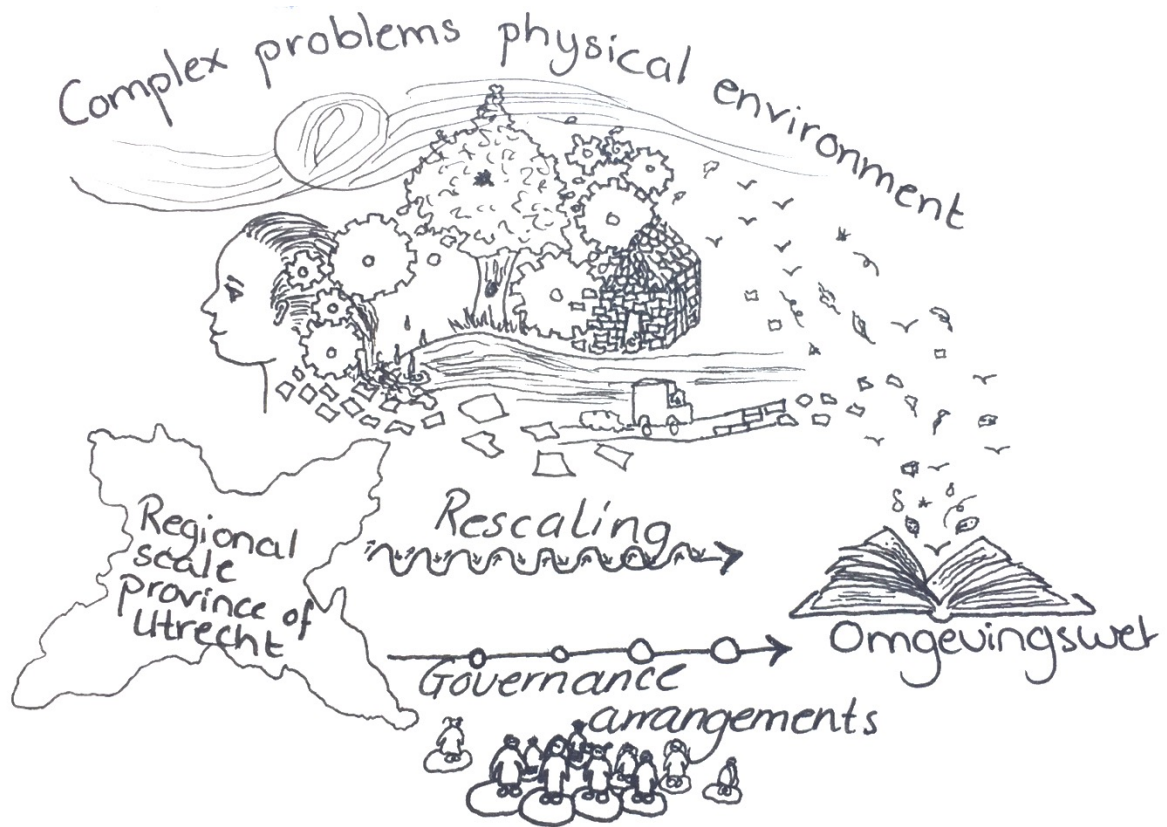


SOLVING COMPLEX PROBLEMS AT THE REGIONAL SCALE

Collaboration and scale within the new Environmental Planning Act in the province of Utrecht



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Thesis Series: Omgevingswet

Title	Solving complex problems at the regional scale - Collaboration and scale within the new Environmental Planning Act in the province of Utrecht
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Tags	Complex problems, governance, regional, scale, case study, living lab, best practice, collaborative learning, institutions, legitimacy.
Theme	Participation, integral approach
Instrument	Environmental vision, environmental plan, environmental programme, project decision.
Dutch summary	Onder de Omgevingswet complexe problemen oplossen vanuit het regionale schaalniveau met formele en informele governance.
English summary	Solving complex problems with formal and informal regional governance under the new Environmental Planning Act.
Dutch abstract	Verschillende governance benaderingen zijn geanalyseerd die gebruikt kunnen worden door de provincie Utrecht om complex beleid op te zetten binnen de kaders van de Omgevingswet. Dit is een nieuwe wet in Nederland die zesentwintig wetten over de fysieke leefomgeving samenvoegt in één begrijpelijke wet. Deze wet gaat naar verwachting in 2021 in. Interessante en belangrijke inzichten worden gegeven in de manier waarop de 'living lab' methode kan worden ingezet als participatieve methode om de wet te implementeren via diverse casussen. Kwalitatief onderzoek en een deductieve benadering zijn gebruikt om tot aspecten van governance te komen die gebruikt kunnen worden onder de nieuwe wet. Verandering in gedrag, besluitvorming en werkwijzen is nodig om met governance, schaalniveaus en de implementatie van de Omgevingswet om te gaan. Vier doelstellingen voor de provincie worden gegeven. Daarbij is meer flexibiliteit nodig om te kunnen handelen in een netwerksamenleving met diverse actoren.
English abstract	Different forms of governance are analysed that can be used by the province of Utrecht to implement complex policies within the framework of the Environmental Planning Act. The Act is a new law in the Netherlands, that transforms twenty-six laws on planning in the physical environment into one comprehensive law. Interesting and important insights in the way the 'living Lab' methodology can be used as a participatory tool to help with the implementation of the complex Act are given. A qualitative research method is used in which a deductive method is used to come up with aspects of governance that can be used under the Act. A change in behavior, decision-making and working methods is needed to deal with governance, scale and implementation of the Environmental Planning Act. Four objectives for the province are given. Besides this, more flexibility is needed to act in a network society with different actors.
External links	More information on the implementation of the new Environmental Planning Act at the province of Utrecht: https://omgevingswet.provincie-utrecht.nl/ More information on the complexity and opportunities of the regional scale: https://www.researchgate.net/publication/325472746_Entangled_in_scales_Multilevel_governance_challenges_for_regional_planning_strategies

<p>Information on links</p>	<p>Implementing the Environmental Planning Act at the province of Utrecht. All information on the Environmental Planning Act and the implementation of it by the province of Utrecht can be found there. A wide participatory approach is used to write the environmental vision, environmental ordinance and environmental programmes. Besides that, emphasis is put on changing the working methods and doing experiments.</p> <p>The complexity and opportunities of the regional scale This article describes the regional scale as an important planning level to provide for spatial objectives that transcend the boundaries of authorities. Tensions between formal and informal governance are described. Regional planning authorities need to take up a more centripetal, intermediate role in formal and informal governance arrangements to disentangle difficult problems.</p>
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'Solving complex problems at the regional scale'

Collaboration and scale within the new Environmental Planning Act in the province of Utrecht

'Complexe problemen oplossen op het regionale schaalniveau'

Samenwerking en schaalniveaus binnen de Omgevingswet en de provincie Utrecht

Master thesis

7th of July 2017

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Picture front thesis Renzo Gerritsen (2017) & drawing Anouk Paris (2017)



Foreword

A new law that incorporates twenty-six current laws on the physical environment into one. How can this law be implemented? How are all these people working within the physical environment going to collaborate on developing the physical environment? What is the regional scale and how is the province of Utrecht governing this scale? Are there other scales and how are these scales connected? These questions were the beginning of this master thesis and the search for an internship.

This master thesis is the result of that search. Starting in November 2016, a research subject and internship at the province of Utrecht were found that lead to a finished thesis on the 7th of July 2017. The master thesis is the research project that finalises the master Spatial Planning at the University of Utrecht. It is a project in which an individual research is designed and conducted. In this research, I present the knowledge gained during the program and show that the academic skills are completely mastered.

The internship is optional for the master course, but adds a lot of practical experience to the research. For this research, an internship at the province of Utrecht has been conducted. Within the internship, I contributed to the implementation program of the new Environmental Planning Act and the innovation program of the physical environment. The research in this thesis contributes to both programs and therefore, the internship and thesis contributed to each other. I would like to thank Patrick Witte (University of Utrecht) and Marijke Peters (Province of Utrecht) for their immense support and supervision during the writing of my master thesis.

Further, I would like to thank all my colleagues at the province of Utrecht, who thought along, provided the opportunity to contribute to their program or helped me through the hard times a thesis process also consists of. Hanneke Kerckhaert-Zeevalkink, Mariëlle Hoefsloot, Pim Beerling, Annelies Camping, Melissa te Dorsthorst and all the respondents who were willing to clear their agenda to participate in the interviews taken. My fellow students who were willing to hear my struggles even though they were struggling on their own: Laura Tenniglo, Melissa Warmenhoven, Kia Silvennoinen, Jidde Koekoek, Nathan Pfeyffer, Luiza Moreira da Rocha Amaral de Souza, Vivian Wong and Kasia Iwińska thank you so much for your positive energy.

A major gap exists between the first words of this thesis to the conclusion in which a certain time was spent to read, re-read, write, erase, re-write, discuss, think and look up. Besides that, I started this whole process by getting inspired with other master theses and thought Patrick Witte's musical support (based on Andy Field's introduction) was very funny and interesting. Therefore, I would like to continue this tradition and elaborate on the musical support that helped me through this process:

- Mumford and sons - *White blank page*
- Raccoon - *Don't give up the fight*
- The Beatles - *Get back*
- Jason Mraz - *I won't give up*
- Queen - *Under pressure*
- Fleetwood Mac - *Don't stop*
- Queen - *The miracle*
- The Doors - *The end*

I would like to conclude with special thanks to my parents who supported me in all this and inspired me to follow my ambitions. My mother specifically for proofreading and reviewing my thesis. Besides that, my boyfriend Bart for supporting me in all this and providing the needed distraction at times. Without you, the result would not have been the same.

Anouk N. Paris BSc.

Utrecht, 7th of July 2017

Summary¹

Complex problems exist within the physical environment, especially at the regional scale. To find solutions to these problems, governance and rescaling must be considered. A new law is implemented in the Netherlands; the new Environmental Planning Act, that focusses on a physical environment that is healthy and developed effectively to fulfil societal needs. The aim of this thesis is to define what aspects of informal and formal governance arrangements can be used by the province of Utrecht to develop projects on a regional level within the framework of the Environmental Planning Act. The transition to a new Act is a difficult task, because it incorporates twenty-six current laws concerning the physical environment into one. Therefore, this research helps to obtain a clearer view on the objectives for the province towards the implementation of this act. It is important hereby, to define what role participation with other actors takes in this process.

This thesis adds a Dutch, regional planning perspective to the ongoing debate about rescaling governance described by Evers & de Vries (2013). A lot of research has been conducted on governance and governing the regional scale. A difference is made concerning governance in this research. Governance is approached as either formal governance that is hierarchical, institutional and determined by law and on the other hand informal governance that is constructed by networks. Research has already been conducted on governance, rescaling and the debate on the regional scale separately. However, these three issues have not been combined to find an answer to these three intertwined themes taken altogether. Besides that, the living lab methodology is highlighted as being a methodology that can be used to implement the new Environmental Planning Act and solve complex problems on the regional scale. In a living lab, different actors are involved in solving complex problems by making use of innovation. It is a research-based methodology in which learning whilst doing is important.

By making use of a qualitative research methodology, an answer has been found to the question on how to combine these themes and implement them in the new Environmental Planning Act. Nineteen people have participated in this research in either an interview or a discussion group. These are experts in the fields of the new Environmental Planning Act, living labs, the province of Utrecht and the regional scale or participants of the cases considered in this research. Five cases have been selected to compare the processes used to come up with solutions for complex problems within the physical environment. The first case considered, is the living lab new Environmental Planning Act, in which four different projects are developed to be capable to work already with the legislation considered in the new Environmental Planning Act. The second case considered is the junction development in Bunnik. Hereby, a train station is developed in which the whole environment is developed simultaneously. Connecting different values within the direct environment of the junction is the main issue raised in the development. The third case is the development of the Oostelijke Vechtplassen. The quality of nature in this area is being improved by developing the whole area. Paying special attention to the water quality in the area. The fourth case is the redevelopment of the Noorderpark. Hereby, a park north-east of Utrecht is being developed. The last case is the new Dutch Waterline in which provinces work together to maintain an old military defence line running through different provinces.

A literature analysis was conducted to obtain an overview of the findings in the context of existing literature. Complex problems arise in spatial planning. These may even be called 'wicked' problems. Knowledge must be gained to come up with different possible solutions. Besides that, the context in which the problem takes place, must be considered (Rittel & Webber, 1973). An ongoing shift is taking place from government to governance (Rhodes, 2007). Governance can be used to solve complex problems (Termeer et al., 2010). In governance, public and private actors work together and share responsibilities (Evers & de Vries, 2013). Governance can be approached in a formal way and in more informal ways. Different aspects of governance are elaborated on by different authors (Termeer et al., 2015; Termeer et al., 2016; Emerson et al., 2011; Edelenbos & van Meerkerk, 2015; Ayres, 2017). These aspects of governance define what should be considered in working together with actors from different organisations. These are divided in five capabilities: revitalising, responsiveness, reflexivity, resilience and rescaling (Termeer et al., 2015 & Termeer et al., 2016). Scale is not self-evident, it is socially and politically constructed (Wyborn & Bixler, 2013). The regional scale gains in importance, because initiatives arise from lower scales and through decentralisation of national tasks, a top-down phenomenon exists (Spit & Zoete, 2013). Integrating different issues and approaching the physical environment coherently is an aim of the new Environmental Planning

¹ A summary in Dutch is provided in appendix F.

Act. Besides that, the subsidiarity principle is strived for in the new Act. Thereby, the lowest level possible is used to solve problems, because it is assumed that the problem originates there (Boeve & Groothuijse, 2014). It is important to monitor and evaluate spatial strategies at the regional level, to be able to adapt to the most efficient scale for regional planning (Alden, 2006). Rescaling for governance arrangements is inevitable (Swyngedouw, 2005).

From the results of the interviews and discussion group, the province of Utrecht needs to adapt to the changes needed under the new Environmental Planning Act and the changing society. The change from government to governance is such a change that has been going on for a few years. With the new Environmental Planning Act coming in sight, the province of Utrecht needs to adapt to this change. The physical environment needs to be approached coherently and decision-making should be enlarged. The regional scale is a level on which complex problems take place. Therefore, the change to more informal approaches of governance could add to finding solutions to these complex problems. Governing issues on the scale these issues take place on with actors involved in these issues is the objective the province faces. Hereby, the province needs to keep different perspectives of actors in mind and involve each actor on a scale it can oversee. By adapting to an open process in which research is incorporated to find solutions to questions raised in the projects solving societal issues, the province can manage these complex problems taking place on the regional level with the actors involved. Civil servants need to be aware of the changing state of the position of the province. They should continuously take on a critical stand towards their work, attitude and project to monitor, evaluate and develop the process. Then lessons can be learned that could be implemented in other projects. The complexity and enthusiasm to participate of today's society asks for a changing government. Issues arise from the civil society and with the new Environmental Planning Act, the province is given the possibility to react to these issues and solve them together with the society.

The problem considered in this thesis consisted of three parts; governance, scale and the implementation of the new Environmental Planning Act. Four objectives for the province were defined based on the results of this research. The province of Utrecht should adapt to the changing role of the government, the extent of participation from society must be defined, cross-border collaboration must be set up to adapt governance to the issue at stake and the lessons learned in different projects need to be carried-out. The province should overlook the provincial scale and the governance processes that take place on this scale. The differences in scales should be communicated by the province with the other actors to define the issues that take place on these scales. Flexibility is needed here. Therefore, formal decision-making should be adaptable to the context in which the projects take place. This is not easy given the political and administrative structure of the province. However, the network society that is emerging, asks for a changing context in which provinces are flexible. These objectives need to be implemented, otherwise the province cannot meet the goals of the new Environmental Planning Act. Therefore, a change in the attitude, behaviour, decision-making and working methods of people working and politicians at the province is needed.

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1. Introduction

The responsibility and authority of the provinces in the Netherlands has been discussed since last century (Giebels, 1997; Allers & Fraanje, 2011). The objective in this societal discussion, is to make the geographical scale of the province smaller and more effective. To achieve this objective, the provinces should transform to a province that is able to adapt to different circumstances and policy areas. Both the internal operating procedure as the external operating procedure of the provinces should be revised (Hoeve et al., 2013). Hoeve et al. (2013) state that the task for the province as defined in the new Environmental Planning Act², contains a paradox. On one side, the province must be more effective with less budget and on the other side it must allow stakeholders to participate within the new law (Groothuijse et al., 2014). The provinces put the societal task up front. To address societal problems, co-operation with companies, other public actors, civilians and others involved is needed even more than up to now. Thus, knowledge is gathered to come to a solution to redefine the responsibility and authority of the provinces (Hoeve et al., 2013).

The provincial region, that is the border that has been defined jurisdictionally, may cross the borders of the geographical position of the province in practice (Overheid.nl, 2017). This might complicate the application of regulations to the region, weigh the interests at stake and make choices positive for the whole region. In this thesis, rescaling is considered from a provincial perspective. Rescaling here is understood as continuously adapting to the scale on which the problem takes place. A combination is made with governance to understand how the province can address wicked problems at the right scale and involve the relevant stakeholders. Hereby the new Environmental Planning Act is analysed in its capacity to add to this discussion on rescaling.

The new Dutch Environmental Planning Act gathers different current spatial laws and regulations into one. The objective is to make spatial policy making simpler and more flexible (Rijksoverheid, 2017). With the introduction of more and more complex planning processes, the call for integration gets louder. The new Environmental Planning Act adds to this call for integration (Spit & Zoete, 2013). Because of the environmental plan³ and environmental vision⁴ becoming more general documents, the legislator expects participation in spatial policy becoming easier to facilitate. Improving participation between governments and actors other than the government is one of the focus points of the new Environmental Planning Act (Rijksoverheid, 2017).

Within the new Environmental Planning Act, responsibilities are not clearly defined for each governmental scale. The fundamental idea is that the municipality is primarily responsible for the physical environment. Further, the responsibilities are divided over the water agencies, provinces and the national government. Not defining those responsibilities is an explicit choice of the legislator to make all governments equally responsible for the concern of the physical environment (Groothuijse et al., 2014). The aim of this thesis is not to elaborate on the differences in cooperation under the 'old' legislation and the new Environmental Planning Act. Therefore, the different goals of the new Environmental Planning Act are elaborated on to give insight in the degree to which the new Environmental Planning Act guides governance arrangements and rescaling. The main goal of this thesis concerning the new Act is to analyse the different goals of the new Environmental Planning Act to assess in how far the new Environmental Planning Act amends existing governance arrangements and rescaling.

Traditional state-led planning has changed and led to different, new governance arrangements in the past years, such as public-private partnerships, citizen participation and New Public Management (NPM) (Lester & Reckhow, 2012). In more recent years, multi-level governance, collaborative governance, network governance and informational governance have emerged. The most recent shift is the one from 'big government' to 'big society' in which the society itself is more involved in problem solving than the government (Termeer et al., 2016). This thesis adds to this most recent shift and therefore focusses on aspects of governance. The influence of planning in the local, regional and national governments has weakened in the context of globalization. Reduced public funds and less government involvement exist in spatial planning. Therefore, improvement in the quantity and quality of (citizen) involvement is urgent, since the relative power of actors involved in spatial planning practice has shifted. However, participation makes planning more complex, because information is needed for each actor and interests must coincide

² Omgevingswet

³ Omgevingsplan

⁴ Omgevingsvisie

(Boonstra & Boelens, 2011). Within spatial planning, rescaling is a necessary governance capacity. Due to the wickedness of spatial planning problems, mismatches exist between the problem- and governance scales. By observing these mismatches and rescaling, wicked problems can become easier to seize. Rescaling can be elaborated on by shifting administrative responsibilities between scales or by connecting different scales (Termeer et al., 2016).

Consensus building to act regionally occurs at overlapping scales and includes a lot of different actors. Research has been conducted on governance arrangements in which the results often led to participation being 'just a seat at the table' and participation in the decision-making process remained out of question (Lester & Reckhow, 2012). Especially water and ground issues often take place at a scale that transgresses with the political, geographical and ideological boundaries. For example, the water-agencies are divided in different geographical departments that do not cohere with the provincial or municipal borders. This makes governing planning processes concerning water and ground issues more complex, because cooperation at this boundary-crossing level is complicated to achieve. Moreover, public institutions often have a clear defined function, whereas water and ground issues involve different policy areas (Lester & Reckhow, 2012). A potential methodology to approach complex problems at the regional scale, could be the research-based 'living lab' methodology. Hereby, actors with different backgrounds cooperate in an open process to solve complex problems (Dell'Era & Landoni, 2014; Niitamo et al., 2014; Edwards-Schachter et al., 2012).

Regional governance refers to the coordination of different cities and their surrounding suburbs (Pierre, 2005). The regional scale becomes more important in the last few years and more dependent on developments occurring at other scales (Evers & de Vries, 2013). Governments can be active in shaping and guiding the planning process at the regional level (Witte et al., 2016). Therefore, it is interesting to study the process that can be adopted to guide developments at the regional level. In the Netherlands, the regional planning authorities are the provinces (Morrison, 2014). The province weighs interests and makes choices that are in the interest of the region (IPO, 2017). For this reason, the role of the province is quite substantive within regional governance.

It appears that the specific complexity of water and ground issues adds to intricate problems in spatial planning (Lester & Reckhow, 2012). With the Dutch new Environmental Planning Act focussing on more than only spatial planning, but the physical environment altogether, the complexity and wickedness of problems will increase. The aim of the new Environmental Planning Act is to approach the physical environment integrally. That means that especially at the regional scale, where finding the right scale to approach the problem is debatable, a problem exists. This problem statement consists of three parts. First there exists a problem on governance, that is the discussion on how to cooperate as a province on the regional scale with other actors. The second problem is the fluctuating scale on which the problem takes place. That means that the province must deal with rescaling. Third is the upcoming transition in the Netherlands of a new Environmental Planning Act being implemented. This leads to the following research question broached in this thesis:

How can aspects of formal and informal governance arrangements be used by the province of Utrecht to develop complex projects within the physical environment on a regional level within the framework of the new Environmental Planning Act?

This central research question is split up in different sub-questions to let the answer of each sub-question contribute to the final answer on the central research question:

1. What are aspects of formal and informal governance arrangements?
2. What is the regional level (scale) that the province moves on?
3. What aspects of governance arrangements are needed for the rescaling of projects developed by the province of Utrecht?
4. What is the influence of the new Environmental Planning Act on governance arrangements at the regional level?
5. To what extent is the methodology of a living lab adequate for the province of Utrecht to function as the right methodology to develop complex projects within the physical environment?

