, project managers and relational officers fear that this would lead to a lower efficiency by more disagreement and law cases. On the contrary, some of them argue that a fair process is the most efficient process. For procedural justice in participation processes this would be an interesting hypothesis, that can possibly be quantified.

Quantifiable proxies for procedural justice in a project could be obtained by questionnaires, for instance by evaluating the process with all participants (satisfaction survey). Alternatively, assuming that a more elaborate relational management has more time to deal with everybody's interests personally, the relative budget for the relational management could be related. Proxies for the

efficiency of the process could be found by the amounts of complaints and court procedures, or the expenses relative to the budget.



## Bibliography

Alexander, M., Doorn, N. & Priest, (2018) *S. Reg Environ Change* 18: 397.  
<https://doi.org/10.1007/s110113-017-1195-4>

Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners* 35(4), 216–224.

Barnaud, C., P. D'Aquino, W. Daré, C. Fourage, R. Mathevet, and G. Trébuil. (2011) Power asymmetries in companion modelling processes. Pages 117–140 in M. Etienne, editor. *Companion modelling. A participatory approach to support sustainable development*. Quæ, Versailles, France.

Begg, C. (2018): Power, responsibility and justice: a review of local stakeholder participation in European flood risk management, *Local Environment*, DOI: 10.1080/13549839.2017.1422119

Cleaver, F., (1999) Paradoxes of participation: questioning participatory approaches to development. *J. Int. Dev.* 11, 597–612.

Cooke, B., Kothari, U., (2001) *Participation: the New Tyranny?* Zed Books, London.

Doorn, N. (2016) "Governance Experiments in Water Management: From Interests to Building Blocks. *Science and Engineering Ethics* 22 (3): 755–774.

Edelenbos, J., A. Van Buuren, D. Roth, and M. Winnubst. (2017) Stakeholder Initiatives in Flood Risk Management: Exploring the Role and Impact of Bottom-up Initiatives in Three 'Room for the River' Projects in the Netherlands. *Journal of Environmental Planning and Management* 60 (1): 47–66.

European Commission (2001) *European governance: a white paper*. Brussels 25.7.2001. COM(2001):428

Few R, Brown K, Tompkins EL (2007) Public participation and climate change adaptation: avoiding the illusion of inclusion. *Clim Pol* 7(1): 46–59. doi:10.1080/14693062.2007.9685637

Fliervoet, J. M., G. W. Geerling, E. Mostert, and A. J. M. Smits. (2016) "Analyzing Collaborative Governance Through Social Network Analysis: A Case Study of River Management Along the Waal River in The Netherlands." *Environmental Management* 57 (2): 355–367.

Glucker, A., Driessen, P., Kolhoff, A. & Runhaar, H. (2013). Public participation in environmental impact assessment: why, who and how? *Environmental Impact Assessment Review* 43, 104–111.

Hajer, M. *Policy Sciences* (2003) 36: 175. <https://doi.org/10.1023/A:1024834510939>

Hartmann T, Spit T (2016) Legitimizing differentiated flood protection levels—consequences of the European flood risk management plan. *Environ Sci Pol* 55:361–367. doi:10.1016/j.envsci.2015.08.013

Hoppe, R. (2011). *The governance of problems: puzzling, powering and participation*. The Policy Press.

House, M.A. (1999) "Citizen Participation in Water Management." *Water Science and Technology* 40 (10): 125–130.

Kuhlicke, C., A. Scolobig, S. Tapsell, A. Steinführer, and B. De Marchi. (2011) Contextualizing Social Vulnerability: Findings from Case Studies across Europe. *Natural Hazards* 58 (2): 789–810.

Lawrence RL, Daniels SE, Stankey GH (1997) Procedural justice and public involvement in natural resource decision making. *Soc Nat Resour* 10(6):577–589. doi:10.1080/08941929709381054

Leroy, P., and B. Arts. (2006) Institutional dynamics in environmental governance. Pages 1–19 in B. Arts and P. Leroy, editors. *Institutional dynamics in environmental governance*. Springer, Dordrecht, The Netherlands. [http://dx.doi.org/10.1007/1-4020-5079-8\\_1](http://dx.doi.org/10.1007/1-4020-5079-8_1)

- March JG, Olsen JP (2008) The logic of appropriateness. In: Moren M, Rein M, Goodin RE (eds) *The Oxford handbook of public policy*. Oxford University Press, Oxford, pp 689–708
- Mees, H. L., P. P. Driessen, and H. A. Runhaar. (2014) Legitimate Adaptive Flood Risk Governance Beyond the Dikes: The Cases of Hamburg, Helsinki and Rotterdam. *Regional Environmental Change* 14 (2): 671–682.
- Mees, H., A. Crabbé, M. Alexander, M. Kaufmann, S. Bruzzone, L. Lévy, and J. Lewandowski. (2016) "Coproducting Flood Risk Management Through Citizen Involvement: Insights from Cross-Country Comparison in Europe." *Ecology and Society* 21 (3).
- Mees H, Crabbé A, Driessen PPJ (2017) Conditions for citizen co- production in a resilient, efficient and legitimate flood risk governance arrangement. A tentative framework. *J Environ Policy Plann.* doi:10.1080/1523908X.2017.1299623
- Michels, A. (2016) Arguments for involving the public in water management: evidence from local and regional water plans in the Netherlands *Water Policy*, 18 (4) 918-931; DOI: 10.2166/wp.2016.178
- OECD (2015) OECD principles of water governance. Directorate for Public Governance and Territorial Development.
- Ostrom, V., Tiebout, C., Warren, R., (1961) The organisation of government in metropolitan areas: a theoretical inquiry. *Am. Polit. Sci. Rev.* 831–842.
- Peters, B. G., and J. Pierre. (2001) Developments in intergovernmental relations: towards multi-level governance. *Policy & Politics* 29(2):131-135. <http://dx.doi.org/10.1332/03055-73012501251>
- Programma Bureau Hoogwaterbescherming, (2017) Projectenboek 2018  
<http://www.hoogwaterbeschermingsprogramma.nl/Documenten+openbaar/HandlerDownloadFiles.ashx?idnv=913803>
- Programma Directie Hoogwaterbescherming, (2015) Projectenboek 2016  
<http://www.hoogwaterbeschermingsprogramma.nl/documenten+openbaar/handlerdownloadfiles.ashx?idnv=448091>
- Rinaudo, J.D., and P. Garin. (2005) "The Benefits of Combining Lay and Expert Input for Water-Management Planning at the Watershed Level." *Water Policy* 7: 279–293.
- Roth, D. Vink, M. Warner, J. Winnubst, M. (2017) Watered-down politics? Inclusive water governance in the Netherlands, *Ocean & Coastal Management* 150 (51-61)  
<https://doi.org/10.1016/j.ocecoaman.2017.02.020>.
- Rowlands J (1995) Empowerment examined. *Dev Pract* 5(2):101–107
- Ruimte voor de Rivier (2016), factsheet Dutch Water Programme UK  
[https://issuu.com/ruimtevoorderivier/docs/factsheet\\_dutch\\_water\\_programme\\_uk\\_\\_47425562a3293d](https://issuu.com/ruimtevoorderivier/docs/factsheet_dutch_water_programme_uk__47425562a3293d)
- Sampson N.R., Schulz A.J., Parker E.A., and Israel B.A (2014). *Environmental Justice*. 45-54. <http://doi.org.ezproxy.library.wur.nl/10.1089/env.2014.0004>
- Sørensen, E. (2010) Governance and democracy. Working Paper Series, Centre for Democratic Network Governance. CDNG: Denmark
- Skelcher, C. & Sullivan, H. (2007) Public partnerships, citizen participation and democratic governance. Paper presented at the Public Partnerships and Collaborative Governance - The Citizenship Challenge seminar, Manchester University, 18 May 2007.
- Termeer, C.J.A.M., Dewulf, A., van Lieshout, M., (2010) Disentangling scale approaches in governance research: comparing monocentric, multilevel and adaptive governance. *Ecol. Soc.* 15 (4), 29.

Thaler, T., and T. Hartmann. (2016) "Justice and Flood Risk Management: Reflecting on Different Approaches to Distribute and Allocate Flood Risk Management in Europe." *Natural Hazards* 83 (1): 129–147.

Thaler, T., and M. Levin-Keitel. (2016) "Multi-level Stakeholder Engagement in Flood Risk Management – A Question of Roles and Power: Lessons from England." *Environmental Science & Policy* 55: 292–301.

Twigger-Ross, C. Orr, P. Brooks, K. Saduaskis R. (2016) Citizen involvement in flood risk governance: flood groups and networks. *E3S Web Conf.* 7 17006 DOI: 10.1051/e3sconf/20160717006

Van Ast, J. A., L. Gerrits (2017) Public participation, experts and expert knowledge in water management in the Netherlands

van Buuren, A., E. H. Klijn, and J. Edelenbos. (2012) "Democratic Legitimacy of New Forms of Water Management in the Netherlands." *International Journal of Water Resources Development* 28 (4): 629–645.

Van Buuren, M.W., J. Edelenbos, and E.H. Klijn. (2010) *Gebiedsontwikkeling in Woelig Water: Over Water Governance bewegend tussen adaptief waterbeheer en ruimtelijke besluitvorming*. Den Haag: Lemma.

van Buuren A, Driessen P, Teisman G, van Rijswijk M (2014) Toward legitimate governance strategies for climate adaptation in the Netherlands: combining insights from a legal, planning, and network perspective. *Reg Environ Chang* 14(3):1021–1033. doi:10. 1007/110113-013-0448-0

van Eeten, M., 2001. The challenge ahead for deliberative democracy: in reply to Weale. *Sci. Public Policy* 28 (6), 423e426.

Vink, M. (2015). *Navigating frames: a study of the interplay between meaning and power in policy deliberations over adaptation to climate change*. Wageningen: Wageningen University.

Vink M., Van der Steen M., Dewulf A. (2016) Dealing with long-term policy problems: Making sense of the interplay between meaning and power, *Futures* 67 1-6, <https://doi.org/10.1016/j.futures.2016.01.003>.

Warner, J.F., M.W. van Buuren, and J. Edelenbos, (2012) *Making Space for the River: Governance Experiences With Multifunctional River Flood Management in the US and Europe*. London: IWA Publishing.