The first question is formulated to identify the differences between formal and informal governance arrangements described in the current body of academic literature. Question two describes the regional level on which the province moves to handle problems at an appropriate scale. The third question helps to define the aspects of governance arrangements that are needed to be able to rescale the projects developed

by the province of Utrecht. The fourth question describes the influence of the new Environmental Planning Act on governance arrangements. In one of the cases researched, the methodology of living labs is used to solve the problem at hand and therefore, this methodology is elaborated on in more detail in the last research question. Besides that, the living lab methodology incorporates different aspects that are corresponding to aspects aimed at in the new Environmental Planning Act.

Five cases are examined to find answers to the questions raised in this thesis. First, the living lab new Environmental Planning Act whereby different water-related projects are conducted. Second, a case about the program of the new Dutch Waterline within this program different projects are conducted that are considered. Third, the Noorderpark that gets redeveloped. Fourth, the development Oostelijke Vechtplassen is considered. The last case is about a junction development in Bunnik. The cases are more elaborated on in the contextual chapter. From the theory described in this research, a deductive approach is used. Therefore, different recommendations are made for governing the regional scale and adapting continuously to the scale on which the complex projects can be developed.

1.1 Societal relevance

It is important to research governance arrangements that can be more suitable within the framework of the Environmental Planning Act, because spatial planning problems are complex and it is not always clear on what scale a problem should be solved. Besides that, the new Environmental Planning Act gives no clear regulations for the division of responsibilities between governments (Rijksoverheid, 2017). Therefore, it is in society's interest that research is conducted to determine what governance arrangement can be used to develop projects on a regional level in the province of Utrecht, within the framework of the Environmental Planning Act. It is especially important to consider this issue in this early stage of the initiation process of designing the Environmental Planning Act, because eventual problems can be defined on which further research must be conducted. The transition to a new Environmental Planning Act is a difficult task and this research could help to obtain a clearer view on the objectives for the province towards the rest of the region. Besides that, it is important that participation of citizens in governance approaches on the regional scale is defined. Therefore, governance on the regional scale can be conducted as effectively as possible.

1.2 Academic relevance

As Boonstra & Boelens (2011) stated, participation is complex and governance gets more important, this makes it crucial to assess governance processes to facilitate participatory planning. The new Environmental Planning Act emphasises the principle of subsidiarity, which means that the level on which the implementation takes place, is the lowest if not otherwise specified in the law (Gabry, 2013). This thesis adds a Dutch, regional spatial planning perspective to the ongoing debate about rescaling governance described by Evers & de Vries (2013). A lot of research has been conducted on governance (Rhodes, 2007; Gupta et al. 2015; Lester & Reckhow, 2012; Evers & de Vries, 2013; Swyngedouw, 2005; Lambregts et al., 2008; van Buuren et al., 2014; Termeer et al., 2010; Hooghe & Marks, 2001; Emerson et al. 2011; Arnouts et al, 2012) and on governing on the regional scale (Feiock, 2007; Newman, 2000; Albrechts et al., 2003; Boogers, 2013; Termeer et al., 2015; Termeer et al., 2016). A difference is made between formal governance that is hierarchical, institutional and determined by law and regulation on one hand and informal governance, which is constructed by networks on the other hand (Witte et al., 2016). The term 'network' describes any system of interconnected entities (Freeman & Millar, 2017). Scales are dynamic, linked to problems and constructed by different actors. These actors can try to shift responsibilities by allocating the problem to a lower or higher scale (Lieshout et al., 2010). Research has been conducted on governance, rescaling and the debate of the regional scale. However, these three issues have not been combined to find an answer to these three intertwined themes taken altogether. The complexity of spatial planning problems already asks for flexible problem solving and this has been researched a lot (Newman, 2000; Termeer et al., 2015; Termeer et al., 2016). By addressing the three themes in one research, connections can be made that help to address complex problems within the physical environment altogether. Hereby, recommendations can be made to solve complex problems on the regional scale. Whereby I hopefully make clearer how the regional government authorities can move between scales and collaborate with actors concerned to solve these complex problems.

1.3 Outline of this thesis

Firstly, background theory is elaborated on. Wicked problems and complex planning are started with. Moving on to theory on formal and informal governance and the concept of scale. The aim of the new Environmental Planning Act is explained shortly. A conclusion is made with rescaling to the right scale on

which complex problems may be handled. In the contextual chapter, some more background information is given to understand the new Environmental Planning Act, provinces in the Netherlands and living labs more thoroughly. Besides that, the cases are elaborated on in this contextual chapter. The next chapter describes the methodology of the research and the way in which the theory described in this thesis has been made operational for the research. Further, the theory and empirical findings are bridged together to present the results that give an answer to the main question of the research.

2. Theoretical background

This section offers an overview of the most relevant academic literature for this research. Starting with Rittel and Webber's wicked problems, an explanation is given for why spatial planning problems can be complex. Then, a difference is made between formal and informal governance arrangements in which five governance capabilities are defined (Rittel & Webber, 1973; Termeer et al., 2015; Termeer et al., 2016). The regional scale is introduced and the complications that occur in planning at this scale are discussed. Rescaling is put forward as a possible solution to the complex planning problems by handling each problem at the right scale. Finally, a conceptual model and a synthesis are set up to give more insight on solving complex problems on this regional governmental planning level.

2.1 Wicked problems and complex planning

Problems in spatial planning are complex problems (Ayres, 2017; Boogers, 2013; Brand & Gaffikin, 2007; Hartmann, 2012; Arnouts et al., 2012; Edelenbos & van Meerkerk, 2015). Rittel and Webber (1973) even call these problems 'wicked' problems. To describe a wicked problem, all conceivable solutions must be developed before. That means that knowledge of all possible solutions is required. Understanding problems and resolving problems are interconnected. A problem cannot be understood if the context is not considered (Rittel & Webber, 1973). Wicked problems challenge people working in the government, especially at the departments of spatial planning and water management. Governance can add to dealing with wicked problems, because it brings actors together with different information to come up with potential solutions. Current governance arrangements encounter tensions between existing formal rules and informal rules of the systems in which they are operating. Alternative governance strategies and ways of observing might be found that can tackle wicked problems and are more open to new strategies for governing (Termeer et al., 2015). Formal processes are not going to be enough to come up with solutions to these complex problems. Planners need to guess and experiment to come up with new solutions. Different attempts have been made to come up with solutions to complex problems, such as: incremental planning, planning by projects and mixed scanning (Hartmann, 2012). Especially processes at local and regional levels are complex and need fitting instruments, because different problems come together at these levels (Arnouts et al., 2012). Wyborn & Bixler (2013) argue that each planning problem takes place on its own scale. This calls for governance mechanisms that decentralize decision-making and at the same time coordinate decision-making within and between scales and actors (Wyborn & Bixler, 2013).

Governance can be approached in two ways: analytically and normatively. On the one hand, the analytical focus on governance puts the emphasis on the process, the 'how' rather than the 'who'. Both state and non-state actors are involved in the decision-making process. On the other hand, the normative concept of governance is focused on network-based models and models of good governance in which transparency and participation are described as democratic ideals (Gupta et al., 2015). Termeer et al. (2010) add to this that governance comprises all modes of governing and that governance arrangements can be enforced by markets, hierarchies or networks (Termeer et al., 2010). Pozzoli et al. (2014) state that governance reduces costs for the public sector and increases public performance, because there is higher expertise when different types of knowledge are considered. With different types of knowledge, different solutions to the complex problems arise. Normative principles allow for comparisons between different governance arrangements (Pierre, 2005). Governance arrangements aim to be legitimate, effective and resilient to govern complex issues. It is complicated to operationalise these norms. Besides that, governance asks for knowledge to design innovative policy arrangements. Apart from jurisdictional agreements (such as the new Environmental Planning Act), the institutional-, network- and knowledge scale should be considered (Termeer et al., 2010).

There is an ongoing shift from government to governance as stated by Rhodes (2007). He also explains that there is a process going on of 'the hollowing out of the state'. This means that this growth of governance makes the role of the state less significant and reduces the effectiveness of the core executive (Rhodes, 2007; Pozzoli et al., 2014). This shift of government to governance is a shift from a hierarchical government to more interactive governance arrangements in which actors acknowledge that they are interdependent. When planning becomes less hierarchical, the scale of actors runs from public to private and territorial boundaries and responsibilities become blurred (Evers & de Vries, 2013). The government becoming less hierarchical makes the possibility of setting up a network of actors easier, because the scope of actors involved can be broadened once less governmental action is taken. Witte et al. (2016) emphasise that this shift would suggest that networks are open to all and empowering, but governance networks are often

value-laden and exclude particular groups of actors (Witte et al., 2016). This is something that should be thought of once setting up governance networks to avoid excluding groups of actors. When the territorial boundaries of governmental authorities do not correspond with the scales of public goods, governing problems arise, because decisions cannot be taken on the scale on which the problem takes place (Termeer et al., 2010). The new Environmental Planning Act asks for more participation. It states that 'stakeholders (citizens, businesses, social organisations and other governments) should be involved at an early stage of the process of decision-making for a project or activity' (Dieperink, 2016). Driessen et al. (2012) argue that more attention in governance is given to the interaction between actors of the state, the market and civil society.

2.2 Formal and informal governance arrangements

Governance has different meanings to different scholars, which makes it hard to come up with a definition of governance (Kooiman et al., 2008). It has emerged as an analytical and a normative tool in academic literature. It can refer to actors and networks; the process and structure of governance and the quality of governance. The analytical concept of governance focuses on managing and ruling territories and populations. Hereby, the definition of governance defined by Gupta et al. (2015) is handled:

"The sum of the many ways individuals and institutions, public and private, manage their common affair. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action may be taken."

Gupta et al. (2015, p. 28).

In this shift from government to governance a division can be made between formal governance arrangements and informal governance arrangements. Formal governance is incorporated in law and regulations (Boonstra & Boelens, 2011; Witte et al., 2016; Hooghe & Marks, 2001). This formal governance is based on the bureaucratic governance process which adds more to the government part of the shift. Jurisdictional boundaries derive this formal governance arrangement (Lester & Reckhow, 2012). The province of Utrecht is such a formal governance institution based on a jurisdictional boundary (Evers & de Vries, 2013). Lester & Reckhow (2012) argue that the renewed interest in acting regionally does not call for a single formal regional government. Formal governance can be understood as governance between different governmental organisations. It is a closed collaboration within specific groups of actors.

Informal governance on the other hand is based on trust and shared responsibility (van Meerkerk, et al., 2013). Trust develops in informal governance structures (Edelenbos & van Meerkerk, 2015). Emerson et al. (2011) even state that shared motivation is needed in collaborative governance arrangements. Hereby, mutual trust, understanding, internal legitimacy and commitment are essential. Mutual understanding refers to the ability to understand and respect each other's positions and interests, even if people do not agree. Internal legitimacy refers to the confirmation that participants are trustworthy and credible. Shared commitment refers to participants being able to share a path and cross scales, jurisdictional boundaries and organizational boundaries (Emerson et al., 2011). Informal governance arrangements provide room for actors to think and behave outside their roles and rules set by their formal positions in established institutions. This leads to cross-boundary partnerships (Edelenbos & van Meerkerk, 2015). Ayres (2017) defines informal governance as:

"Those non-codified settings of day-to-day interaction concerning policy issues, in which the participation of actors, the formation of coalitions, the processes of agenda setting, (preliminary) decision-making and implementation are not structured by pre-given sets of rules or formal institutions."

Ayres (2017, p. 95)

Two concepts are central in this definition. First, whether there are formal rules that are set. Second, if the actors are making use of pre-limited practices that are agreed upon by the actors (Ayres, 2017). Network governance is often referred to as an informal governance arrangement (Lester & Reckhow, 2012; Witte et al., 2016). It is even argued that this informal governance could be a solution to the discussion on regional governance, because specific stakeholders come together to solve a specific problem (Lester & Reckhow, 2012).

Scott (2001) claims that these formal and informal governance arrangements constitute the actions of actors in a particular context. Arnouts et al. (2012) argue that there is a difference in formal procedures and informal routines. This difference can be derived from defining the role division between actors and define

the division of responsibilities between the actors (Arnouts et al., 2012). Swyngedouw (2005) states that a displacement occurs from the formal to the more informal governance arrangements in which new actors appear in the scene of the government. He considers that this asks for a transformation in statehood and a new relation between the state and the civil society (Swyngedouw, 2005).

This interplay between formal institutional arrangements and informal practices is complex (Ayres, 2017). It asks for a constant switch between the 'front stage' and the 'back stage'. 'Front stage' is visible and public officials must stay in role here. 'Back stage' is the world of complex decision-making in which complex negotiations can be less formal. Roles are less rigid, which makes it possible to step out of character and come up with innovative solutions, because flexibility is possible. Public leaders must make place for administrators to have sufficient autonomy and flexibility to be innovative. This makes stability and uncertainty challenging each other. Politicians are still being held account for their decisions back stage, which makes it important that processes are transparent. It means that informal governance needs some kind of formalization in which the informal process is established in formal structures. This can be done by setting up 'rules of the game' in which behaviour of actors is guided and constrained. The role for politicians is to develop public support for innovation, before it mobilizes different stakeholders (Ayres, 2017). Dieperink (2016) adds to this that in practice often a formal demand is needed for participation to oblige the initiator to let other (public and private) actors participate in the project. The new Environmental Planning Act remains very general when it comes to participation with public and private actors. The choice for the extent of participation remains a political choice, not a legal choice. The most important aspect for legal certainty of participation is that the new Environmental Planning Act does not define when and about what participation should take place and who should participate (Dieperink, 2016).

Consequently, a balance needs to be found between formal and informal governance arrangements. On top of that, a balance needs to be found between the analytical approach to governance and the normative approach of governance. Therefore, both the process of governance and the degree to which governance must be conducted can be broached. The collaborative governance theory could add to the search for balance in governance.

2.2.1 Theory of collaborative governance

The theory of collaborative governance incorporates cooperation for decision-making between governments and other organisations (Boogers, 2013). Brand & Gafikin (2007) argue that collaborative planning is a democratic process, it gives a voice to the voiceless. The purpose of collaboration is to generate desired outcomes together with different actors, that cannot be accomplished separately. Hereby, it is important to get the 'right' people to the table (Emerson et al., 2011). Arnouts et al. (2012) adds to this that it is not enough to study actors itself, one should study the interrelationship between actors. Six preconditions for governance processes are defined by Boogers (2013). These could form a basis for the aspects of formal and informal governance arrangements needed within solution finding for complex problems.

1. *Persons involved are equivalent in power and means.*
This is important to prevent stakeholders in a weaker position from not taking a significant part in the decision-making process. Unequal power relations should be addressed.
2. *There must be a necessity to participate in the collaboration process.*
Taking part in decision-making processes is most often a voluntary decision, that is what makes it important for stakeholders to have a clear motive for participation.
3. *Experiences with cooperation and conflicts.*
Good experiences with previous cooperation provides trust between partners, a history of discrepancies creates distrust between partners and hold backs trust and collaborative decision-making.
4. *Supporting leadership.*
Especially when cooperation is not self-evident, a leader can make a difference. Barriers for cooperative decision making can be taken away.
5. *Decision-making must be open and exclusive.*
Collaborative decision-making must be collaborative. It is an important condition for successful decision-making. The exclusive nature of the decision-making process is another condition, because this underlines that there is just one decision-making platform and actors concerned cannot transfer to another decision-making platform to obtain their goals.
6. *Trust, commitment and successful outcome process.*

Collaborative decision-making is a process of giving, taking and falling and rising. It is important to invest in the quality of personal contacts. Every result achieved must be put in the spotlight and celebrated to build trust and remove conflicts.

The reason why not a lot of progress has been made in the reinforcement of the regional government is connected to the fact that discussions were more focussed on the regional government itself than on governing the region. These six preconditions give a basis for the answer to the question on how to govern the region (Boogers, 2013). Nonetheless, these six preconditions are not enough to give an answer to the governance structure needed for complex problem solving. Therefore, governance capabilities are needed to add to these six preconditions. A combination of both is needed to define how complex problems can be governed.

2.2.2 Governance capabilities

Four governance capabilities are defined by Termeer et al. (2015) that add to this discussion about governing the region: reflexivity, responsivity, resilience and revitalising (Termeer et al., 2015). A fifth capability was added later; rescaling (Termeer et al. 2016). These governance capabilities are part of an integrative approach to deal with wicked problems. They define a governance capability as:

“The ability of policy makers to observe wicked problems and to act accordingly, and the ability of the governance systems to enable such observing and acting.”

Termeer et al. (2015, p. 683)

Apart from action strategies, two additional dimensions are needed to govern a wicked problem: the wickedness of the problem needs to be observed and the conditions for a governance system must be enabled in which actors operate to deal with the wicked problem. The context in which the problem takes place must be considered to come up with alternative strategies. One capability is not enough to cope with the wicked problems, several capabilities must be used in conjunction (Termeer et al., 2015). These preconditions and capabilities are used in this research to set up the topic list for the interviews held. It adds to the deductive approach from which recommendations can be derived for governing the regional level within scales and the new Environmental Planning Act.

Reflexivity

This first capability prevents tunnel vision. In a policy domain, different frames exist. Different frames handle decisions, policy issues and meanings from different perspectives. Frames are connected to a person's background and position. Misunderstandings may occur if frames differ considerably. It is important to observe these different frames and understand how this affects the interactions between actors and the wicked problem's dynamics. Collaborative governance and network governance provide strategies to take these multiple frames into account (Termeer et al., 2015). One can seduce others in a particular frame. Different frames can be connected or negotiation can take place to deal with the wicked problem, despite the frame differences. Boogers (2013) adds to this that informal networks are needed to make regional collaboration successful. Here, public officials, governors and entrepreneurs meet to connect on a regional level. Of importance is also the amount and equality of collaborating partners (Boogers, 2013). Reflexivity asks for frame exploration, self-criticism and creativity. Unfortunately, this is not easily achieved, because of the political nature of the governmental system. A solution for this would be to enable structures that institutionalise a bridge between organisations, policy sectors and administrative level (Termeer et al., 2015). This would ask for the fifth capability; rescaling. In recent years, less attention has been given to reflexivity. Safety norms and safety approaches are the only sector that gets reflected on. Therefore, safety norms are adjusted continuously (Termeer et al., 2016). The new Environmental Planning Act focuses on the physical environment as a whole. This is contradictory to the previous legislation that was only focussed on the field of spatial planning. Hereby, external safety and health are new domains to be considered (Groothuijse et al., 2014). The tendency to focus more on safety is even visible in the upcoming new Environmental Planning Act.

Resilience

Resilience is the capability to be flexible with the uncertainties and constant changing context wicked problems take place in. It is important to observe upcoming disturbances. Different types of knowledge can be combined to observe these potential changes. Three types of mechanisms are defined:

- Threshold effects: Small events that trigger changes that are impossible to reverse.
- Surprises: behaviour differs from expectations defined beforehand.

- Cascading effects: Events produce immense consequences across scales, systems and time.

Learning by doing is important to adapt continuously to these changing conditions. Reflection on the process by actors is important in this. Not all uncertainties can be foreseen by learning, but different scenarios can be defined and adjusted when needed or applied only when necessary. Here rescaling is also an option, because cross-scale linkages between individuals, organizations, agencies and institutions at different levels can stimulate interactions and learning across boundaries. For this, flexible legislation that allows experiments is needed (Termeer et al., 2015). In water policy, a continuous call for resilience exists. The increasing vulnerability, resilience and recuperative ability of a water system and long term development and anticipating policy ask for resilience (Termeer et al., 2016). Knowing how governance takes place across all scales is another dimension of regional institutional resilience (Morrison, 2014). One of the fundamental ideas of the new Environmental Planning Act is the concept of flexibility (Groothuijse et al., 2014). To bridge political and governmental differences, a regional leader is needed. Mostly a mayor of one of the municipalities takes this task, but it is advisable to have someone from the business world to have a pulling and leading role in developing and realising regional agenda's (Boogers, 2013). Edelenbos & van Meerkerk (2015) call this a 'boundary spanner'. It is someone who plays a bridging role between informal networks on one hand and formal decision-making structures and policy processes on the other. This role is important to develop interactions between stakeholders and help make the informal governance network a formal decision-making process in a legitimate way (Edelenbos & van Meerkerk, 2015). Hooghe & Marks (2001) argue that this is an authority that can change formal decision making rules and that it is fundamental to governance to be able to change those formal rules.

Responsiveness

Governments should be able to observe and respond effectively and on time to issues that are urgent in politics and society. Policy agendas are created on different levels to achieve this. A big event such as a crisis or organizational failure is needed to give a rise of attention to a certain issue. This can give a 'window of opportunity' to changing policies. Responding to these calls for attention is challenging for policy makers. If all calls are heard, the wickedness of the policy problem increases, this means that a balance needs to be found. An organisation should be able to monitor attention and filter relevant information. Governance systems should find and react to these issues (Termeer et al., 2015). Some attention is given to the communication with the environment and civil society, but this seems to have the form of explaining the own policy measures instead of getting insight in the desires of the environment (Termeer et al., 2016). Boogers (2013) adds to this that it is important to define a sense of urgency not only within the government itself, but broader with the regional businesses and knowledge institutes to gain a broadly supported awareness of the regional problems and development opportunities that reaches all persons involved with the idea that doing nothing is impossible. Another important aspect is that a strong societal engagement is needed to be successful. Otherwise, governmental impasses can be broken by encouraging societal engagement to obtain desired results (Boogers, 2013).

Revitalising

Revitalising describes how policy makers can become stuck in attempts to cope with wicked problems and resolve stagnation. This is often created by being bound to rules and not involving the intention behind the rule. Actors are usually not aware of this stagnating pattern. Individuals that are at distance of the organization can be helpful to define this stagnation. Interventions are needed to unblock the stagnation. A higher level of abstraction is needed from actors to understand what is going on (Termeer et al., 2015).

Rescaling

In the article '*Governance strategieën voor waterbeleid: historische trends en vooruitblik*'⁵ of 2016 by Termeer et al., a fifth capability is defined: rescaling. Wicked problems traverse all governmental layers, timeframes and policy sectors. In rescaling, the different policy sectors and timeframes on which the problems takes place needs to be recognized and managed. Governance strategies need to be adjusted continuously to the right scale, in a multi-level context where the policy or implementation takes place. Coherence in policy making is another important aspect for integral policy making. In practice, it often seems hard to find points of application for this coherence (Termeer et al., 2016). The Environmental Planning Act asks for an integral approach for plans in the physical environment (Ministry of infrastructure and environment, 2016). Kooiman (2008) argues that governance needs to be scale specific and incorporate external factors. What may be effective governance in one place may be ineffective in another (Kooiman, 2008). Albrechts et al. (2003) agree on the fact that spatial planning initiatives need different kind of

⁵ Governance strategies for waterpolicy: historical trends and preview.

governance arrangements in different contexts. It is important to plan integrally to incorporate all relevant factors in the plan. Termeer et al. (2016) state that integration is not a goal on its own, but must relate to potential contextual advantage, such as mutual strengthening of goals. Rescaling encourages levels of government to work together with different actors and the civil society (Albrechts et al., 2003).

Boogers (2013) defines three roles for the regional level. First, it is a strategic vision on a geographical area between the municipality and the province. Second, it is a set of governmental collaboration agreements. Third, it is a living reality in which people live together and formulate their problems and desires. These three roles must coincide in a certain degree not only on the content, but also on the scale. Regional governance can only be successful if there is coherence in the regional development vision, regional government and the regional society. This means that there is not 'one regional level'. Therefore, the regional level is fluctuating continuously to fit the issue at hand. Moreover, to find the scale needed to solve the issue, continuous switching between governmental scales must occur.

2.3 Regional scale for governance arrangements

Scale is not self-evident. It is socially and politically constructed. It is logical to start solutions at the lowest organizational level as possible for cross-scale collaboration. This is associated with the subsidiarity principle, in which the lowest level to solve the problem must be found (Wyborn & Bixler, 2013; Morrison, 2014). The Environmental Planning Act adds to this with the programmed approach, in which it is stated that solving a problem should be started at the lowest level possible, because it is assumed that the problem originates there (Boeve & Groothuijse, 2014).

The regional scale gains in importance. It has been rediscovered in the 1980s (Hanssen et al., 2011). Two strengthening processes originate this importance. First, there is a clear top-down phenomenon, because decentralisation of national tasks must be executed on a lower level. Second, bottom-up processes and initiatives arise, both because of upscaling and through strategic policy (Spit & Zoete, 2013). Lester & Reckhow (2012) argue that the regional scale has become important for competitiveness. Nongovernmental organisations may take the role to act regionally. According to Evers & de Vries (2013), the revival of the regional scale for policy making, happened simultaneously with the rise of the term 'governance'. This means that the shift from decision making taking place within the public sector, towards joint decision making between the public sector, the private sector and the civil society appears necessary at the regional scale (Evers & de Vries, 2013).

Despite the regional scale gaining in importance, dilemma arises at the regional level. The complex planning processes ask for more coordination, but it is getting harder to coordinate at the desired level. Especially the regional scale has an increased dynamic that asks for this coordination. It is hard to achieve coordination at a dynamic scale, due to the complexity of the regional scale. The wish to adjust to different interests and solutions in spatial planning is an interesting ambition (Spit & Zoete, 2013). Witte et al. (2016) state that balancing interests between different types of stakeholders (public, private and civil) implies a broader understanding of governance. Hanssen et al. (2011) argue that a framework of policy instruments and governance is needed that fits the scale on which the regional development takes place.

Thereby, the question arises what level of governance suits this scale best (Hanssen et al., 2011). Especially if integral decision making is a goal on its own. There are some pitfalls to making integration a goal on its own. Especially on the regional level, procrastination develops in the decision-making process, because integration asks for a support base and it is hard to define when this support base is sufficient. Besides that, an integral approach invites for participation in which every actor has its own contribution. The actual contribution is always reserved by the most important actors involved. This is often determined even before the participation process takes place (Spit & Zoete, 2013).

Finally, especially at the regional level, contrasts in interest exist, that mobilise hinder power. Third parties can oppose to the proposed policy. There is not one solution to this problem, but multi-level governance can be a start, combined with a project-based approach in which ambitions are lowered and planning becomes less complex (Spit & Zoete, 2013).

Most regions do not fit within the geographical boundaries of municipalities, provinces or states. The literature on the regional gap refers to this conflict (Termeer et al., 2010). In the Netherlands, this means that an ongoing debate exists that tasks and responsibilities exceed the municipal borders, but that the provinces are too big to take over these regional tasks. This regional gap has for the most part been

overcome by rescaling the municipal level and reformatting the municipalities. The debate has then changed to the provincial scale being too small compared to the growing municipalities (Allers & Fraanje, 2011). The theory on new regionalism can give a new perspective on regional cooperation and regional governance (Boogers, 2013).

New regionalism describes increasing interest in understanding forms of intergovernmental co-operation at a city-regional scale. This is a theory derived from literature of the United States of America, that means caution is needed, because the scale is much bigger than the Dutch scale. A problem with New regionalism is the lack of legislation. Flexible boundaries are needed to co-operate on a regional level. Thus, legitimacy must be created for new institutions and policies, but two aspects are needed here; first, institutions must break out of short-term electoral politics and second, need to establish consensus around wider regional goals (Newman, 2000). Alden (2006) argues that this new regionalism is not new at all. He states that spatial planning has made the greatest impact at the regional level. It is important to monitor and evaluate spatial strategies at the regional level, to be able to adapt to the most efficient scale for regional planning (Alden, 2006).

The reformatting of provinces and municipalities has also taken place in the Netherlands. In 2006, the WGR+ (Wet gemeenschappelijke regelingen⁶) regions were introduced. These were built to cover the regional gap between the national government, province and municipality. Legal tasks were assigned to these regions for the themes physical area and economy to get clear results. In practice, the WGR were creating tensions between the municipalities and provinces. Often the board of the region took decisions that were binding to the municipality, but in which the municipality had no influence. Now the BRU (Bestuurlijke region Utrecht⁷) region around Utrecht has been terminated and the U10, a collaboration with ten municipalities in the province of Utrecht has been set up. This collaboration is set up on transparency and trust. A plan can then be presented to the municipal council. One of the objectives is to win the municipal councils over to interfere more on a regional level (Moerkamp, 2016). With a regional government, municipalities can handle their mutual problems collectively. If that succeeds, businesses, institutions and especially the inhabitants of a region profit from that (Boogers, 2013). Rescaling of governance arrangements is inevitable (Swyngedouw, 2005). Regional institutions are formal and informal sites of social interaction, negotiation and contestation across the public, private and voluntary spheres. Apparent is that appointing a new regional institution did not work in the past (Morrison, 2014). Governance must take place at the relevant scale for a problem: local, regional if necessary, supra regional or cross-scales. This asks for rescaling of governance arrangements (Wyborn & Bixler, 2013).

2.4 Rescaling to the right scale for governance

Rescaling has been mentioned earlier in this thesis. It can take place in three forms: downward from the national state to the provinces and then potentially to the local level, upward from local, provincial to the national and even international level and outward from centralised to more open and inclusive forms of decision-making (Cohen, 2014). It is important that governance operates across different scales, because collaboration can be achieved between actors to capture the variation in territorial reach of spatial planning problems (Hooghe & Marks, 2001; Wyborn & Bixler, 2013; Swyngedouw, 2005; Boogers, 2013; Lieshout et al., 2010; Freeman & Millar, 2017). New developments often do not fit in the territory of one municipality, that is why rescaling is needed (Korthals, 2006). Allers & Fraanje (2011) argue that this rescaling leads to the transfer of governmental tasks between governments, because the geographic scope and extent that underlie the governmental task do not fit the scale anymore. Article 2.2 of the new Environmental Planning Act states that administrative boards⁸ can exert their authority collectively and that there is no need to transfer the governmental tasks. This means that collaborative governance is needed at least between different governmental levels to be able to exert this authority together. Especially water issues ask for continuous rescaling, because water is a flow resource that crosses boundaries continuously. There is not one single scale, that can cover all complexities of water problems and the needed governance arrangements for these problems. It is important to define these borders continuously and determine the responsible authority (Cohen, 2014).

⁶ Law on collaborative regulations

⁷ Governmental region Utrecht

⁸ Bestuursorgaan

2.5 Conceptual model

Figure 1: Conceptual model.

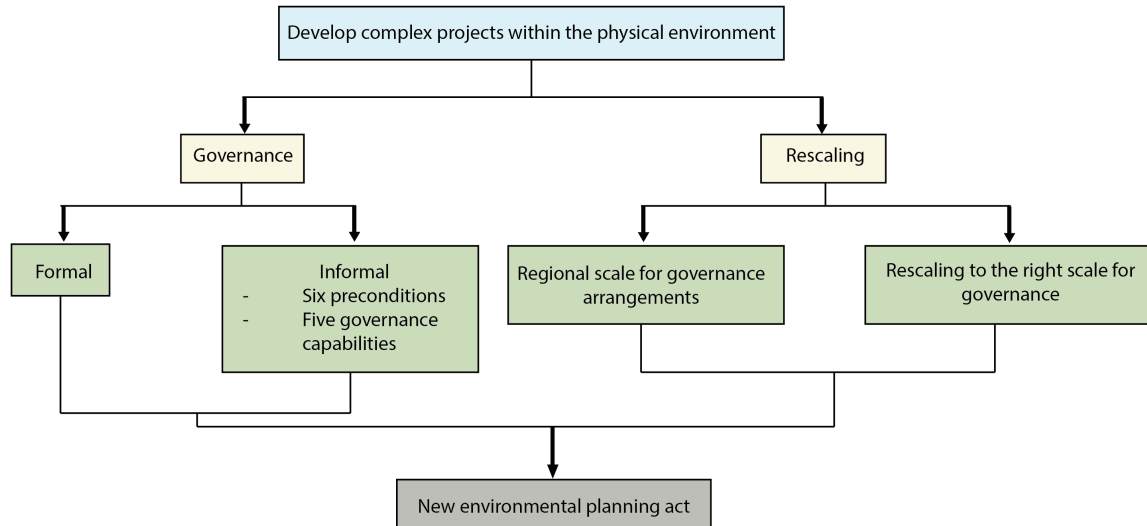


Figure 1 represents the conceptual model used to make the research conducted more comprehensible. Complex problems within the physical environment need to be developed, regardless of the complexity of these projects. Governance and rescaling are needed to develop these complex projects. Governance can be approached in two ways, formal or informal. For formal governance, rules are set up and mostly governmental actors are involved. For informal governance, the six preconditions defined by Boogers (2013) and the five governance capabilities from Termeer et al. (2015) & Termeer et al. (2016) can be pursued. Rescaling is approached in two ways here, first at the regional scale, to define how the province can set up governance arrangements at this scale. Second, amongst different scales, to define how the province can adapt the governance arrangement to the scale on which the issue takes place. Both aspects of governance and rescaling are considered in the new Environmental Planning Act. Rescaling through the subsidiarity principle elaborated on in the law. On the other hand, governance through the extensive elaboration on approaching the physical environment coherently.

2.6 Synthesis

Based on this theoretical chapter, it can be stated that complex problems exist within spatial planning and that solutions can be found by making use of governance arrangements and rescaling. These problems may even be complex. Several ways are described how these wicked problems may be handled. Governance can be approached in an analytical way, in which is considered how governance should take place to solve the problem. Besides that, governance can be approached in a normative way in which the extent to which governance takes place and the value that is given to the governance approach is considered (Gupta et al., 2015). Governance can be both formal and informal and a balance should be found in which flexible governance can be used, but some certainty is set aside to secure the decision making of governance arrangements (Ayres, 2017). The analytical approach and normative approach to governance are made clear by six preconditions and five governance capabilities on how to conduct governance to make it as effective as possible (Boogers, 2013; Termeer et al., 2015; Termeer et al., 2016). Nonetheless, governance is not enough to solve the complex problems that arise within the physical environment on the regional scale. The regional scale needs to be adjusted constantly to the issue handled (Cohen, 2014). Both rescaling and governance are embedded within the new Environmental Planning Act. The principle of subsidiarity is used to denote that the scale on which the problem takes place is questionable. It is not necessarily the lowest level at which an issue should be handled. Besides that, the obligation written down in the new Environmental Planning Act to at least explain how there has been participated with other actors adds to the governance part of the problem (Dieperink, 2016). Therefore, from the literature a consistent basis for this research is derived. Based on the theoretical background, the deductive approach in this research is set up.

3. Context

In this contextual chapter, some more background information is given on the new Environmental Planning Act, the Dutch province and living labs to clarify the research conducted in this thesis. In addition, the cases analysed in this thesis are described. Hereby, an explanation is given on how the living lab methodology is handled and how this could be approached. On top of that, each case is linked to the central research question.

3.1 New Environmental Planning Act

With the new Environmental Planning Act, the rules for environmental projects are joined, which should make it easier to start spatial projects. These rules for environmental projects comprise all rules applicable to the physical environment. This should add to the ability to approach the physical environment coherently. This Act enters force in 2019⁹. The new Environmental Planning Act means an enormous change for the physical environment. It joins twenty-six current laws into one (Rijksoverheid, 2017). It has two societal goals and four improvement goals that might add to the debate on rescaling governance (Aan de slag met de omgevingswet, 2017). The two societal goals are:

1. To achieve and maintain a safe and healthy physical environment and physical quality;
2. Maintaining, using and developing the physical environment effectively to fulfil societal needs.

These two main goals are aimed at achieving a higher quality of the physical environment and developing this physical environment as effectively as possible, focussing on the needs of society. This coincides with the theory described in the previous chapter. Thereby, governance, rescaling and the new Environmental Planning Act have been discussed. Insight can be gained in the needs of society by using governance arrangements to set up processes. Besides that, to develop the physical environment effectively, rescaling is needed to adapt to the scale on which the issue takes place.

To achieve these societal goals, four improvement goals are formulated:

1. Approach the physical environment coherently;
2. Enlarge the governmental space for consideration;
3. Enlarge the comprehensiveness, predictableness and the user-friendliness of the environmental law and;
4. Improve and speed up the decision-making of projects in the physical environment.

These four improvement goals can be reached by working together on different scales and with different partners. Nonetheless, the aim of the new Environmental Planning Act seems quite high compared to the current legislation. Therefore, instruments have been defined to contribute to reaching the goals set.

The Environmental Planning Act codifies six new instruments to implement these goals in practice (Rijksoverheid, 2017):

- The environmental strategy: which encompasses a coherent strategic plan relating to the physical environment;
- The programme: in which plans and measures are drafted that serve to meet the environmental values or targets in the physical environment;
- Decentral regulations: the municipality's environmental plan, the water board's regulation and the province's environmental regulation in which general and obligations for obtaining permits are comprehensively laid down;
- General government regulation: in which regulations for activities within the physical environment are described.
- The environmental permit: which can be used to obtain a permission for activities to be taken out in the physical environment and;
- Project decision; generic arrangement for decision-making for projects with a public interest.

Within this research not the whole new Environmental Planning Act is considered as this is not necessary for the scope of this research. Therefore, only the goals of the law and the new instruments put forward are described. These goals and instruments are relevant to understand the intention of the legislator.

⁹ Expected date of implementation at time of writing (May 2017). However, discussions take place about it going in effect in 2020/2021.

3.2 Province

The provinces in the Netherlands form the middle government between the national government and the municipalities. The Netherlands is divided in twelve provinces. Design and maintenance of the physical environment are the main tasks of the provinces. Besides that, they monitor the municipalities and the water authorities. Furthermore, they get tasks assigned from the national government. Out of the three governmental layers, the provinces in the Netherlands are discussed the most. Regularly, propositions are made to reform the provinces. One of the problems of the provinces is that there is a wide gap between the province and the citizen. Compared to the national government and the municipalities, the provinces have fewer tasks. The clearest responsibility of the province is to coordinate the municipalities. This is done by setting up 'strategic plans' for the province. With the regional scale as rising scale in European perspective, it is curious that the province is still discussed (Breeman et al., 2015).

The provincial council¹⁰ is the highest authority of the province and is documented in the constitution. The provincial council has the highest legal authority and represent the citizens of the province. Besides that, they control the provincial executives (Breeman et al., 2015). The provincial executive¹¹ consist of the King's commissioner and at least three and at most seven executives. Executives are assigned by the provincial council and forms the Administrative board. In practice, all executives have their own competences that they communicate to the provincial council (Breeman et al., 2015).

Implementing the new Environmental Planning Act at the province of Utrecht seems a complicated task. It has influence on 'what' the province does and 'how' it does that. One of the tasks the new Environmental Planning Act describes for the province is to 'adapt the working method to collaborate integrally and focussed on the environment. Whereby space is given from trust. One is conscious of the role of the province which makes sharp acting possible'. Another task described is 'to adapt work processes to the new demands and authority of the province, such as appointing programmes' (Province of Utrecht, 2017b). Within this thesis, recommendations are given on both tasks through the analysis conducted on the different cases in which the new Environmental Planning Act is already reflected on.

3.3 Living labs

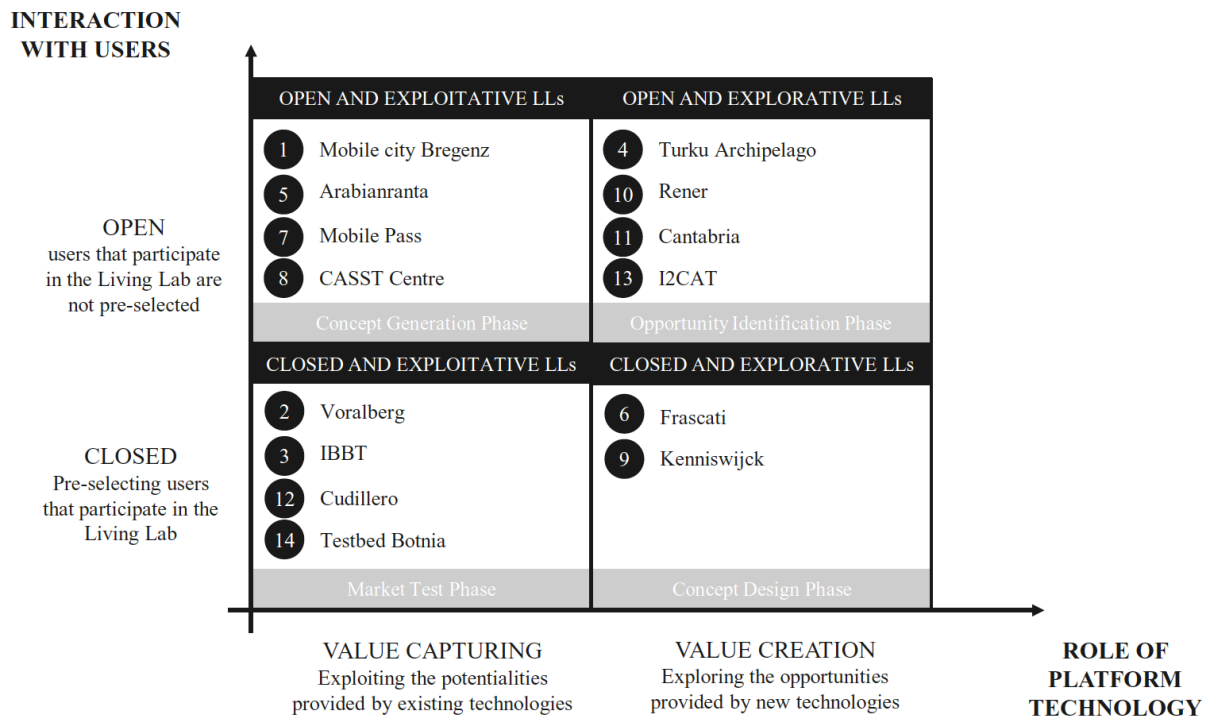
The living lab methodology is used made use of by the province. Therefore, it needs more explanation to understand the open process used in the case. Besides that, the methodology for collaboration that comes closest to combine the five capabilities described in the theoretical chapter may be the living lab methodology. With this intention, an explanation is given on what a Living Lab methodology incorporates. It is interesting to consider the extent to which this living lab methodology makes use of the capabilities defined by Termeer et al. (2015). To understand this methodology fully, an elaboration on it is given.

Living labs get limited attention in academic literature, because it is quite a new phenomenon. The method of living labs is based on applied ethnography, which is the practice of observing users in the context of use. The design research has shifted from a user-centred approach, in which the user is a subject, to a participatory approach, in which the user is seen as a partner in the process. This methodology of living labs can provide perspectives to make the transition from user-centred to participatory approaches. Two primary elements are part of a living lab methodology; a real-life test and experimentation environment and users who are aware that they collaborate to the innovation process. A living lab is an emerging public-private partnership in which firms, public authorities and citizens test new services in real-life contexts such as cities, city regions and rural areas (Dell'Era & Landoni, 2014; Niitamo et al. 2014). Edwards-Schachter et al. (2012) add the academic/research institutes to this partnership in living labs. Universities can improve the effectiveness of governance, because a lot of knowledge is available. (Goldstein & Glaser, 2012). Universities are naturally collaborative, because they are well positioned for the co-production of knowledge and learning (Freeman & Millar, 2017). Albrechts et al. (2003) already argued that more open and innovative collaborative governance practices are needed for sustainable spatial planning. Dell'Era & Landoni, 2014 present a model to position case studies in the living lab methodology between the openness of the case and the extent to which new technologies are used (figure 2).

¹⁰ Provinciale staten

¹¹ Gedeputeerde staten

Figure 2: Model of living lab methodology and case-studies.



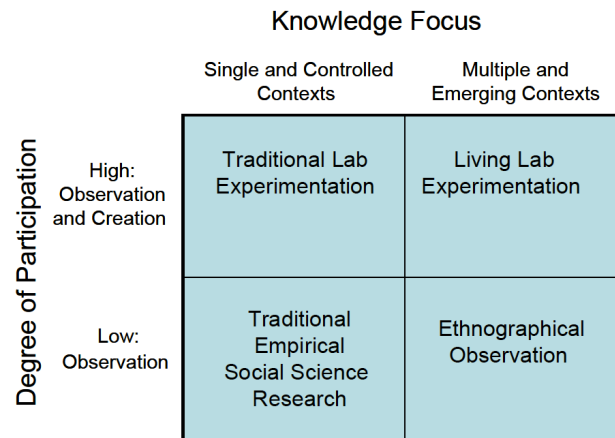
Source: Dell’Era & Landoni (2014).

The model consists of the different case studies conducted by Dell’Era & Landoni, 2014. They set up a scale between ‘interaction with users’ and ‘role of platform technology’ on which they position different case studies. ‘Role of platform technology’ needs clarification. Platform technologies can be standard infrastructures that have been previously tested and used outside the living lab or new technologies that are developed for the specific living lab. ‘Open interaction with users’ takes place when users that participate in the living lab are not preselected. ‘Closed interaction with users’ takes place when users that participate in the living lab are preselected. ‘Value capturing’ takes place when potentialities provided by existing technologies are exploited. This means that use is made of existing technologies. ‘Value creation’ takes place when opportunities are explored that are provided by new technologies. This is the less common platform technology, because it requires higher investments. Four different living lab methodologies can be derived from this model (Dell’Era & Landoni, 2014).

Niitamo et al. (2014) propose a matrix in which the degree of participation and the knowledge focus (context) are compared within different methodological approaches (figure 3). In this matrix, the living lab experimentation has the highest degree of participation, because participants observe and create, contrary to the low degree of participation, in which participants only observe (have a seat at the table). The context is multiple and emerging in the living lab methodology, which means that the context is considered in the methodology (Niitamo et al., 2014). This is because living lab methodology creates a real-life context (Dell’Era & Landoni, 2014). The citizen is part of the method, to obtain a full creativity potential that integrates efficiently with the large population. It is important to generate the necessary knowledge, because the citizen is assumed not to comprehend everything at hand (Niitamo et al., 2014). Brand & Gaffikin (2007) add to this that it is especially important to determine what to look for in the pursuit for knowledge. All types of knowledge should be considered, because it is a collective learning process (Brand & Gaffikin, 2007). Public organisations need to make more use of living labs to base their policy on basic societal processes. The level of active involvement of the living lab is useful for public organisations, because it creates public support (Niitamo et al., 2014). Allers & Fraanje (2011) argue that the province is not visible for the ordinary civilian. The open and neutral approach of the living lab allows for public involvement and asks for new governance arrangements. There is a need for highly self-organised and self-managed processes with multi-disciplinary research and innovation management processes to come up with new and innovative solutions to complex issues (Niitamo et al., 2014). Edwards-Schachter et al. (2012) state that there is a ‘social region’ in which place-based innovations where learning and institutional mechanisms determine the quality of participation and collaborative governance. They define five key dimensions of living labs: innovation settings (‘open innovation environment’), operating environments (‘real-life’

settings), affecting innovation processes ('user-driven' innovation), user engagement and outcomes expected (Edwards-Schachter et al., 2012). This adds to the model of Dell'Era & Landoni (2014) in which the living lab must be open, participants are not pre-selected and new technologies are explored, which adds to the 'open innovation environment' and the explorative nature of the five key elements in which innovation is aimed at. It is important that actors involved share their knowledge to make it a learning process (Edwards-Schachter et al., 2012).

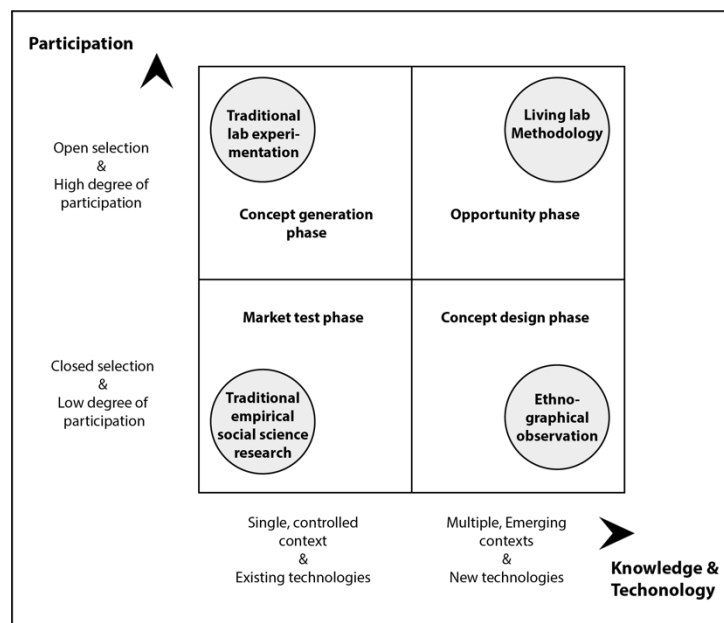
Figure 3: Matrix of participation and context



Source: Niitamo et al. (2014).

A third matrix can be added to this in which a combination is made of an ideal living lab methodology in which participation and knowledge are combined (figure 4). By combining the two approaches, from Niitamo et al. (2014) and Dell'Era & Landoni (2014) living labs can be approached as being a methodology in which an open learning and innovation environment is created in which different participants are involved in the decision-making process. In this process, different new technologies are tested which can add to the current body of knowledge to innovate and come up with new solutions to complex (spatial) planning problems. The openness of living labs and the knowledge aspect of accepting different contexts in which spatial planning takes place and on the other side making use of new technologies make living labs suited for opportunities to innovate with a high degree of participation.

Figure 4: Living labs position in the debate on participation in knowledge & technology.



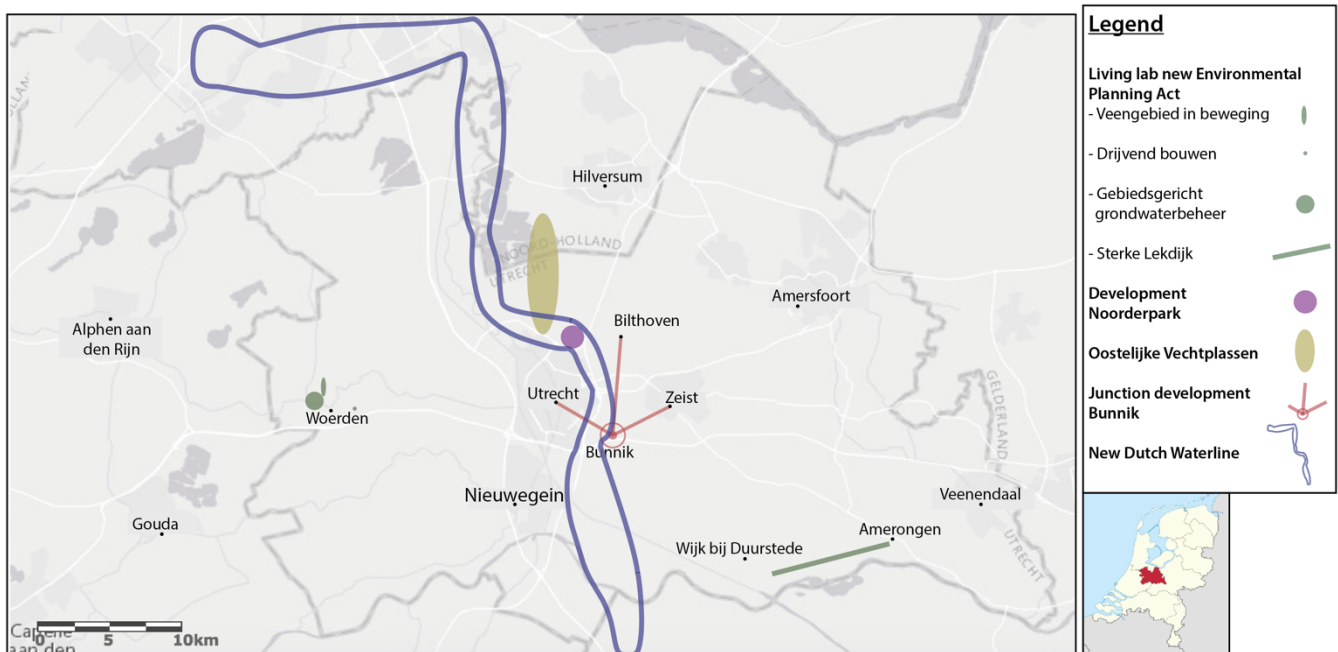
Source: Niitamo et al. (2014) & Dell'Era & Landoni (2014) (edited).

3.4 Cases

As mentioned before, five different cases are used for the case study research. These cases are described here. An overview of the locations of the cases is given in figure 5. The projects within the 'living lab net Environmental Planning Act, the first case, take place at a relatively small scale, each time, only one municipality is involved. However, one of the projects takes place in another municipality than the other projects within the living lab. The second case, 'junction development Bunnik', occurs on a slightly larger scale within the province, but still one municipality is involved. The third case, 'development Oostelijke Vechtplassen', also takes place at a relatively small case, but two municipalities are involved. The fourth case, 'redevelopment Noorderpark' takes place at a larger scale and different municipalities are involved. The last case, 'New Dutch Waterline' takes place on an even larger scale; across different provinces.

Figure 5: Overview of the locations of the cases.

Overview locations cases



Source: Esri (2017) edited.

Besides these five cases, the province has an innovation program in which nine experiments are carried out within the framework of the new Environmental Planning Act. Each experiment considers a different societal issue. Hereby, the goals of the new Environmental Planning Act are considered (Province of Utrecht 2016; Province of Utrecht 2017a). Two of these experiments are discussed as cases for this thesis. Namely the redevelopment of the Noorderpark and the junction development in Bunnik.

Living lab new Environmental Planning Act

The first case researched in this thesis, is a 'living lab' set up to experiment already with the new Environmental Planning Act in the province of Utrecht, the Netherlands. Different actors are involved in setting up a long-term strategy to counteract soil subsidence out of other complex issues (Platform slappe bodem, 2017). Woerden is one of the municipalities taking part in this living lab. Woerden is located for more than eighty percent on a thick turf and clay soil, that is sensitive for soil subsidence. The consequences of this soil subsidence are wide. Roads get worn out, sewage systems crack, water trouble arises and houses get damaged. This applies to both the urban and rural area (Platform slappe bodem, 2017). A living lab approach is used in the program for Woerden. In this living lab, four cases are described in which cooperation between private actors, education, research, the government and the civil society is tried to be achieved. The living lab is divided in four projects as can be seen in figure 5. The first project is about controlling water in the land use (gebiedsgericht grondwaterbeheer). The second project is about logistics, because roads get worn out and need to be rebuild (Veengebied in beweging). The third project is about investigating opportunities for floating buildings (Drijvend bouwen). The fourth and last project is about an

embankment the 'Lekdijk' that needs to be redeveloped (Sterke Lekdijk). These four projects all take place on a different scale within the region and interfere with different actors. This living lab is initiated by the province of Utrecht. The main goal of this living lab methodology is to approach the problem at hand as innovatively as possible and already learn to work with the new Environmental Planning Act. This means that besides finding a solution to a complex problem, it is an objective to find an innovative solution within the framework of the new act. Besides that, the process is open. Contrary to classic planning, different actors are involved from the beginning of the process and can add to the decision-making process.

The regional scale of this pilot study and the living lab approach makes it a relevant case to study in this thesis. It is one of the many pilot studies conducted to examine the new environmental act which is meant to initiate in 2019 (Rijksoverheid, 2017). Besides that, the living lab methodology is an interesting informal governance approach to reflect on, because the process is very open and unframed. The aim of the living lab methodology is to collaborate with different actors on different scales and within different (policy) areas. Therefore, it adds to an open and all incorporating governance arrangement. It is interesting to look into this specific methodology and define to what extent it incorporates aspects of governance arrangements that could be used by the province of Utrecht to develop projects within the physical environment on the regional scale. Especially this regional scale appears to be a complex level to work on and needs a flexible work methodology, that could possibly be a living lab methodology.

Junction development Bunnik

The development of the multimodal junction in Bunnik is a project started in 2016. It is one of the projects conducted within the innovation program of the province of Utrecht. The Utrecht Science Park welcomes four thousand commuters a day. These commuters travel through the Utrecht central station and pass by the train station of Bunnik. The journey from Utrecht central station to Utrecht Science Park takes 20 minutes by bus, whereas a simple bike ride from the train station of Bunnik only takes ten minutes to the Utrecht Science Park. The whole junction and its environment are developed simultaneously. Hereby, as much actors as possible are involved in the process. Especially other train stations are considered, such as Bilthoven and Driebergen-Zeist as visualised in figure 5. The issue raised in the development of this junction is how the different values in and around the junction can be connected (Province of Utrecht, 2017). This project is part of the innovation program of the province and conducted with the aim to learn how to work with the new Environmental Planning Act. Even values concerning water issues are reflected on in the project. The interesting aspect of this project is how the different values are contemplated. This is done through alliance-conversations in which all actors involved take part (Province of Utrecht, 2016). Besides the project taking place under the ambience of the new Environmental Planning Act, it involves water related issues besides other issues. On top of that, an interesting governance arrangement is used. These three aspects of the project make it interesting to handle it as a case for this thesis.

Development Oostelijke Vechtplassen

The Oostelijke Vechtplassen consist of low-lying marshland and the eastside of the Utrechtse Heuvelrug (Ministry of economic affairs, 2017). It is situated on the territory of two provinces, Noord-Holland and Utrecht (figure 5). The Oostelijke Vechtplassen are part of the Natura2000 area, a European network of protected natural parks. The quality of nature in this area is being improved by developing the whole area. Besides that, the water quality is being improved. The differences in land height are being accentuated to make clear that each stadia of low-lying marshland is present within this area (Province of Utrecht, 2017c). A lot of different actors are involved in this case. Because the area is both part of Noord-Holland and Utrecht, it is interesting how governance arrangements take place here. Besides that, it is interesting how rescaling is taking place within this natural park development. The development may be part of a bigger development of all Natura2000 areas within the Netherlands or even Europe. Besides that, this case is not considering the new Environmental Planning Act, which is why maybe differences can be noted in governance arrangements or rescaling, compared to the other cases.

Redevelopment Noorderpark

The Noorderpark is the green area north and east of the city of Utrecht (figure 5). Different villages are located in the Noorderpark, such as: Groenekan, Hollandse Rading, Maartensdijk, Tienhoven/Oud Maarsseveen and Westbroek. It is an area with a lot of agricultural nature and formed by its peat-cutting. It is a transition area between the Utrechtse Heuvelrug and the turf-land area (Agrarische Natuur Vereniging Noorderpark, 2017). The redevelopment of Noorderpark started in 1995, when the provincial executives ascertained the plan for the redevelopment. Parts of the plan have been realized since and some plans have been adjusted or expired. In 2006, the changes in the plan have been set. The plan involves the

infrastructural access, water control, landscaping and the allocation of parcels (Province of Utrecht, 2006). For this thesis only the water control part is researched. The scale on which this project takes place is more elaborated than the one from the living lab, because it takes place in four different municipalities located in the province of Utrecht. This makes it interesting to research it, because this is a whole different governance arrangement on also a whole different scale, but within the province.

Different partners are involved in the redevelopment of the Noorderpark. The involved partners are: Municipality of De Bilt, Municipality of Maarssen, & Municipality of Utrecht, Hoogheemraadschap Amstel, Gooi & Vecht, Recreatieschap Stichtse Groenlanden, Staatsbosbeheer, Vereniging natuurmonumenten and the Province of Utrecht.

In this case the living lab methodology or another defined collaboration method is not used. However, a lot of different partners are involved in the redevelopment. Therefore, it is interesting to analyse what aspects of informal and formal governance arrangements are used to develop this regional project. Subsequently, an analysis can be conducted that looks at the extent to which the approach used in the case coincides or differs from the living lab approach. The same can be done for the last case.

The new Dutch Waterline

The new Dutch Waterline is an old military defence line, developed between 1815 and 1940. Nowadays it is full of landscape heritage, with possibilities for new developments and usages. The location between the natural landscape and the urban area is very appealing. The new Dutch Waterline is a collaboration between the provinces of Gelderland, Noord-Brabant, Noord-Holland and Utrecht. The responsibility of the development of the Waterline lies with these provinces since 2014. In this development, collaboration is taking place with other governments, social organisations, home-owners and businesses owners. Implementation is done by the "Linieteam". This is a program that takes care of the coordination, protection, control and dissemination of the Waterline as world heritage. Interesting is to consider the collaboration that takes place between the different provinces and actors involved in the new Dutch Waterline network and the extent to which different scales are taken into account in developing the Waterline (Nieuwe Hollandse Waterlinie, 2017). Figure 5 shows the approximate location of the new Dutch Waterline in the province of Utrecht.

4. Methodology

In this chapter, the different research methods and the different considerations and choices are elaborated on, described and illustrated. The whole research approach and operationalisation is introduced. Besides that, the limitations and risks of the research are mentioned and the expected results are put forward.

3.5 Methods and techniques

The aim of this research is to define what informal and formal governance arrangements can be used by the province of Utrecht to develop projects on a regional level within the framework of the Environmental Planning Act. Different cases are elaborated on to define what aspects of formal and informal governance arrangements are used by the province. By making use of a comparative research method, the different approaches can be analysed (Pierre, 2005). This research is conducted through qualitative research methods. A deductive approach is used in which theory forms the basis of the empirical research from which recommendations are made (Rudestam, 2007). Opinions and choices made by people can be elaborated on in qualitative research methods (Boeije et al., 2009, p. 254). The elaboration on choices made by people is an important element for governance arrangements, because a lot of different choices are made and it is necessary to analyse these choices to understand why certain choices were made. Different persons concerned are interviewed to get insight in the planning process. Besides that, a discussion is set up to define problems encountered in solving complex issues within the living lab case. Quantitative research is done for a big group of people to define a phenomenon and combine people's characteristics with behaviour. Qualitative research methods go further and provide an answer to the question 'why' (Boeije et al., 2009, p. 216). This research makes use of qualitative research methods, to give a more concrete answer to the question 'why' and give recommendations for the question 'how'. The power lies in a clear description of factors that have an influence on regional collaboration and can favour it or obstruct it (Boogers, 2013). This description is given by elaborating on the capabilities described by Termeer et al. (2015) and defining the factors for each case that favour or obstruct the regional collaboration in the specific case by looking at the six preconditions for governance processes as described by Boogers (2013). Both theories are added to from the other articles considered in this research.

Semi-structured interviews are held with actors involved in the cases analysed and with experts in the different fields researched; the new Environmental Planning Act, living labs, the province of Utrecht and the regional scale. In semi-structured interviews, the main scope of the interview is defined, but not fixed to be able to discuss aspects in more detail. The respondent is also able to bring other elements forward that the researcher had not foreseen or considered (Boeije et al., 2009, p. 267). Hereby, unexpected outcomes arise. A topic list is formulated to get answers to the questions provided in the research, attached in appendix A. This list is adapted to the different cases to make it context dependent and get the most detailed information from the interview. The topic list is based on the academic literature put forward in this thesis. Through interviews, answers to the questions addressed in this research are obtained. For the experiments of the innovation program physical environment, an expert interview is held with the program manager. Besides that, two projects of the innovation program are regarded as cases in this research.

The different projects within the living lab new Environmental Planning Act are researched by a discussion on different questions and statements. A picture of the process and the table cloth afterwards have been added to appendix C. A table was set up on which a writable table cloth was spread out. On this table cloth, different statements and questions were written down. The statements and questions were based on the topic list in this thesis and the project itself. Each question or statement needed to be answered by each actor involved in the different projects. Three columns were added, the first on how this question or statement takes place or happens now, the second one on the contribution on this statement/question of the living lab methodology and a third on how this will take place or happen once the new Environmental Planning Act is implemented (appendix D). The statements and questions are based on the topic list set up for the interviews (appendix A)

For each case study, different interviews are held. A first overview of the interviews has been set up (Table 1 & 2). The other respondents are approached through a *snowball method*. Through the first actor, other actors are found that are involved in the case (Boeije et al., 2009, p. 263). The actors are selected for either their expertise on a specific field, such as the new Environmental Planning Act, living labs, the province of Utrecht or the regional scale (table 1) or their involvement in one of the cases (Table 2). To get more insight in the case and especially the governance process, an interview is held with the project leader or person

responsible for the project. This person has a clear overview of the process and knows who are involved in the project. Besides that, another person involved in the project is interviewed to get another perspective on the project than the person in charge. Unfortunately, not everyone wanted to cooperate in the research, therefore, it appeared to be hard to find enough people for each case to interview two persons per case. Respondent's names are not being mentioned in this research due to reasons of integrity towards the respondents.

An overview of the different projects and programs that take place within the province of Utrecht that are focussed on the new Environmental Planning Act are added to appendix E. There it can be seen what programs and projects are intertwined and influence each other.

Table 1: Expert interviews

Topic	Name	Function	Date
New Environmental Planning Act	Respondent 1	Coordinator experiments new Environmental Planning Act, province of Utrecht	21 st of April 2017
Living labs	Respondent 2	Doctor area development and law at Saxion university of applied sciences	28 th of April 2017
	Respondent 3	Professor innovation studies at the university of Utrecht	6 th of March 2017
Province of Utrecht	Respondent 4 & Respondent 5	Policy advisor strategic spatial development, Province of Utrecht	18 th of April 2017
	Respondent 6	Program manager innovation program physical environment	24 th of April 2017
Regional scale	Respondent 7	Coordinator, space, Environmental Planning Act and water, IPO	9 th of May 2017

Table 2: Case specific interviews

Case	Project	Name	Organisation	Date
Living lab new Environmental Planning Act	Overall	Respondent 1	Province of Utrecht, policy advisor	22 nd of May 2017
	Sterke lekdijk	Respondent 8	Province of Utrecht, policy advisor	22 nd of May 2017
	Veenweide in beweging	Respondent 9	Hoogheemraadschap Stichtse Rijnlanden	22 nd of May 2017
	Veenweide in beweging	Respondent 10	Hoogheemraadschap Stichtse Rijnlanden	22 nd of May 2017
	Drijvend bouwen/Veenweide in beweging	Respondent 11	Municipality of Woerden	22 nd of May 2017
	Gebiedsgericht grondwaterbeheer	Respondent 12	Province of Utrecht	22 nd of May 2017
	Overall	Respondent 13	ORG-ID	22 nd of May 2017
	Veenweide in beweging	Respondent 14	ORG-ID	22 nd of May 2017
Junction development Bunnik		Respondent 15	Province of Utrecht (Project leader junction development Bunnik)	18 th of April 2017
Development Oostelijke Vechtplassen		Respondent 16	Province of Utrecht Project leader program agency Utrecht West	25 th of April 2017
		Respondent 17	Program agency Utrecht West (project leader Oostelijke Vechtplassen)	25 th of April 2017
Development Noorderpark		Respondent 18	Province of Utrecht (Project leader development Noorderpark)	22 nd of May 2017

New Dutch waterline	Respondent 19	Province of Utrecht (Program leader New Dutch Waterline)	8 th of May 2017
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3.6 Operationalisation

By comparing cases, a robust analytical framework is needed to define the variables that are compared. As much contextual ‘noise’ as possible must be left out (Pierre, 2005). Different aspects of formal and informal governance arrangements need to be compared to define which aspects of governance arrangements can be used by the province of Utrecht. By investigating the new Environmental Planning Act, the legitimacy of the formal and informal aspects of governance processed in the Netherlands are obtained. Comparing the different aspects mentioned in literature to aspects used in cases, gives insight in the position of the province on the regional scale that is needed. Hereby the goals of the new Environmental Planning Act as defined in paragraph 2.4 are compared with the actions taken for collaboration in the different cases.

Through desk research and different meetings at the province of Utrecht, five cases have been defined in which the province of Utrecht takes part in a governance process. Four different criteria are set up to select the cases. First, different partners must be involved besides the province of Utrecht; second, the project considered must have started; third, each case must take place on another scale than the other two cases and fourth, the case must take partly place inside the geographical provincial border. The goal of a case study is not to generalise, but to research certain situations very specifically (Hay, 2010). A case study is especially valuable, because detailed information that follows it can elaborate more on the relation between governance arrangements and rescaling of the regional scale than merely a fact study does. Generalisation is not the goal of this research. It is not possible to generalise this specific research focussed on the province of Utrecht to other provinces, because each project has a different process and context. This means that even within one province, different projects ask for different governance arrangements.

For each case, the governance arrangement is defined and researched. Hereby, the five governance capabilities and the six preconditions are used to set up a topic list for each interview in which the aspects of formal governance and informal governance arrangements are described. The different interviewees are approached via email or telephone to take part in the interview. The objective is to interview at least two people per case. The theoretical aspects underlying the topic list are elaborated on in table 3. For each theory described in the theoretical chapter, the aspects of governance are defined. These aspects of governance shape the foundation for the topic list of the interviews. Each interview addresses other theories and aspects to get a clear overview of the governance aspects in the different cases and the fields of expertise and the aspects made there. These aspects are then grouped per theme that is related to different themes (appendix A). Six themes are defined in which the aspects are translated to questions. The six themes are: position of actors, relationship between actors (the human behind the actor), process objective, presence of an individual, independent leader and the extent to which integral cooperation takes place on different levels and regulations.

The living lab has been approached differently. Nine questions and statements were put forward to the participants of the living lab. The questions and statements are based on the topic list and the process in which the living lab was at that moment. For each question or statement, they had to fill in three columns, the first one was about the current situation, the second one about the contribution of the living lab methodology and the last one about the situation once the new Environmental Planning Act is implemented. All answers were written on a writable tablecloth (Appendix C). From the answers, an excel sheet is made (Appendix D) with the outcomes of the session. Next, the answers have been coded and analysed the same way as the interviews.

It is expected that within the process in each case, different aspects are used that are described in table 3. With that information, it can be analysed to what extent each the province is successful in pursuing solutions to the issues at hand. From there recommendations can be made for the province of Utrecht on which aspects of governance, rescaling and the Environmental Planning Act add to developing projects on a regional level.

Table 3: Theoretical aspects

Theoretical background	Aspect	
Governance capabilities (Termeer et al., 2015; Termeer et al., 2016)	Reflexivity	<ul style="list-style-type: none"> - Different frames are considered - Amount and equality of collaborating partners - Bridge between organisations, policy sectors and administrative level
	Resilience	<ul style="list-style-type: none"> - Observe upcoming disturbances - Combination of different types of knowledge - Learning by doing - Reflection on the process by actors - Cross-scale linkages between individuals, organizations, agencies, institutions at different levels - Flexible legislation that allows for experiments - Presence of a regional, independent leader - Ability to change formal decision making rules
	Responsive-ness	<ul style="list-style-type: none"> - Policy agendas created on different levels - Responding to calls for attention of a certain issue - Monitor and filter relevant information - Getting insight in the desires of the environment - Definition of sense of urgency to gain broadly supported awareness of regional problems - Strong societal engagement
	Revitalising	<ul style="list-style-type: none"> - Stagnation - Awareness of stagnating pattern - Individual at distance of the organization to define stagnation - Interventions taken to unblock stagnation
	Rescaling	<ul style="list-style-type: none"> - Governance strategy adjusted continuously to the scale on which policy or implementation takes place - Coherence in policy making for integral policy making - Incorporation of external factors - Mutual strengthening of goals with actors
Formal governance aspects		<ul style="list-style-type: none"> - Bureaucratic governance process (mostly governmental actors) - Jurisdictional boundaries and rules set for governance arrangement - Pre-limited practice agreed upon by actors (secret agenda)
Informal governance aspects		<ul style="list-style-type: none"> - Trust and shared responsibility - Mutual understanding of: positions and interests - Internal legitimacy: participants are trustworthy and credible - Shared commitment: participants share a path and cross scales - Room provided for actors to think and behave outside roles and rules set by formal positions - Presence of cross-boundary partnerships - 'Front stage' & 'back stage' difference

Preconditions governance process (Boogers, 2013)	<ul style="list-style-type: none"> - Persons involved are equivalent in power and means - There must be a necessity to participate in the collaboration process - Experiences with cooperation and conflicts - Supporting leadership - Decision-making must be open and exclusive. - Trust, commitment and successful outcome process
Goals new Environmental Planning Act	<ul style="list-style-type: none"> - Coherent approach physical environment - Enlargement governmental space for consideration - Enlargement comprehensiveness, predictableness and user-friendliness of environmental law - Improve and speed up decision-making of projects in the physical environment

The interviewees are asked at the beginning of the interview, if they agree with the interview being recorded. Recording the interview makes it more reliable to interpret the answers given and discussion held, to avoid misinterpretation. The researcher can listen to the tape again and make sure that all answers given and results obtained are analysed coherently. If the interviewee does not agree to the interview being recorded, the researcher takes notes as accurately as possible. For the session on the living lab, pictures were taken of the process, but some participants did not want to be recognizable on the picture. Therefore, the faces are made unrecognizable. For two interviews, something went wrong with recording the interview. Although notes were taken during the interviews, this should be mentioned, because it might influence the results.

After the interview has taken place, the interview recorded is transcribed as quickly as possible. Thereafter, the interviews are coded by means of codes that are selected based on the topic list and the interview itself. The codes can be found in appendix B. The semi-structured interview is open for contributions from the respondent. Therefore, besides the codes coming from theory, codes were selected from the interviews to define the unexpected outcomes. The codes are put next to the transcribed interviews to get a clear overview of when and for how much time a certain topic has been discussed in the interview.

The transcripts are then analysed through the codes that are added. The different governance capabilities and preconditions are considered to represent to what extent the province of Utrecht makes use of different aspects of these capabilities and preconditions. The results of the interviews are transcribed and coded. Answers can be compared between the different interviewees. By going back to the literature, a comparison is made with the results from the data derived from the interviews and the tablecloth session. The quotes used in this thesis were translated from Dutch, because all respondents and the researcher are Dutch and the interviews were held in Dutch. The translations are kept as far as possible as the interviewee formulated it in Dutch. Besides that, the readability has been improved by making whole sentences of sentences that were cut in pieces in the interview. With the quotes as data, an answer is provided to the main question in this thesis.

3.7 Limitations and risks

Different terms are used to evaluate qualitative research (Bryman, 2012). Bryman (2012) defines: reliability, replication and validity. These are elaborated on for this research.

Reliability

Reliability is concerned with the question of whether the results of the study are trustworthy (Bryman, 2012). Through setting up different criterion for the selection of the cases and composing a topic list based on the theories described, an attempt is made to obtain results that are coherent with the central question and sub-questions defined in the research.

Replication

Replication is concerned with the question of whether it is possible for someone else to replicate the findings. A study must be replicable and therefore a researcher must explain his or her procedures in great detail (Bryman, 2012). Through this methodological chapter, a clear description of the process of the research is given through which the research should be replicable. However, because of the qualitative

nature of this research, a second attempt of doing the same research would not give the same results. The interviewees might not answer the same to the different questions put forward, because they then have already been interviewed about the same topic. Besides that, repeating the same research another time, would result in a further stadium of the projects analysed in the cases and different results concerned with the governance process conducted.

Validity

Validity is concerned with the integrity of the conclusions that are generated from a research. For this research only external validity is relevant. It is important to know whether the results of this research can be generalized beyond the research context used for this research (Bryman, 2012). The aim of this research is not to generalize what governance arrangements should be used on the regional scale, but it is focused on the province of Utrecht. Through the expert interviews and the different cases an insight is given in the formal and informal governance arrangements that can be relevant for the province to develop projects on a regional level. It is not possible to make a user-manual for the province to describe how governance should take place, because each issue is context related.

4. Results & Analysis

From the various interviews, a lot of data is derived. This chapter elaborates on the findings and discussions in the interviews and compares it to the theory described in the second chapter. Therefore, the structure of this chapter starts with formal and informal governance arrangements, elaborating the preconditions for governance processes and the five governance capabilities. Whereupon the regional scale for governance arrangements and rescaling to the right scale for governance are analysed. These are followed by the outcomes for the new Environmental Planning Act and the unexpected outcomes. The chapter ends with an overall conclusion.

4.1 Formal governance arrangements

As has been noted in the theoretical chapter, formal governance arrangements are based on rules and regulations (Boonstra & Boelens, 2011). Hereby, three aspects of formal governance were defined for formal governance in theory. These have been discussed in the interviews. First, it is discussed if mostly governmental agencies are involved in the process. Second, whether rules are set up for collaboration with different actors. The last aspect of formal governance is about the possibility that rules are set up before the process started to make sure a formal process is conducted. From the expert interviews, it became clear that for each project governmental actors are involved. Besides the governmental actors, non-governmental actors are involved in the projects. It is important to incorporate more actors, because new and innovative solutions can arise.

"I think of Living labs as another way of mainly collaboration between knowledge institutes, businesses often, or at least private actors, governments and possibly civil society. Thus, the quadruple Helix. In which it is mostly another way of conducting research."

Respondent 3 (Professor of innovation studies at the university of Utrecht)

With new methodologies arising for governance arrangements, it becomes less common just to go through the process of resolving a problem with only governmental actors. For example, the living lab methodology is specifically focussed on not just including governmental actors as stated by Respondent 3. From the respondent's scientific perspective, it is important to include more actors than just governmental actors to be able to conduct a different kind of research in which innovative solutions arise. This is important to solve complex problems, because innovative solutions and solving problems with different actors could make it possible to come up with solutions to these complex problems. This adds to the theory of the living lab methodology described by Dell'Era & Landoni (2014) in which different actors are involved to adopt a research approach to come up with solutions to complex problems.

"Entrepreneurs from the green area were also involved, actually the unique selling point, the green quality, around Bunnik (...) I think that especially solutions are scale specific, but an issue navigates between scales, that is why it is still an issue. (...) They say, please, especially the other governments and the municipality shouted this, please province, you at that middle level, you at the regional level, please take a directing role and facilitate the process (...) off course we as province pull this for almost 80-90% and we finance it for 100%."

Respondent 15 (Project leader of the junction development in Bunnik, at the province of Utrecht)

For the junction development in Bunnik, people from the surroundings of the junction were involved in the process, because they have an interest in the development. Here it becomes already apparent that a shift occurred from formal governance to more informal governance. The area in which the problem takes place is taken as a starting point. That is how the issue is approached here. Besides that, respondent 15 takes scales in mind to find a solution to an issue, which is why actors from all scales are involved in the process. Due to the complexity that arises between issues at the regional scale, there is a need for an actor that has an overview of this level. This actor must adapt the governance structure continuously to the needs of the process at that time. In the case of the junction development in Bunnik, it appeared that the other actors asked the province to take on this role. This adds to the theory of Edelenbos & van Meerkerk (2015) that stated that a leading actor is needed to overview a regional process. Besides that, the province finances the whole development, which means that both in terms of scale and governance, the province has an overview of the finances and therefore possibilities for solutions. Respondent 6 emphasises the importance of a

provincial or regional governmental actor participating in the process. Research indicates that the province is needed to map the different scales on which the issue takes place. Respondent 6 is the program manager of the program respondent 15 is conducting a project of. It is interesting that both agree on a regional actor being present to map the different scales. Hooghe & Marks (2001) stated that this authority must be able to change formal decision-making rules and that it is fundamental to governance to be able to do this. Respondent 6 and 15 did not say anything about the province being able to change the formal decision-making. However, it would be unfair towards the other actors involved if in the end the province is still in lead to take the decision, even though different actors participated in the process and are involved.

"Therefore, you cut it up and at the same time you make sure that a provincial or regional government is present that maps the different scales continuously and communicates about it visually."

Respondent 6 (Program manager of the innovation program at the province of Utrecht)

Besides, the province must communicate this difference in scales continuously to the other actors, because other actors will then understand the importance of scale for the issue at hand. Scales are emphasised as being important to define the issue, because Termeer et al. (2016) stated that the issue navigates between scales. It appears that governmental actors are needed for developing complex projects within the physical environment, because these have an overview of the region. However, these governmental actors need to keep in mind that they are not alone in solving projects and taking decisions once collaboration takes place.

"Somewhere, we need to become something and something needs to be formed."

Respondent 13 (Consultant at ORG-ID)

"What you get [within a living lab] is that an informal initiative tends to formalise. On the other side, living labs exist that are intended to be very formal."

Respondent 3 (Professor innovation studies at the University of Utrecht)

A need to formalise the governance arrangement exists. For the Living lab new Environmental Planning Act, it was mentioned and discussed that some kind of collaboration had to be formed. Therefore, the different roles of the actors involved become clear and actors need on what they can rely from the other actors. Currently, a collaboration exists between the water agency and the province, but this does not incorporate the other actors involved, such as the municipalities. Therefore, another collaboration has to be set up to make all actors equal in the process as Boogers (2013) stressed. The professor of innovation studies stated living labs can be intended as both formal or informal. This depends on the openness aimed at. Informality is good for the openness of the process, because actors can step out of role as Edelenbos & van Meerkerk (2015) explained is important in an informal governance approach. However, this stresses that the process is kept flexible. For a political institution like the province, a flexible process is complicated, because it means more risks arise. Therefore, the province tends more to the formalisation of processes.

"I can imagine that we put the interests on the collaboration between the province and water agency and then it is possible that they [politicians] say fine, here you have extra money."

Respondent 1 (Coordinator experiments new environmental planning act at the province of Utrecht)

However, due to financial risks, a need to embed the collaboration exists for the living lab new Environmental Planning Act. Therefore, the focus was put on the governmental actors to finance the process, because these have more financial power than private actors as was assumed within the living lab. In the living lab new Environmental Planning Act, it became clear that the collaboration with the water agencies could be used to put the interest on the agenda and then discuss the financial issue. This is still a collaboration with governmental actors, which leaves it to formal governance. Non-governmental actors are not considered in the living lab new Environmental Planning Act as financial partners. It is assumed by respondent 1, that the politicians would agree with the water agency and province share the financial risks, because these have an existing administrative agreement on developing water projects. In the program New Dutch Waterline, collaboration is taken further to other actors instead of the province being in charge.

“Not more money up front and hung on locations, but ordinary said we have money for the New Dutch Waterline and we are mainly going to boost and make sure that other actors are in charge.”

Respondent 19 (Program manager of the New Dutch Waterline)

The province used to steer with money. A shift was made to mostly boost and make sure that other actors are in charge. Apparently there still exists a demand for the province contributing financially. Here, the responsibility is divided over different actors. In that case, the responsibility does not lie within the governmental actors, but each actor has the same responsibility and shares the same goal. That is interesting, because it adds to the informal governance aspect of mutual responsibility between actors as defined by van Meerkerk et al. (2013). Hereby, collaborating actors are all equally responsible for the project.

“The coalition agreement states that we [the province of Utrecht] are connecting, but how we do that is not defined.”

Respondent 1 (Coordinator experiments new Environmental Planning Act at the province of Utrecht)

Even the coalition agreement of the province states that collaboration is needed, but it is not defined how this should take place. This adds to the uncertainty and unclearness of what the province does and how other actors can rely on the province for its collaboration. Connecting goes even further than collaborating, because in connecting, networks are set up with other actors. This adds to the statement of Termeer et al. (2015), that setting up networks is important for collaborations between individuals, organisations, agencies and institutions operating at different scales. The new Environmental Planning Act adds to this, because the law stimulates collaboration with actors from different organisations and scales to approach the physical environment coherently.

“It means that a consultation obligation is behind it, even though this is not clearly defined in the law, but that is what the legislator intended, in such a way that you do not surprise each other with the usage of the instruments of the law”

Respondent 7 (Coordinator new Environmental Planning Act at IPO)

An obligation to consult the other governmental actors is intended by the legislator. This could be even taken further by consulting all actors involved in the project and not just the governmental actors. In this way, the collaboration and responsibility is supported by all actors involved and each actor consults and informs the others on the way the new Environmental Planning Act is handled. That is not necessary if actors cooperate, because they would know what instruments of the law are used, because they decided this together. Shared responsibility and shared finances appear to be needed in practice in order to solve the issues at hand. This indicates the province is not the only one responsible for the development of projects within the physical environment anymore.

“It asks for a changing role of the government.”

Respondent 2 (Doctor area development and law at Saxion university of applied sciences)

With the new Environmental Planning Act, the legislator intended that more consultation takes place between different governmental agencies. This adds to the intention of the legislator that collaboration should take place and that it must be explained how collaboration occurs. A change in collaborating between governments as described in the law, asks for a changing role of the government. The government is not the only authority anymore and cannot operate on its own, because other actors are of importance to solve the complex issues the modern society deals with.

A conclusion can be made that regional governmental actors are needed to facilitate the process, map different scales and contribute financially. Each governance arrangement has components of informal governance arrangements. This means that purely formal governance arrangements are not practiced anymore. A need exists to formalise the collaboration between the different actors to make each interests and commitment clear and define the financial support for the process. Therefore, the government needs to redefine its role in collaborations with other actors. For the province, this means a step must be taken

back to share responsibilities with the other actors involved and contribute financially. Then, decision-making should take place collectively to support the solutions proposed by all actors together.

4.2 Informal governance arrangements

It seems that purely formal governance arrangements are not being used anymore under the new Environmental Planning Act. From the theoretical chapter, it became clear that informal governance arrangements are based on trust and mutual responsibility between actors (van Meerkerk et al., 2013). Hereby, actors can set up goals together and cooperate across scales.

“I think one should be flexible and adapt the collaboration to the subject at hand. Within subjects, responsibilities and roles of actors differ, that means that the collaboration process is different for each subject. Sometimes participation must be limited and sometimes it has to be completely admissible.”

Respondent 5 (Policy advisor strategic spatial development at the Province of Utrecht)

Flexibility is needed in adapting collaboration to the subject. Each issue needs its own governance approach, scale and solution. Because the context differs considerably, it is important to consider the difference in collaboration processes for different subjects. This is complicated, because risks need to be taken to be flexible. For a political organisation, taking risks is complex, because there is a chance things do not develop as expected. However, for the development of Oostelijke Vechtplassen, a loose collaboration was handled.

“Here, a looser collaboration arose, but that is a conscious decision.”

Respondent 17 (Project leader of Oostelijke Vechtplassen)

According to van Meerkerk et al. (2013), informal governance arrangements are based on mutual responsibility between actors. This means that the different actors involved in the process are sharing responsibilities. Even in some collaborations shared responsibility is already aimed at. As respondent 19 explained, the province is not the only actor in charge. Within the New Dutch Waterline program, a shared responsibility for all actors was set up, that makes the other actors be in charge as well and the province to take a step back.

“As public governments, you also have a role and responsibility that it is possible and agreements are made about that, but eventually, the province will take care of the realisation, that means that you have to work together. (...) You are responsible for a part and working on that part, but together with the other actors. (...) I think that it is successful that everyone takes part in the process. The province appears to be an important booster of the process. I think eventually everyone feels part of the process. (...) but if something goes wrong, the province remains the last one responsible.”

Respondent 16 (Project leader of the program agency Utrecht west)

It appears that it is tried to share responsibilities. However, the province remains the one responsible in case something goes wrong. That is contradictory to the statement van Meerkerk et al. (2013) made, because there all actors are mutually responsible. This elaborates on the complex task the province is faced with in the implementation of the new Environmental Planning Act. Taking a distance from projects is complicated for the province. Partially, because the province takes on the role of a booster of the process and partially, because other actors presume the province has the final responsibility. Even if the province takes on a different role, other actors need to adapt to and accept this changing role of the province.

“Where we’re going is shared ownership (...) That means we get a different role as government, we will become a partner in the thinking about.”

Respondent 6 (program manager innovation program physical environment at the province of Utrecht)

“We said, less governmental financing is coming, thus, more co-ownership and interdependence needs to originate than we had until now. What we did, is that from within the province, we set up the program that way. From not supporting locations anymore, but we support areas. We only sit at the table at the moment that we are no longer only financing, but can start the whole process altogether.”

Respondent 19 (Program manager of the New Dutch Waterline)

In some cases, mutual responsibility is taken even further, because shared- or co-ownership is aimed at. In co-ownership, the province has a changing role and is no longer just financing the process, but an equivalent partner within the process. Emerson et al. (2011) argued that mutual responsibility can only be achieved if mutual trust exists between the different actors. Trust is not something that is self-evident. Here again, the ambiguity of the changing role of the government arises again. If trust does not exist between actors, mutual responsibility cannot be strived for. Therefore, the province needs to trust the other actors and the other actors need to trust each other and the province in return.

“There is some incomprehension. There is some tension between the interests.”

Respondent 17 (project leader of the Oostelijke Vechtplassen)

“I’m afraid that distrust arises.”

Respondent 8 (Policy advisor at the province of Utrecht)

Tension between interests can cause incomprehension between actors. For the living lab, an actor was afraid that distrust arises. Apparently, it is important for actors to understand each other’s power and interest. Emerson et al. (2011) stated that actors need to understand each other and respect each other’s positions and interests, even if they do not agree. That way room can be made for actors to act and think outside their role. Besides, cross-boundary partnerships can arise if actors are able to consider interests of other actors (Edelenbos & van Meerkerk, 2015). This is something the province needs to work on, because in two projects, trouble arises with these aspects. A possible solution is to communicate about the different interests and explain the reasons behind the interests. An open approach to other actors is needed to trust each other.

“You have to set up rules for people to be able and people to dare act outside their role.”

Respondent 3 (Professor innovation studies at the university of Utrecht)

Apparently, rules need to be set down for people to dare to act outside their role. These rules formalise and allow people to act outside their role. Eventually, people will be tempted to think and act differently. The province has different roles as an institution already. Lessons can be learned about the different roles of the province. It is important for the province to communicate about these roles, because otherwise it is not clear what role the province takes on within the process. However, this role of the province appears to be unclear at times as respondent 15 emphasises.

“Because our own role as province is one that we need to sharpen, because I think that one is the hardest. The province is my most difficult stakeholder or discussion partner, because it has such different roles internally as well. That makes it complicated and partners outside, well we try to tempt them to step out of their comfort zone. (...) The other side is because it really has a learning goal, that is to find out what the good role of the province is in all this, well that was answered the first meeting already, but we can learn more about it.”

Respondent 15 (Project leader of the junction development in Bunnik, at the province of Utrecht)

Some people mention that they struggle with these different roles of the province. Especially towards other partners, having different roles makes things unclear. Except if others also step out of their own role and are open to a new view or vision. Stepping out of role has two sides, on one side it makes one think outside the box and adds to the informal governance arrangement in which the flexibility exists to act and behave outside formal roles. On the other side, it can make things unclear towards other actors, because clearly defined roles can add to the understanding of one another’s power and interests. It is important that actors communicate their role and actions taken. Ayres (2017) made a difference between the ‘front’ and ‘back’ in which politicians up front need to act and stay in their defined role. In the back, a lot of complex decision-making is happening in which less formal negotiations take place in which defined roles are less important. Within the province, even in the back people do not agree on decisions being taken. In the end, people are taking decisions based on what they know. Even amongst colleagues, civil servants may disagree on what

decision should be taken. By basing decision-making on collaborations taking place between actors and scientific research conducted, the decisions are more profound and choices made can be elaborated on.

“Public servants always worked starting with risk management, if you work for a politician, you have one job and that is to make your politician successful. The old thinking was goal thinking, which means risk management. The turn happening now, is issue thinking, without defining goals first.”

Respondent 6 (program manager innovation program physical environment at the province of Utrecht)

Within issue thinking, the issue is defined first by all partners involved, before the goals and risks are defined. This asks for an open process in which people have an open view and are not bound to their position and role. Public servants are used to manage risks, whereas a turn is happening towards issue thinking in which the issue is defined first and everyone understands what they are talking about. By making clear what the issue is, shared goals can be set up. However, politicians need to change the way they think and take decisions as well, otherwise they cannot base their decisions on the possible decisions proposed by civil servants.

“Under the new Environmental Planning Act, more participation takes place and solutions are innovative, because a glance is taken at bigger interests.”

Respondent 1 (Coordinator experiments new Environmental Planning Act at the province of Utrecht)

The bigger interest can become clear by defining the issue and therefore, goals can be adapted to this bigger interest. By defining the bigger interest, solutions are formed on a higher abstraction level. Through which innovative solutions can be formed. Besides participants sharing goals, governments operating on different scales, can also share goals. However, defining the bigger interest is complicated, because as van Meerkerk et al. (2013) stated, actors have different interests. Nonetheless, the bigger interests can be the interest of the region as a whole, that would be the province here. Regardless of this, interests are complicate to define for different actors together.

“I think it is very important that the governments form one government and one partner towards the other people. That is a very important thing.”

Respondent 14 (Consultant at ORG-ID)

Because different interests differ, it is important that governmental actors aim to agree mostly on interests as respondent 14 claims. However, due to scale differences and political differences, governments tend to have different interests as well. In collaborations with other actors, it could be achieved that governments share their interests or combine interests to operate as one towards the other actors. That is that governmental actors communicate their interests towards other actors and define what they would like to gain from the process. However, differences in governments and political views make it complicated for governments to act as one towards other partners. It is important to communicate about this.

To summarise, flexibility is needed to define what collaboration is going to exist within the process. Sharing responsibilities appears to be a complicated task, but in some projects co-ownership is even strived for. Therefore, trust needs to exist between the actors. For people to act outside their role to become more open in looking for new collaboration opportunities, people need some kind of rules to be able and dare to step out of their role. Goals can be set up collectively once the issue is defined. It is important however, that governments are clear about what their interest and statement is, because otherwise the government's intention becomes unclear towards the other participants and distrust can occur.

4.2.1 Preconditions for governance processes

Boogers (2013) defined six preconditions for governance processes. These preconditions were added to the different governance capabilities and overlap in some sort with other capabilities. However, not all preconditions are considered in projects developed by the province. In table 4 an overview is given of the preconditions Boogers (2013) defined and which of these are considered by the province.

Table 4: Preconditions considered by the province

Precondition	Considered by the province	Not considered by the province
Equivalence in power and means		X
Necessity for participation	X	
Experience cooperation and conflicts		X
Leadership	X	
Open and exclusive decision-making		X
Trust, commitment and successful outcome	X	

Three of the six preconditions are considered by the province, necessity for participation, leadership and the last precondition: trust, commitment and successful outcome. The first precondition is sometimes mentioned, but not consciously considered in processes. That is why it has been labelled as 'not considered' here. It is interesting that the province does not consciously consider equivalence of actors in power and means, because as Boogers (2013) explained, it is an important precondition to prevent stakeholders in a weaker position from not taking a significant part in the decision-making process. If the province does not consider this, the chance exists that stakeholders with a weaker position have less to add to the decision-making process. Specifically, stakeholders with a weaker position should be considered by the regional authority, that is the province to be able to hear everyone and consider every actor as equal. Besides that, the second precondition not considered by the province is experience in cooperation and conflicts. Different governments work together all the time, experience in cooperation and conflicts exists, but it is something that is considered normal. Reflection on previous collaboration does not take place. Therefore, no clear measures are taken to solve conflicts or improve cooperation. The governments cooperate, sometimes better than other times, but it is not something that comes in mind whilst setting up a process. Open and exclusive decision-making is also something the respondents thought was not something that is needed to consider. For decision-making to be successful, all actors should be able to decide. This adds to the first precondition and the fairness of the decision-making process. Every actor should be treated as equal to operate in an open decision-making process. Decisions are taken by the politics and there is no discussion about decisions being taken elsewhere, respondents stated. This is contradictory to decisions taken with actors together. Nonetheless, due to the political organisation that the province is, the politics always decide in the end. It is important that other actors add to the prepositions that precede the decision-making process.

The preconditions 'necessity for participation' is considered by the province. The province feels a need for participation. In different interviews, participation has been discussed and for each case, not only the province is part of the process, but other actors are taking part in it as well. However, it remains unclear what is done with the input gotten from participation. It is very important to define beforehand how the outcome of participation is taken into the process.

"It fits the appeal Mark Rutte did a while ago, about the participation society. We are moving on that way in this law, the new Environmental Planning Act is nothing else than a codification of a changing relationship between public administration services and society."

Respondent 7 (Coordinator space, new Environmental Planning Act and water at IPO)

The prime minister of the Netherlands, Mark Rutte appealed more participation. The new Environmental Planning Act seems to codify an ongoing process within society. This ongoing process moves towards more participation from other actors than just governmental actors. More importantly, it adds to the shift from government to governance elaborated on by Rhodes (2007). It provides possibilities to incorporate different actors in an early process to make resistance at the end of the process reduced. However, it has been stated by Rhodes (2007) that this shift is moving to the 'hollowing out of the state'. Participation stresses that more actors are involved in the process and can contribute to the outcome of the process. For the province, it is important to define what participation is and why participation is taking place. Currently, this is not yet clear in different projects.

"Participation is not only about citizens, it is also about other governments and who do I know.."

Respondent 1 (Coordinator experiments new Environmental Planning Act at the province of Utrecht)

Participation is often understood as citizen participation, but participation as defined within the living lab, goes further than that. It is the whole collaboration with other external partners happening in different processes. For most processes, a start is made with governments and then other actors are invited to join the process. Nonetheless, it is important to incorporate all actors from the beginning to start with all these interests and different perspectives together. The next precondition adopted by the province is the presence of a leader in the process. Having a leader in charge to take away barriers for cooperative decision-making is something the province practices more and more. In the different projects considered, this leader is either the province or an independent leader from outside of the collaboration.

“We have to realise goals together with our partners, that is our objective. Not to come up with something ourselves. The program agency Utrecht west is the project leader in this case.”

Respondent 17 (project leader of the Oostelijke Vechtplassen)

“In such a complex field you need someone that takes lead and dares to make choices.”

Respondent 5 (policy advisor at the province of Utrecht)

Especially when collective goals must be realised and a complex issue is handled, a leader is needed. This person can bring actors together and make choices that are guiding the process in the interest of the whole project. Specifically, when conflicts arise, a leader can act as a mediator between the different actors. The last precondition is the trust, commitment and outcome of the process. Time is spent in the quality of personal contacts between the actors through having spontaneous drinks as respondent 19 stated. Successes are celebrated to keep each other enthusiastic for the continuation of the project.

“Soon a subarea will be opened and this will be celebrated with everyone involved.”

Respondent 16 (project leader at the program agency Utrecht west)

“We held spontaneous drinks to talk about things on another level.”

Respondent 19 (Program manager of the New Dutch Waterline)

Even if the project is not completed as a whole, respondent 16 claims that celebrations take place. From the interview with the professor of innovation studies, a clear definition of a successful project has been derived. It consists of four parts, it has to be a beautiful project, it has to get media-attention, it has to solve a major issue and it must be copied elsewhere. Even learning a lot in the process is a success, because you will learn lessons for the next time. Especially this last part of learning about the process can be elaborated on towards the projects considered in this research. The other success factors have not been defined by the respondents working on the different projects analysed in the cases.

“The classical definition [of success] that is also common in the political network is that you can show that you did a fantastic and beautiful project, it has to be successful in terms of getting media-attention, that it solves a major societal issue, that it is copied by others elsewhere. That is a frame, another frame is that is the learning part, that you have an innovative solution. It can fail in terms of solving the project, but it can be a success, because you learned a lot in the process.”

Respondent 3 (professor innovation studies at the university of Utrecht)

In sum, three of the six preconditions are considered. Some of the preconditions overlap with other aspects that are discussed in the interviews. That is why they may not be considered consciously, but taken for granted and naturally considered by the province. Monitoring and evaluating the experience in cooperation conflicts with other actors would give more insight in potential upcoming disturbances in the process (Boogers, 2013).

4.2.2 Governance capabilities

The governance capabilities defined by Termeer et al. (2015) deal with wicked problems. The different capabilities are elaborated on here from the perspective of the different respondents.

Reflexivity

Reflexivity prevents tunnel vision. Different frames exist in a policy domain. Different actors are involved in the researched cases. These actors all have different backgrounds and therefore frames. For some projects, more actors were involved than in other projects.

“That is the two municipalities on which’s administrative area the Oostelijke Vechtplassen are located, de Bilt and Stichtse Vecht. Water agency Amstel, Gooi en Vecht, the farmer collective, because there is some agrarian practice. Natural monuments and the forest administration and they all have territorial property there, resident associations are also involved, because it is their backyard.”

Respondent 17 (project leader of the Oostelijke Vechtplassen)

“It is a list of 42 people.”

Respondent 15 (project leader of the junction development Bunnik, at the province of Utrecht)

For the junction development in Bunnik a lot of actors are involved, a total of forty-two people. All these people have different frames. People working at the province reacted very surprised by this. It is not something that goes naturally for the province to work with that many people together. For the development of Oostelijke Vechtplassen only the actors involved and within the proximity of the area were involved. A difference in approaches can be seen here. For Bunnik, more actors were involved, because more scales are regarded. For the Oostelijke Vechtplassen, only the scale on which the development takes place was considered and a different governance approach is handled. Termeer et al. (2015) elaborated on the complications that can arise when misunderstandings occur about differences in frames. These multiple strategies must be taken into account to prevent misunderstandings. Therefore, actors need to be equivalent to each other, Boogers (2013) explained that it is very important that collaborating partners are equal and see each other as equal.

“The idea was to set up a strategy for the long-term. (...) We would like to do that through co-creation, we have to see how far we come in that, but that is the idea. That is a very beautiful challenge!”

Respondent 4 (policy advisor at the province of Utrecht)

Respondent 4 claims that co-creation is one of the strategies that can be used to take multiple frames into account. A strategy is then set up with all actors involved and everyone can participate in setting up the strategy, equally. Co-creation means that besides thinking along, people can develop the project together.

“It is not commonly accepted as far as I’m concerned that the government is always in charge to solve it. I would like to see a situation from the thought of civil society and market, that first those powers solve societal issues, before the government comes in view.”

Respondent 7 (Coordinator space, new Environmental Planning Act and water at IPO)

Besides that, the coordinator of space, new Environmental Planning Act and water at IPO argued that collaboration should be taken further, the government is always in charge. According to the coordinator, the civil society and market should be more in charge, compared to the government, because these are the first in power to solve societal issues. This is a logical opinion, because the civil society and market stand closer to society than the government. However, the civil society and market need to have the capabilities to be in charge. The internal organisation needs to be prepared for it and these actors need to be able to finance the project partially. In view of perspectives differing, respondents noted that they recognise this difference in perspectives. Sometimes differences in perspectives exist between politics and public servants and sometimes between actors.

“You notice it in the governmental consultation the most. (...) There you notice the most that each actor has another perspective.”

Respondent 17 (project leader of the Oostelijke Vechtplassen)

“Some interests are possibly so individual, a private person that lives next to it, that gives a whole different light than a European obligation to prompt the nature value or the water quality in the area. You need to weight all interests and sometimes a private person has to make way for a bigger public interest. (...) The scale on which you look at this area is completely different from a watersystem perspective than if you look at the disclosure of this area for the residents and its surroundings and the effects on their backyards in terms of speaking. The scales are thus very diverse.”

Respondent 16 (Project leader at the program agency Utrecht west)

“Everyone looks at the problem from their own perspective and with different information.”

Respondent 14 (Consultant at ORG-ID)

One of the consultants of ORG-ID explained that differences in perspectives originate from differences in information and knowledge. This adds to statement of Termeer et al. (2015) in which different types of knowledge could be combined to come up with innovative solutions. Besides considering that different perspectives exist, information must be communicated effectively for everyone to have disposal of the relevant information. In the same way, perspectives are dependent on the scale that is handled. Therefore, perspectives differ across scales. Nonetheless, it is important to communicate about these interests and make clear towards other partners why choices are made.

“A province can step over that [interest] it can look at the general interest, it can communicate this as the leading perspective.”

Respondent 6 (program manager innovation program physical environment at the province of Utrecht)

The province can look at the general interest and communicate this as the leading perspective for others. This can add to preventing perspectives to differ considerably. The province has an overview of general interests and can communicate this to the other actors to make them understand what the bigger, regional interest is about. For the living lab, another complication arises concerning perspectives. Different perspectives arise from different backgrounds.

“The government has a policy background, the living lab has a research background, someone needs to organise the living lab who understands both.”

Respondent 2 (Doctor area development and law at Saxion university for applied sciences)

The living lab is applied in a policy area and has a research background. If policy advisors work with a living lab methodology, they need to understand the research part of the living lab, otherwise the goal of the living lab, learning from the process, is not achieved. A combination of both research and policy must be made to conduct the living lab coherently, because otherwise it is or a process like the others, or there is not enough policy incorporated in the living lab.

Altogether, reflexivity can be aimed by the province by preventing tunnel vision and involving different actors. The different cases show that within different projects different actors are involved. These actors have different perspectives and the province tries to regard these different perspectives by co-creating. The difference in information is important to monitor, because perspectives are based on the information and knowledge that people have. The province can communicate the general perspective and focus more on society and market to be in charge. This is something that happens more and more at the province, because societal and private actors are involved more in the projects, but it is not yet the norm. Research and policy can be combined more by the province to solve complex problems.

Resilience

Resilience adds to flexibility within a constant changing context in which the wicked problems take place. Learning by doing is important to adapt continuously to the changing conditions (Termeer et al., 2015). Most lessons learned in the different projects, are focussed on the new Environmental Planning Act.

“The living lab methodology came into existence from the thought that research is done in practice based on conducting experiments or pilots. ‘Aan de slag met de Omgevingswet’ reacts to that. Learning by doing. New

questions that arise from the living lab are gathered for further research. An ideal form of a living lab would be when all five O's are involved from the start, including education and research."

Respondent 2 (Doctor area development and law at Saxion university of applied sciences)

The living lab came into existence after pilots and experiments were set up. From the living lab questions arise that can be looked at in further research conducted by knowledge institutes such as the University of Utrecht. Examples of lessons learned in the living lab are elaborated on here. It is important that these lessons learned in the living lab are carried out in the rest of the organisations, otherwise nothing is done with the lessons and things as open collaboration will not take place.

"In the living lab we're learning that open collaboration is not scary, but brings more!"

Respondent 6 (Program manager innovation program physical environment at the province of Utrecht)

"Through the living lab methodology, we will gain more insight in where the space is to practice with letting go and framing, that is an interesting paradox."

Respondent 8 (Policy advisor at the province of Utrecht)

"What you see with such a living lab methodology, is that it is much more a transdisciplinary approach. (...) From an early stage, you work together to address different questions in research."

Respondent 3 (Professor innovation studies at the university of Utrecht)

Respondents gave three examples of lessons learned in the living lab. The first experience was connected to the openness of the process. The conclusion was made that the open collaboration brings more. Hereby, another respondent noted that a balance has to be found between framing and leaving the process open. A living lab is a transdisciplinary approach and the lessons learned can be addressed in research. It is important to find a way to organise this learning process and implement it within the organisation. .

"An important question is how to organise the learning process. That is where it appears to be difficult in practice. It should be embedded institutionally. For example, you can give knowledge institutes a prominent role in these learning processes. What they try to do is to learn by doing research. (...) By working together in an early stage and transdisciplinary, you can organise a more social learning process around it. That asks for different roles of actors. A scientist is pulled out of its comfort zone, because he/she has to learn lessons in a new way and maybe even become more part of a debate, which he/she would otherwise only look at. Otherwise, a policy maker maybe has to get used to taking action even though the political context is still moving."

Respondent 3 (Professor innovation studies at the university of Utrecht)

"Interesting to know what lessons we learn and how we can record these. Thus, note them down for other processes."

Respondent 9 (Water agency)

Respondent 3 explained that it is important to define the learning process. This appears to be hard in practice. The different roles of actors are also mentioned by respondent 3. These changes in thinking in a transdisciplinary way are both new for policy makers and researchers. It is important however, to find out how the lessons can be noted down and recorded for further processes. However, neither the respondents, nor the literature has an answer to how this should be done. I think that analysing experiments and lessons learned in different projects is an important aspect of learning. Therefore, evaluating and reflecting on projects is important to learn from the consequence making difference choices had.

"That is why the search is not collective, but individually per province, which is quite logic and explicable is because of the characteristic differences and cultural differences and the inter-governmental relationships, but at the same time a fail if you don't want to learn from each other. (...) There is no clearly outlined knowledge infrastructure and otherwise it happens quite ad hoc."

Respondent 7 (Coordinator space, new Environmental Planning Act and water at IPO)

Respondent 7 also stated that there is no clear way to share the knowledge gained. Besides that, respondent 7 stated that the search for the implementation of the new Environmental Planning Act happens for each province on its own. It would be much more productive to learn collectively about the implementation of the new Environmental Planning Act. Carrying out the lessons learned in the difference projects at the province of Utrecht towards other provinces could add to this. A regional leader can add to this learning process. On top of that, a regional leader can bridge the political and governmental differences. It is someone who bridges the informal networks and formal decision-making process (Edelenbos & van Meerkerk, 2015).

"Now we have the independent leader and we all pay them, which is sort of how we want to make it work."

Respondent 18 (Project leader, development Noorderpark)

"I involved someone to be an independent leader, but for now I take on this role."

Respondent 15 (Project leader of the junction development in Bunnik, at the province of Utrecht)

For some projects a regional leader is present. Or the ambition exists to involve a regional leader. For the development of the Noorderpark, all actors involved pay the independent process leader. The IPO is the overall provincial institute and could take on this role of regional leader concerning the implementation of the new Environmental Planning Act.

"The IPO has an implementation team I believe that they work demand-based, not supply-based. They accompany the provinces in their complicated search to the right implementation of the new Environmental Planning Act."

Respondent 7 (Coordinator space, new Environmental Planning Act and water at IPO)

IPO has an implementation team and helps the provinces to implement the new Environmental Planning Act. Although IPO works closely with different provinces, it is an authority that works on a national scale and tries to assemble all provinces. It could help by bridging the politics and governmental differences. Cross-scale linkages between actors on different scales can stimulate learning across boundaries (Termeer et al., 2015). The different respondents are setting up networks through different scales or are conscious of the need to collaborate with actors on other scales.

"What collaboration originates between actors once the new law is implemented, is dependent on the scale."

Respondent 1 (Coordinator experiments new Environmental Planning Act at the province of Utrecht)

"I call it an alliance. (...) Where I can steer a relationship between two people, then I don't steer the people, but on the little line between them. (...) I think that the new Environmental Planning Act asks from us more than we do now, to have a certain view, ability and strategy on how we connect actors to each other, but also to our self and that we look earlier in the process for collaboration with others and that that pressure does not reduce."

Respondent 15 (Project leader of the junction development in Bunnik, at the province of Utrecht)

Arnouts et al. (2012) stated that one should study the relationship between actors. That is exactly what the project leader of the junction development in Bunnik does, steering on the relationship between people. He/she connects actors to each other. By connecting actors, networks can be set up in which people understand what binds them. Therefore, flexibility to adapt to the changing context can be achieved, because people from different organisations work together as a network to develop projects. The IPO is used to networking between scales.

“We [IPO] play on a board of departments, parliament, VNG, Union of water agencies and social stakeholders. We switch naturally between those, the natural way we do that should actually be adapted by each province on their own scale.”

Respondent 7 (Coordinator space, new Environmental Planning Act and water at IPO)

Respondent 7 describes that the way IPO switches between scales should be adapted by the provinces. They should naturally switch between actors on their own scale in order to maintain and set up a network of actors with whom they can collaborate. To collaborate within scales and learn together, flexible legislation is needed to experiment in this. Collaboration is not something that is self-evident between different scales. Under the new Environmental Planning Act it is advised, but experiments are needed to learn more and set up networks among scales. Subsequently, lessons learned from the experiments can be implemented in practice.

“The answer is then that it is convenient that living labs offer a new perspective and that space is made to experience. This can be done for a certain time or within a certain geographic scale.”

Respondent 3 (Professor innovation studies at the university of Utrecht)

A living lab is a setting in which experiments can take place. However, space needs to be given to experiment and politicians need to agree with experiments taking place. Hooghe & Marks (2001) take flexibility even further. They argue that it is fundamental to governance to be able to change formal rules. A policy advisor at the province explains that changing decision-making processes is formally not done at the province.

“If something is decided, you can’t say well, I don’t agree, I’m going to do it otherwise. Off course there are ways to influence opinions if you see it coming that a bad decision is going to be made, you can talk to them one on one beforehand, we can propose that as well (...) but if you say it very black and white, no, you have to execute what has been decided.”

Respondent 4 (policy advisor at the province of Utrecht)

Once a decision is taken, you have to execute the decision, but he also states that there are ways to influence politician’s opinions. This could be seen as being able to adapt decision making, but formally this is not possible at the province. Politicians should be taken along in the process in order to make them understand what lies beyond the potential decisions proposed by the civil servants.

As was previously stated, resilience is about adapting to a changing context. Hence, experiments are set up within the province to learn by doing. Questions arise within these experiments and can be used for further research. However, it is not yet defined how to organise this learning process. The question remains about what to do with the lessons that are learned? Moreover, collective learning processes could be organised with other provinces around the new Environmental Planning Act. The province has a leading position within the region and can set up networks across scales and departments to learn and work together. Governance is about flexibility and the possibility to change decision making processes to substantiate this flexibility. This appears to be impossible at the province, due to the province being a political organisation.

Responsiveness

Termeer et al. (2015) argue that governments have the ability to observe and respond to societal issues and therefore, need to adapt their policy agendas to different levels to achieve this. The province creates policy agendas and creates them with other actors collectively already.

“The program agency organises it, but the province is explicitly involved. (...) The knowledge was needed from the province, which is why they were involved. (...) and we hired a consultancy agency.”

Respondent 17 (project leader of the Oostelijke Vechtplassen)

“Composing the territory plan is done by all partners involved in the whole process. Province, municipalities, water agency and the private actors”

Respondent 16 (project leader at the program agency Utrecht west)

For the project of Oostelijke Vechtplassen, the program agency organises the process, the province adds the knowledge and a consultancy agency brings it all together. Hereby, the strategic policy agenda is set up with the program agency of Utrecht West, that is intended to have an overview of the west part of Utrecht. The province and the consultancy agency add to this strategic policy agenda. More actors are involved in this, because the program agency coordinates all actors together and gains insight in the information needed to develop the Oostelijke Vechtplassen.

“Yes, we do that with other actors together. Those agendas, you don’t come up with them by yourself. We actually say, well we want to set up an agenda, come with ideas and then we’ll decide how we’re going to collaborate in this.”

Respondent 5 (policy advisor at the province of Utrecht)

Respondent 5 states that it is not possible to come up with a strategic agenda by yourself. This means that the province is not able to set up a strategic agenda by itself and should always collaborate in this. That adds to complex problems being too complicated to be handled by one actor alone. The remaining question is how and to what extent collaboration is taking place. This can either happen on specific topics or on scales or both. The aim for the implementation of the new Environmental Planning Act is to set up strategic agendas collectively on both different scales and different policy themes. A good strategic agenda focussed on policy may lead to a more integral process all over (Termeer et al., 2015).

“There were some policy tasks from the province, there was a task for the nature network, the nitrogen emission, the water agency had to make a new water territory plan, strategy was focussed on that to make sure it all comes together and leads to a good result.”

Respondent 17 (project leader of the Oostelijke Vechtplassen)

For the Oostelijke Vechtplassen the aim of setting up a strategic agenda is the same as described in the literature, a strategy leads to a good result and everything coming together in an integral approach. When in fact, the extent to which the Oostelijke Vechtplassen is working in an integral matter can be discussed. Yes, an integral approach is handled for the themes defined that need to be involved for the development, but an integral approach could be adapted by involving other surrounding areas as well. Contrary, for the junction development in Bunnik, setting up policy is not a priority. There, governance networks are set up first and then policy is defined. Strong governance is needed to set up a collaboration in which the different partners can be involved in developing the area.

“Policy is not what we need now. We will need strong policy later, when we are going to fill things in. Now we need strong governance. A strong call for that is coming now.”

Respondent 15 (Project leader of the junction development in Bunnik, at the province of Utrecht)

The research background of the living lab methodology makes sure that the strategic policy agenda is embedded in the research, because a research plan is set up beforehand. Therefore, a research based approach can be used to set up policy within the area at hand in the living lab.

“The living lab needs a program. It is a research program within which experiments can be conducted. This can be done by theme or for example within a region.”

Respondent 2 (Doctor area development and law at Saxion university for applied sciences)

Respondent 2 acknowledges that strategic policy agendas, even in the living lab, can be either done by theme or within a region. This is exactly the difference taking place for the development of the Oostelijke Vechtplassen. There, a strategic policy agenda is set up amongst themes instead of within a broader region than just the area handled in the project. Here, setting up strategic policy agendas by theme does not mean that the themes are coherent for the region. This is an important factor to keep in mind. Besides that, setting up strategic policy agendas with others is a task on its own, because it is not easy to involve all actors.

"The business community is hard to involve. We take a year to set up a strategic vision, but you're not going to involve them from day one, they don't have the time and capacity to do that. They think well, come back once your idea is a little bit more concrete. While you also want it to be theirs."

Respondent 5 (policy advisor at the province of Utrecht)

For example the business community appears to be a complicated actor to involve. They lack time and capacity, because the timeframe of a policy agenda is too long compared to the timeframe on which the business community operates. Timeframes are another thing to keep in mind besides different perspectives of actors. It is important to stress the significance of being involved in the project for businesses. That makes them able to define what they get in return for their effort in participating.

"Sometimes interesting things come up, that we think oh we should consider that. I remember one evening that we asked what is going on and that we returned with homework."

Respondent 16 (project leader at the program agency Utrecht west)

Getting input from society is hard for the province, but it is important to react to societal issues (Termeer et al., 2016). The province hosts evenings where citizens can introduce their ideas and opinions and Respondent 16 explains that this leaves them with homework sometimes. However, next the question is if something is done with the homework obtained. The province thinks it is complicated to define what is done with the outcome of participation processes. Therefore, it is important for the province to define why participation is taking place and what can be done with the input gained from the participation process.

"Residents associations are also incorporated, but they are not directly involved in steering the project, but we are in contact with them and they can think along."

Respondent 17 (project leader of the Oostelijke Vechtplassen)

"Participation is organised through informational evenings"

Respondent 10 (Water agency)

"I'm making a manifest with youngsters (18-28)."

Respondent 14 (Consultant at ORG-ID)

Insight in the needs of the environment are gained in different projects, but priority needs to be defined on what is done with the opinions and ideas that come from participation. For example, a manifest can be set up to present to the politicians. Therefore, a specific group, such as youngsters can represent their selves and communicate their visions to the politicians. Subsequently, politicians need to take the input seriously and consider the input raised by these people.

"We choose to address existing societal issues where we have a provincial interest."

Respondent 6 (Program manager innovation program physical environment at the province of Utrecht)

"A helicopter view is needed to see the bigger picture, a province has this and can therefore make a choice in what you're going to put your energy. (...) The politics are important to prioritise issues."

Respondent 5 (policy advisor at the province of Utrecht)

Respondents 5 and 6 agree that the province decides what societal issues are addressed. The province can make the choice in where energy is put according to respondent 5. Through the politicians, priority is divided over different issues. However, it is important to hear the initiatives coming from society and react to them. Therefore, civil servants need to explain why certain choices are made towards incorporating the initiatives chosen.

"Under the new Environmental Planning Act, the government decides with society, not for society."

Respondent 8 (Policy advisor at the province of Utrecht)

According to respondent 8, the new Environmental Planning Act puts more emphasis on decisions being taken with society by the government. The government will no longer decide on its own, but society will be included in the decision-making process. However, is society ready and capable and wanting to participate? Boogers (2013) stated that participation can only be successful if a strong societal engagement exists.

"Individual owners and citizens are also present, but some have an active attitude and others don't."

Respondent 17 (project leader of the Oostelijke Vechtplassen)

"Resident evenings were organised, some kind of walk-in evenings. That happens sometimes during the phases of the project. People can ask their questions that way."

Respondent 16 (project leader at the program agency Utrecht west)

"In the living lab, we will experience how the citizen reacts to being able to participate and the extent to which citizens have the need to participate."

Respondent 8 (Policy advisor at the province of Utrecht)

The question on participation is also raised in the living lab. Respondent 17 stated that some citizens are more active than others in their attitude towards the process. It depends on the process to what extent people want to participate. If a desired result is not reached, societal engagement can help by breaking governmental impasses (Boogers, 2013). A critical precondition is that societal engagement must exist and people want to participate.

As has been noted, the province needs to be able to respond to societal issues. Policy agendas are created with other actors. Either for a specific area, scale or topic. The aim of the new Environmental Planning Act is to create collaborative agendas for either scales or topics. An integral process can be achieved through this collaborative agenda. A difference exists here between different projects at the province. Some have agendas on certain scale, some within a certain area and some for a certain topic, such as the collaboration agenda for water. If themes and topics do not overlap, it is hard to work integrally, because agreements are hard to define. Starting from a certain area improves the ability to work integrally, because the issue for that area can be defined and insight in the actors within the environment is easier to achieve. Hence, is clear who is located within the area. A strong societal engagement is needed, but it appears that people are not always wanting to participate.

Revitalising

Coping with wicked problems can stagnate the project, it is important to be aware of stagnation, to measure possible stagnation and to take measures to revitalise the project (Termeer et al., 2015).

"With the information evenings with the residents now, I don't want to say it stagnated completely, but it isn't easy."

Respondent 18 (Project leader, development Noorderpark)

The project leader of the development Noorderpark is aware that stagnation is lurking. It is important to define what interventions are taken if the project stagnates. A first step in defining what interventions are needed is to define when stagnation occurs. The IPO monitors the implementation of the new Environmental Planning Act at the provinces. Although this is not a project, for major transitions, it is also very important to monitor possible stagnation. However, it is important that this is communicated to the provinces, but that appears to be lacking.

"IPO monitors the way the implementation of the new Environmental Planning Act is conducted at the different provinces. Although, measures are not taken when it goes wrong."

Respondent 7 (Coordinator space, new Environmental Planning Act and water at IPO)

The project leader of the junction development in Bunnik understands that it is important to evaluate the process continuously and learn from the struggles that take place during the process. There again, these lessons learned need to be communicated to others to learn collectively.

"I am going to deliver a reflexion document in which lessons of the whole process are presented also the friction in it, which is most interesting and varies from lessons to me personally."

Respondent 15 (Project leader of the junction development in Bunnik, at the province of Utrecht)

An independent leader is capable of observing possible stagnation and reporting it to the project leader who might not be aware of the stagnation. This independent leader might also evaluate and monitor the process and therefore define the lessons learned in the process.

"The independent leader observes this stagnation."

Respondent 18 (Project leader, development Noorderpark)

"Yes, I monitor the stagnation. I have a whole file that I update regularly."

Respondent 17 (project leader of the Oostelijke Vechtplassen)

The project leader itself can also be the stagnation observant. However, respondent 19 does not agree on this and claims that it is important to have someone that evaluates what you are doing. A fresh look from an outsider that is not involved in the process.

"You need to organise your own resistance. Someone who mirrors you and tells you when you do something wrong."

Respondent 19 (Program manager of the New Dutch Waterline)

It is important to evaluate the process in between and reflect on the process. For some projects the project leader monitors the process and for some projects an external evaluator is evaluating the process. Once stagnation occurs, it is important to define what measures are going to be taken to continue and unblock stagnation.

Rescaling

Governance strategies need to be adjusted to the right scale continuously to work integrally (Termeer et al., 2016). The question is how this can be achieved. Different approaches are used by the province and elaborated on here. The province has been divided in two parts with the two program agencies, west and east. Here, a first step is being undertaken to set up a permanent governance network.

"The program agencies Utrecht west and Utrecht east form two area specific advisory committees, within which representatives take place from our partners in the rural area, varying from the farmer collective to nature and environmental organisations. From municipalities, to water agencies, that take place in the recommendation, but also for prompt execution of the projects. That is the way we try to make use of an integral approach to realise the goals in the area."

Respondent 16 (project leader at the program agency Utrecht west)

Goals are being realised with the people involved in both program agencies. The program agencies are a permanent collaboration with these different partners. For the rural area, an integral approach is strived for, through these program agencies.

"The soil, ecosystem and water are entangled. It is in within the system, the integral aspect of the project. Agrarian interests are taken along, we include recreational possibilities, there is a natural issue within the area and we consider archeologic values. Because we combine those with the issue, I think you could call it integral."

Respondent 17 (project leader of the Oostelijke Vechtplassen)

"In this first meeting there was a need for, well the word goal is not mentioned, but a need for an integral overview of the identity of this junction."

Respondent 15 (Project leader of the junction development in Bunnik, at the province of Utrecht)

"We have an integral area development program. In which we already work on the integral part of the law. It is something we're already working on and want to anchor."

Respondent 5 (policy advisor at the province of Utrecht)

"We have an interprovincial collaboration platform, called the linieteam. (...) By making people enthusiastic and taking them with you in everything, you can work integrally. It has to be liveable, people need to be able to make connections."

Respondent 19 (Program manager of the New Dutch Waterline)

It is important to share the identity of the area in order to share a goal amongst the actors. An integral development team at a higher level within the province is working on the integral part of the law. This is needed to reach the goal to approach the physical environment coherently in the new Environmental Planning Act. An interprovincial collaboration can add to the integral process, because making links is easier if there is an overall collaboration that has this overview. This then must be taken down within the organization to make sure it happens on all fronts, otherwise some sectors try to work integrally, but others do not and coherence is still not achieved. For the development of the Noorderpark, the issue was that the area was not used enough. From there, the project started and actors were involved.

"The program of the New Dutch Waterline works more from the issue at hand. It is also very important for the development of the Noorderpark-Ruigerhoek, because the area was not used enough, (...) even though it is a very important part of the Waterline."

Respondent 18 (Project leader, development Noorderpark)

This thought that a start needs to be made with the issue comes from the program of the New Dutch Waterline, of which the development of the Noorderpark is a part of. Therefore, it is important to put everything within the development of the park in perspective of the whole program, that takes place on a bigger scale. However, doing the same on another scale is not possible according to respondent 8. The issue needs to be adapted to the scale on which it takes place. Therefore, the issue needs to be redefined on the scale handled. That is because the context differs at each scale. The issue must always be seen compared to the context in which it takes place.

"You have area and area, you cannot do the same thing on a very large scale."

Respondent 8 (Policy advisor at the province of Utrecht)

The question raised in the living lab is the scale on which you have to manage something and the way you define this scale. Defining the issue at hand could help here, because by defining the issue, the multi-level context in which the project takes place becomes clear. To make this clear, different scales need to be taken into account to define at which scale the issue takes place and the way the issue changes between scales. It is important to define at what scale what part of the issue is being managed.

"At what scale do you have to manage something?"

Respondent 14 (Consultant at ORG-ID)

In the living lab, this shifting between scales appears to be apparent for some actors involved, but some do not agree to this statement.

"The living lab is being adapted to the scale on which the issue takes place."

Respondents 1, 12, 13, 11 and 14 (Municipality of Woerden, Province & ORG-ID)

“The living lab is not being adapted to the scale on which the issue takes place.”

Respondents 8 & 6 (Province of Utrecht)

It is interesting to see how within one living lab, actors do not agree to issues and scales being adapted to each other. However, it is clear that it is important to keep an eye on all the different scales and learn from the experience of issues taking place on different scales. Subsequently, it is important to define scales, issues and governance processes that are needed to come up with different solutions to problems.

“The living lab makes clear that it is important to keep an eye on all the different scales.”

Respondent 6 (Program manager innovation program physical environment at the province of Utrecht)

“In the living lab we experience how issues take place on different scales. Under the new law, we’ll be dancing through all the scales.”

Respondent 14 (Consultant at ORG-ID)

The expectation is that under the new Environmental Planning Act, moving between scales will be like dancing according to a consultant from ORG-ID. Respondent 6 explains that it is very important to keep in mind that each issue asks for a different approach, because each issue takes place on a different scale. Therefore, the governance should be set up around the issue and incorporate the continuous rescaling within your project, because the issue always takes place and differs on different scales.

“It is true, each issue asks for another approach, because the issue is different on other scales. (...) It is much more important to define your issue and to find your quest within the search and find alliances in it. Your issue on different scales, your regional level, your upper regional level, your local level, and you can do that out of the issue. (...) You must divide your scales. The conversations you have on a regional level, you have with water agencies, knowledge institutes, experts. A farmer needs to look over its territory, otherwise he/she won’t understand the level you’re talking about.”

Respondent 6 (program manager innovation program physical environment at the province of Utrecht)

Although, not everyone involved in the project will understand the different scales. The higher the scale, the higher the abstraction level of the content. Some people do not need to be involved at that level, because they simply do not understand the level of abstraction. Therefore, it is important to create the governance arrangement around the issue and revise it continuously to define if the actors involved still understand what the issue is and what you are talking about. For the junction development, three scales can be defined.

“I identify three scales now. First, the point, that is the station itself with around it a zone of two/three-hundred meters. (...) The second scale, and I skip a part, because you can identify even more scales between them. That is the junction within the town or city, or municipality with the question what does this junction mean to Bunnik? (...) That is the middle level, that is the most complicated and most actual scale, in the discussions going on we have all kinds of lines on this scale. The bottom one is tackled, for that one, we can measure the quality, for which we have all kinds of programs. (...) The highest scale is the one at which you look at connections with residency and work and therefore the commuters. (...) What the city can’t and what we as a province can do better, because we have more people that want and can think on that level and because the city does not understand where she needs and can use what partners and where it is almost essential to include the province earlier.”

Respondent 15 (Project leader of the junction development in Bunnik, at the province of Utrecht)

There, the middle level is most complicated, because the city does not understand where she needs what partners. The province can oversee this, therefore, the province again, is a good facilitator of the process. It can oversee the different scales and add to the rescaling. The governance needs to be set up for each scale specifically and the province has the overview of which people are able to collaborate on which scale.

According to respondent 4, the new Environmental Planning Act makes space for approaches being adapted to issues.

"Each issue asks for its own approach (...) I think that the new Environmental Planning Act makes space for all these forms. (...) It is always searching for the right scale and operation on it, but we do it together. (...) With the discussion about merging the provinces, that question also arose, what issue takes place at which scale? We analysed that for the province and it resulted in the scale differing considerably for each issue."

Respondent 4 (Policy advisor at the province of Utrecht)

The scale and issue question arose in the discussion about merging the provinces and there it already became clear that the scale differs considerably for each issue. Kooiman (2008) stated that the governance needs to be scale specific and incorporate external factors. Therefore, a higher scale needs to be considered to define the external factors.

"All provinces should set up a vision together, then everyone can translate it to their own territory."

Respondent 19 (Program manager of the New Dutch Waterline)

Setting up an environmental vision with all the provinces together would add to this definition of the external factors. Respondent 3 claims that the context in which issues take place is very important. This adds to the integral approach needed to define the issue. Each perspective involved adds to the context in which the issue takes place.

"The context is also very important."

Respondent 3 (professor innovation studies at the university of Utrecht)

If goals are defined before defining the issue, potential external factors may be overlooked, because it is very hard to define the governance approach needed for solving the issue, without defining the issue first. Therefore, it is very important to keep a focus on the issue.

"We never did this, it is very new for the province, that we said, we have existing policy and off course we take it into account, but the issue is the point of focus. Because we consciously let go of the connection with the goal until we defined the issue with the neighbouring actors, we do not know what our goal is."

Respondent 6 (Program manager innovation program physical environment at the province of Utrecht)

Except for a living lab methodology, because the goal is learning by doing, which is very broad. A definition of the issue is needed to know what has to be researched, but the goal can be clear beforehand here.

"The goal of a living lab is simple; learning by doing. It is a research concept, that means that the goal is to gain knowledge."

Respondent 2 (Doctor area development and law at Saxion university for applied sciences)

Rescaling is about adjusting governance to scales. The province of Utrecht is already divided in two areas and has an area-specific approach. It is important for the province to define identities for areas and work from the area and then zoom in and out to observe the issue on different scales. The multilevel context is important to keep in mind continuously. The extent to which this is done depends on the project within the province. The new Environmental Planning Act makes it possible to adapt governance to the issue, because flexible governance agreements can be set up. Different scales mean that different abstraction levels exist. The bigger the scale, the higher the level of abstraction. This is not understood by everyone; therefore a governance approach needs to be revised continuously.

4.3 Regional scale for governance arrangements

The subsidiarity principle is embedded within the new Environmental Planning Act (Boeve & Groothuijse, 2014). Especially at the regional scale it appears to be important to have an overview of the actors involved in the issue.

“If they [other actors working within the region] acknowledge more that it [the issue at hand] is from all of us and don’t have to be afraid that the province will take it from them, because the only thing the province does is governance. We must carry that out even more as a province, and off course for some areas we have policy, but that does not necessarily need to be inconsistent with not doing governance. We must develop as a province to do that well. Working integrally from the start, to sum it up, we say it, but we do not do it. We start sometimes with everyone, but that is something completely different than working integrally. I see a lot of integral consultation, but I see mostly sectoral execution.”

Respondent 15 (Project leader of the junction development in Bunnik, at the province of Utrecht)

Respondent 15 claims that the province is seen as an actor that will take the issue from the other actors. This adds to the previous statements of respondents, that the province is the major actor responsible for the project and the major financial supporter of the project. The co-ownership of the responsibilities and finances can add to the idea that the province is facilitating the process as the regional project leader. Although, under the new Environmental Planning Act, it will become even clearer that an integral approach is needed to solve complex problems, because it appears to be impossible to solve problems alone.

4.4 Rescaling to the right scale for governance

The province can help defining the different scales on which the issue takes place, because the law provides opportunity for the province to set up a network through different scales.

“This law provides the opportunity to the province to form an active governmental layer within the network of the other governmental actors, but also gains visibility at the scale of the civilians and businesses. In the end, the law is about decentral unless, the decision power concerning the physical environment lies low. Consciously chosen, close to the civilian, close to the businesses, but the spatial scale is sometimes that much dependent on the issue, that the lowest government is exceeded and then the province comes into view. That means that the province, like the municipality needs to position itself as facilitator of societal developments, suiting the policy of the province. Thus, a province moves naturally between very different scales and it begins with society itself. The province is also capable of operating towards the state and Europe. The provinces do that a lot. By which a province operates naturally within the network society.”

Respondent 7 (Coordinator space, new Environmental Planning Act and water at IPO)

The subsidiarity principle assumes that the issue is handled at the lowest scale possible, if not needed otherwise. Once the issue exceeds the lowest governmental scale, the province comes into view. The province therefore needs to facilitate the societal developments within its own policy, to make it possible to act as a facilitator within the different processes. Setting up networks and relationships between different actors is a major task for the province under the new Environmental Planning Act, and adds to setting up different governance approaches within different scales, that suit the process of solving the issue at hand.

4.5 New Environmental Planning Act

The new Environmental Planning Act goes in effect in 2019. Four goals have been defined to be improved to maintain a healthy physical environment and physical quality. Besides that, the new Environmental Planning Act aims to develop the physical environment effectively to fulfil societal needs. The goals could add to improving governance and rescaling within the physical environment. Therefore, these have been put forward in this research. The four goals defined in the Act are:

- To approach the physical environment coherently;
- Enlarge the governmental space for consideration;
- Enlarge the comprehensiveness, predictableness and user-friendliness of the environmental law;
- Improve and speed up the decision-making of projects in the physical environment.

These four goals are discussed with the different respondents and their views, statements and current experience with the objectives defined in these goals are elaborated on. The first goal is coherently approaching the physical environment.

“You cannot talk about one thing when rearranging an area, and especially not in an area like this one. Because it coheres. It is one system that you have to see through and then you know that if you turn this, then something changes over there, and that is something good or bad for the nature or water quality for example.”

Respondent 16 (project leader at the program agency Utrecht west)

“In my opinion it would be best to make the area the central focus point, then look at the governments and stakeholders concerned, decide what each other’s tasks and capabilities are after you decided what is best for the area. Only then a good collaboration is taking place, but the hard part is that the organisations we’re talking about are political organisations.”

Respondent 1 (Coordinator experiments new Environmental Planning Act at the province of Utrecht)

Respondent 16 and 1 claim that the area needs to be the focus point, because within an area, themes come together. Policy needs to be set up integrally in order to cover all the relevant themes for the area. Therefore, a coherent approach of the physical environment is inevitable. However, politics define where the priority lies and therefore what themes are considered. Respondent 17 adds to this, that the whole approach changes towards thinking from a specific area. Therefore, one cannot reject the fact that an issue needs to be approached collectively.

“The integral part of the new Environmental Planning Act is an enormous gain compared to a provincial spatial plan, zoning plan and all the policy frameworks. You will work from a whole different approach, because there is an issue at hand in a specific area. We are then working together to sort out that issue.”

Respondent 17 (project leader of the Oostelijke Vechtplassen)

Where themes overlap, it is easier to approach the physical environment coherently, respondent 13 states. However, approaching the physical environment coherently on themes that do not overlap does not happen. This is something that is necessary under the new law and needs to be sorted out how non-overlapping themes can be approached coherently. Again, approaching the project starting with defining the issue could help in this, because the issue could be highlighted for each theme. Therefore, it could be defined within the relevant themes and these could be approached coherently. Everything that is happening in the area may have an influence on the issue and needs to be regarded.

“The physical environment is approached coherently on the most important themes and these overlap, but otherwise not.”

Respondent 13 (Consultant at ORG-ID)

Respondent 6 claims that an integral approach is hoped to be used under the new Environmental Planning Act, but it is a huge step to take.

“I hope an integral approach is used under the new Environmental Planning Act instead of a thematic approach. This movement is a huge step in the direction of thinking under the new Environmental Planning Act and we focus on the environment and unusual suspects.”

Respondent 6 (Program manager innovation program physical environment at the province of Utrecht)

Focussing on the environment and unusual suspects is something that suits the new Environmental Planning Act. By defining the issue and scales, unusual suspects may come up once the external factors come in sight as Kooiman (2008) stated.

“By involving everyone early in the process, decide together what the issue is. Good communication is key. (...) It is important to develop the physical environment in a smart way and by talking to the same people all the time is not the way, because you’ll get the same answers. (...) Out of control is fine, that’s when you are changing and renewing.”

Respondent 19 (Program manager of the New Dutch Waterline)

Respondent 19 agrees with respondent 6 that involving new people or unusual suspects is needed to move on in a project. Different answers will be derived once new perspectives are considered. Respondent 18 encountered a problem with dogs in the development of the Noorderpark. Agreements were made to decide on how this problem would be handled.

"You have dog walking services, that is a huge thing, they made agreements with all actors about it. That is, I think a first thing, that has nothing to do with the new Environmental Planning Act, but is very physical off course, because dogs bite badgers to death, dog poo, but it is quite an impact. Kids can't play there, because sporting dogs are trained there, and well you can't have kids playing next to that. It has quite an impact on the physical arrangement of the area. For the first time, they made all sorts of agreements on that. I think that is easier to achieve with the new Environmental Planning Act."

Respondent 18 (Project leader, development Noorderpark)

The expectations are high for the new Environmental Planning Act, coherently approaching the physical environment is thought to make governance processes easier and therefore, improve the decision-making. This is also the second goal of the law. Respondents were hesitant about giving their opinion on this topic, because at this stage in the implementation, not much is clear about the influence on the improvement of the decision-making.

"I think that it is a challenge to enlarge the decision-making process. (...) I think that in the start-up phase you will get a delay, because people have to think about what should happen in an early phase. You have to prepare more, but the gain is achieved afterwards with the execution, because it is all together and adjusted to each other."

Respondent 17 (project leader of the Oostelijke Vechtplassen)

Respondent 17 is not sure about the third goal of the new Environmental Planning Act, the enlargement of the decision-making process. However, flexibility is thought as something which is needed to be noted down in the environmental ordinance.

"Our challenge is to seek a spot where we can be flexible, it is not a goal on its own to always be flexible, sometimes a clear rule can be very helpful. Where we want to provide flexibility, we should try to formulate that in the environmental ordinance¹² where all the rules will be noted down. With a note that whenever you make things flexible, it often becomes complicated, but how you are going to do that is a huge thing now."

Respondent 4 (policy advisor at the province of Utrecht)

"That demands politicians to have an open conversation with each other, because otherwise you can't really consider things coherently. They need to be conscious that this is what is needed."

Respondent 1 (Coordinator experiments new Environmental Planning Act at the province of Utrecht)

Politicians need to have an open conversation with each other according to respondent 1 in order to enlarge the decision-making process. If politicians do not have an open conversation with each other, they cannot consider things coherently. The fourth goal, is enlarging the clearness of the environmental law.

"We should learn how we can work together."

Respondent 1 (Coordinator experiments new Environmental Planning Act at the province of Utrecht)

"We should learn what the instruments are and how we can use them in practice."

Respondent 11 (Municipality of Woerden)

¹² Omgevingsverordening

Learning is the key to enlarge this clearness of the law according to respondents 1 and 11 who are both participating in the living lab.

Altogether, the area needs to become the central focus point in the process. Then an integral approach of the area can be achieved. This adds to the first goal of the new Environmental Planning Act, the coherent approach of the physical environment. It is new for the province to approach the physical environment integrally, mostly a sectoral approach is used. Governance is important to consider in a territorial approach, because it is an open view to 'unusual suspects' that can come up with new, innovative solutions and ideas. High expectations exist towards the new Environmental Planning Act even though a lot is not yet clear about the influences of the new law. Flexibility is important to note down in the environmental ordinance and politicians need to adapt an open attitude. Learning is important for implementing the new Environmental Planning Act.

4.6 Unexpected outcomes

The interviews were based on the theory described in this thesis. However, some topics came up as very important, that were not elaborated on extensively in the theoretical chapter. Therefore, unexpected outcomes are described. These involve the politics, personal traits, communication and internal struggles at the province.

Newman (2000) stated that institutions must break out of their short-term electoral politics and need to establish consensus around wider regional goals. The second statement seems hard to achieve at the Oostelijke Vechtplassen.

"The water agency thought too much money was spend on nature. (...) the province is also such a political institute, the municipality of the Bilt insisted on residents being involved, each of them has something they think is politically important."

Respondent 17 (project leader of the Oostelijke Vechtplassen)

Each political institute has its own themes that are important to them. Therefore, each government wants to put other themes up front that need to be the top priority and consensus about wider regional goals is not aimed at. For the Oostelijke Vechtplassen, this appeared to be the case. To make sure politicians and civil servants are on the same line, politicians need to be involved in the process.

"With the living lab, we're involving the politician early and consistently in the process."

Respondent 11 (Municipality of Woerden)

"Politicians are involved from the beginning under the new law and have to dare to take risks."

Respondent 12 (Policy advisor at the province of Utrecht)

The living lab tries to involve the politicians consistently in the process. However, respondent 12 noted that politicians need to dare to take risks, because otherwise, agreements cannot be made on flexible projects. Risks must be undertaken by politicians, because the flexibility and robustness are always on tension.

"What we do now, there is some kind of assignment coming from politics to the civil servant. Then we have all kind of meetings with civil servants and then we send it back to the politics and they think something about it. (...) The alternative is learning. Each time in between whilst working on it, going back to politics. Organising multiple political moments that are clearly no decisive moments. That is hard, because it is hard to take politicians to a place where they are comfortable and don't have to decide something. Where they are being challenged to ask a question or where their personal opinion is asked for."

Respondent 15 (Project leader of the junction development in Bunnik, at the province of Utrecht)

Respondent 15 explains that involving politicians early and consistently in the process is executed by going back to the politician every time a step is taken in the process. Multiple meetings with politicians are organised in which they do not have to decide on something. That is new for politicians, but under the new Environmental Planning Act, it could be needed even more, because cooperation with other actors is set up

in the governance approach. Besides that, flexibility is needed from politicians to operate within the new Environmental Planning Act. Developments should take place in favour of society and should add to the quality of the physical environment. Even more than now, this should be kept in mind.

“What you see is that groups feel undervalued when a subject is not only discussed with them, but also with others. Because we are the ones that advise the governor and politician about it and not the other group, that is not possible, it should run by us.”

Respondent 7 (Coordinator space, new Environmental Planning Act and water at IPO)

However, sometimes people do not like it if ‘their’ subject is discussed with others, because they feel like it is their thing and then will be taken over. An open attitude is needed towards each other with the project in mind. It is important that the main goal, that is solving a societal issue, is regarded.

“Yes well who dares to give their opinion? That is a question that bothers me sometimes. Are there any opinions left? Or are we all focussed on processes or the issue and not the problem itself, but well yeah....”

Respondent 4 (policy advisor at the province of Utrecht)

Giving an opinion appears to be not self-evident. Respondent 4 explains that this is something that happens too little. Therefore, the process and issue are too much elaborated on and the problem itself seems to be neglected. I think it is very dangerous if people do not dare to give their opinion. How can you operate as a political organisation if people do not dare to give their opinion? How can you handle an informal governance approach if people do not dare to address certain problems and communicate their opinion on them. This is something that should be taken very seriously by the province, because it is important to be critical to adapt to change. Within the new Environmental Planning Act more cooperation is needed with other organisations and institutes. If people do not dare to give their opinion within the province itself, then how are they going to be able to cooperate with other people outside their own organisation. How are they going to collectively find solutions to complex problems within the physical environment?

“Completely integral is not possible, because it is dependable on people, on who is doing it.”

Respondent 1 (Coordinator experiments new Environmental Planning Act at the province of Utrecht)

Respondent 1 states that it is not possible to approach projects in a completely integral fashion, because it is dependable on people. If people do not want to approach a project integrally, no one is keeping them from not doing it. The discussion on daring to give opinions adds to this. If a coherent approach is needed of the physical environment, people need to be able to communicate their opinion on issues to find possible solutions. When people do not communicate their opinion and knowledge, solutions will not be found. Communication is something two respondents defined as very important.

“I need someone who is good at communication stuff in this 21st century. I am struggling with it and I need a good advisor for that.”

Respondent 15 (Project leader of the junction development in Bunnik at the province of Utrecht)

The province appears to lack people that are good at communication. Respondent 15 claims that someone is needed who can advise in this.

“If you don’t believe in it, don’t start. I put a team around myself with people who are talented. Transitions cost a lot of energy. Continuously you need to ask yourself why, why are we doing this? Besides that, it is very important to be updated and update each other regularly on important subjects.”

Respondent 19 (Program manager of the New Dutch Waterline)

Respondent 19 says that it is important that communication is set up within a program. Continuous updating each other is needed to know what is going on within the program and having the same amount of information.

“For the environmental vision, we are working a lot on the process. We almost forget the content. Who is talking about content? And when you see the ambition, we’re working on integration, participation and all kinds of procedural things, who is working on the content? Who is in charge there, who feels responsible to speak up? How are you going to put that in the whole procedure? I think that is still a weak point.”

Respondent 5 (policy advisor at the province of Utrecht)

Feeling of responsibility is said to be something that is lacking at the province internally. Processes are seen as very important, but the content seems to be forgotten. This is something the province needs to be aware of in order to develop projects. Without content, relevant solutions cannot be found to solve complex problems. Respondent 4 states that all policy areas need to be combined to approach the physical environment coherently.

“The approach of the physical environment in a coherent manner, is about combining all policy areas with each other. For the province, a great deal needs to be made with the mobility department and the department of the physical environment, because major differences exist between those”

Respondent 4 (policy advisor at the province of Utrecht)

However, a major difference exists between the department of the physical environment and the the mobility department at the province. This last department is the largest department within the province and this adds that even within organisations a change needs to happen for the physical environment being approached coherently.

To sum up, politics define the priority of themes. Different political organisations working in the same area provide different priorities and different themes, that complicates the process of approaching the physical environment coherently. Involving politicians in the process could solve this. However, politicians need to dare to be involved and take risks. The content appears often to be less important than the process. It is important to have a feeling of responsibility towards projects and starting to involve the content. People need to change their perspective and working routine to work under the new Environmental Planning Act. Good communication is important to understand each other and have the same information to discuss and work on. Within the province, different departments need to try to set up networks within the province as well. This could help to make clear who needs to collaborate in the project from within the province. This appears to be unclear at times.

4.7 Synthesis

Overall, the results and analysis can be subdivided into four main tasks for the province on how complex projects within the physical environment can be developed:

1. Adapt to the changing role of the government, and therefore the province;
2. Define what participation form society takes;
3. Develop cross-border collaboration to adapt governance to the issue;
4. Carry-out the lessons learned in different projects.

The province used to steer with money and have an extensive financial reserve to develop projects. However, the province has not the same amount of financial reserves anymore and sets up collaborations between different actors. It is important that an actor can overlook the provincial scale and adapt the governance process to this scale. That is the role of the province that is needed from the other actors within the region. The province can communicate the differences in scales with the other actors and define the issues that take place on these scales. It is important for the province to become more flexible. Therefore, it must be possible to adapt formal decision-making to the changing context in which projects take place.

The new Environmental Planning Act states that it must be explained how participation took place, but participation itself is not obligatory. However, participation should be defined. In the different cases, it is defined as involving the direct environment of the issue. It is acknowledged in the different cases that more participation is needed to engage the society. Even though, some citizens are not interested in participating. In some cases, issues arise from society and can be taken on by society itself. Hereby, the government takes on the facilitating role. Politics define what the priority is of issues, even though society can also address different issues and be involved in the decision-making process. Although, it is important to understand that not everyone has the same information and knowledge to make decisions. Therefore, it needs to be

made clear that having the ability of thinking on a high level of abstraction is connected to the information and knowledge carried.

Issues take place on a certain scale and therefore, the governance process needs to be adjusted continuously between different scales. Creating policy agendas with other actors underlies the extent to which a process is approached integrally. Issues need to be defined collectively and within a certain area. It is easier to set up an integral process if a territorial approach is used, because the issues in that region become clear. A need exists to formalise the governance arrangement to define the financial risks and clearly define the issues on the agenda. Therefore, a shared responsibility can be agreed upon with the actors involved. Defining an identity for an area can help by setting up a multi-level context in which different actors work together to improve an area. The possibility to solve the issue alone is non-existent, due to the complexity of projects taking place within the physical environment, therefore, collaboration with other actors is needed. Flexibility is needed to collaborate on this issue. Shared ownership and co-creation are terms that are used to define collaboration between actors. Trust is needed to set up these collaborations in which partners should understand each other's power and interest. In this cross-border collaboration, a regional leader that has an overview of the collaboration, network and scale is needed to coordinate the process. This regional leader can communicate the overall perspective of the scales. A regional leader can also monitor stagnation and take measures once stagnation occurs.

Learning by doing is important whilst adapting to a new legislation. Different experiments are set up to learn how to work under the Environmental Planning Act. Nevertheless, taking these lessons and incorporating them in the regular process is a next step to take. From the living lab, two lessons arose. First, it is important to define what an open process is and second, it is important to balance framing and setting up rules for the process and the openness of the process. It is important to define the learning process. A transdisciplinary approach with researchers can be set up in this to define the influence of the lessons on the regular operations. A collective learning process with the different actors is important, because this can bridge political and governmental differences. Besides learning about the process, the content is important to consider as well. People need to change their perspective and working routine under the new Environmental Planning Act. Good communication is important to understand each other and have the same information to work with.

Considering these four objectives for the province is a first step to set up governance arrangements across scales and solve complex problems within the physical environment.

5. Conclusion

A Dutch perspective on the regional scale is given in this thesis. Hereby, governance, rescaling and the new Environmental Planning Act¹³ are considered. In the Netherlands, the regional planning authority are the provinces. The responsibility and authority of the provinces have been discussed, because it appeared that the geographical scale of the provinces could be smaller and more effective (Giebels, 1997; Allers & Fraanje, 2011). The purpose of this thesis is to emphasise the importance of combining governance, rescaling and the regional scale to solve complex problems within the physical environment. Governance is understood as being a collaboration with different partners to solve societal issues. Rescaling is understood as continuously adapting to the scale on which the problem takes place. A new Act is put forward that could add to this debate on rescaling and governance.

It is important to society that it becomes clear what the influence of the new Environmental Planning Act is on governance arrangements that are used to solve complex problems within the physical environment. Scientifically, governance, the regional scale and rescaling have been discussed in literature, but a combination of these three themes has not yet been made. This thesis emphasises the importance of different governance aspects within the new Environmental Planning Act and describes the opportunities that this new legislation offers. Besides that, a combination is made of governance, the regional scale and rescaling to make clear how aspects of governance and rescaling can add to developing complex projects within the province of Utrecht. Special attention is given to the living lab methodology, because this could incorporate enough aspects of governance to solve complex projects on the regional level.

The central question, the focus of the attention of this research is:

How can aspects of formal and informal governance arrangements be used by the province of Utrecht to develop complex projects within the physical environment on a regional level within the framework of the new Environmental Planning Act?

Five corresponding sub-questions were defined:

1. What are aspects of formal and informal governance arrangements?
2. What is the regional level (scale) that the province moves on?
3. What aspects of governance arrangements are needed for the rescaling of projects developed by the province of Utrecht?
4. What is the influence of the new Environmental Planning Act on governance arrangements?
5. To what extent is the methodology of a living lab adequate for the province of Utrecht to function as the right methodology to develop complex projects within the physical environment?

By making use of qualitative research methodology, five projects of the province of Utrecht have been used as cases to define the different governance arrangements that the province of Utrecht could use to develop complex projects within the physical environment. The first case considered is the living lab new Environmental Planning Act, in which four different projects are developed to be capable to work already with the legislation considered in the new Environmental Planning Act. The second case considered is the junction development in Bunnik. Hereby, a train station is developed in which the whole environment is developed simultaneously. Connecting different values within the direct environment of the junction is the main issue raised in the development. The third case is the development of the Oostelijke Vechtplassen. The quality of nature in this area is being improved by developing the whole area. Paying special attention to the water quality in the area. The fourth case is the redevelopment of the Noorderpark. Hereby, a park north-east of Utrecht is being developed. The last case is the new Dutch Waterline in which provinces work together to maintain an old military defence line running through different provinces.

The overall problem addressed in this thesis, is the movement from 'government' towards 'governance'. The complex problems taking place in the physical environment cannot be solved anymore by just one organisation as Wyborn & Bixler (2013) argued, decision-making should be coordinated between scales and actors. However, the province still adapts mostly formal governance arrangements in which it cooperates with governmental organisations at most as became clear in the case of the living lab new Environmental Planning Act. Whereas, Evers & de Vries (2013) argued informal approaches of governance are needed to solve the complex problems within the physical environment. Flexibility is needed to adapt

¹³ Omgevingswet

to the quickly changing society. Issues being raised by society need to be defined collectively to organise the governance process around it. Then, the governance and issue can be adapted to the scale on which the issue takes place. This is not possible if the province does not approve of and adapt informal governance approaches. The new Environmental Planning Act is a jurisdictional documentation of an ongoing movement within society as respondent 7, coordinator of space, the new Environmental Planning Act and water of IPO explained. A movement the province is falling behind on if a more flexible and informal governance approach is not adapted quickly.

The notion of approaching the physical environment coherently as mentioned in the new Environmental Planning Act can be reached by operating in an informal governance arrangement. This integral approach can be reached by incorporating different aspects. First, actors with different perspectives are included. Networks of actors then overlap different policy areas and scales, because the actors come from different policy areas as Emerson et al. (2011) explained. Termeer et al. (2015) argued that reacting to issues coming from society, monitoring the process, connecting different actors and learning by doing is important hereby. In contrast, the province is a political organisation and must change its role under the new Environmental Planning Act. The question remains what process should be adopted by the province to meet the needs of the legislation. A living lab methodology can partly be adapted in this. Setting up policy from research within an open process with different actors involved is important in this living lab methodology as respondent 3, professor of innovation studies at the university of Utrecht illustrated. However, the openness of the process is contradictory to a political organisation that needs certainty and risk-management to operate.

The question coming from this thesis is the way politics are going to be working within the new Environmental Planning Act. I think this is an important question to raise, because an open and informal process lacks certainty that is valued highly by politics. Besides that, involving different actors and even citizens is contradictory to a political institution in which it is believed that citizens are already represented by the provincial council as Breeman et al. (2015) stated. Why would citizens be needed to involve if they are already represented by politicians? If we are going to shared responsibility, then who is going to take responsibility if things go extremely wrong? This thesis adds to this discussion and by answering the sub-questions in this thesis, some of the questions and dilemmas raised here are elaborated on.

5.1 Sub-questions

First, the aspects of formal and informal governance are illustrated. Second, the aspects of governance needed for rescaling are defined and elaborated on. Third, the regional scale that the province moves on is defined. Fourth, it is made clear what influence the new Environmental Planning Act has on governance arrangements. Last, the living lab methodology is discussed as its possibility to be an adequate methodology for the province to develop complex projects within the physical environment.

Sub-question 1: Aspects of formal and informal governance arrangements

Aspects of formal and informal governance arrangements have been defined, based on the theoretical review. Eight theories following Termeer et al. (2015), Termeer et al. (2016), Boogers (2013), van Meerkerk et al. (2013), Edelenbos & van Meerkerk (2015) Ayres (2017), Wyborn & Bixler (2013) Lester & Reckho (2012), Evers & de Vries (2013) and Kooiman (2008) and the new Environmental Planning Act (Dieperink, 2016) described forty-nine aspects in total. The definition from Gupta et al. (2015) put forward in the beginning of the thesis needs to be combined with the governance capabilities from Termeer et al. (2015) to solve complex problems within the physical environment. That gives a combination of definitions of governance:

“The sum of the many ways individuals and institutions, public and private, manage their common affair. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action may be taken.”

Gupta et al. (2015, p. 28)

In which the governance capabilities should be made use of to adapt the governance approach to the issue at hand. The following definition of a governance capability is then given.

“The ability of policy makers to observe wicked problems and to act accordingly, and the ability of the governance systems to enable such observing and acting.”

Termeer et al. (2015, p. 683)

Therefore, the governance approach can be adapted to the complex nature of problems taking place in spatial planning.

The difference between formal and informal governance arrangements has been elaborated on. Formal governance arrangements are focussed more on government than governance and setting up rules for collaboration during or before the process appears to be important as Lester & Reckhow (2012) described. Informal governance arrangements focus more on trust, mutual responsibility, mutual understanding of interests and perspectives according to van Meerkerk et al. (2013). Being able to step out of role and formal positions, making a difference between different scales to reach mutual goals and cross-border collaborations are aspects of informal governance arrangements. Respondents explained that it is important to be clear about the process actors set up. Hereby, the role of the governmental actors should be defined. As respondent 1 explained, the province argues that it wants to be connecting, but does not define how this should be taking place. Being able to be flexible within governance arrangements is valued highly by respondent 4, policy advisor at the province of Utrecht. Therefore, the different aspects of formal and informal governance arrangements can add to being flexible whilst making clear agreements about the governance approach that is adapted. It is important for actors to reflect on the process as Termeer et al. (2015) pointed out. The forty-nine aspects mentioned in this thesis could add to monitoring the process and taking measures if stagnation occurs. Most other researches just present a new governance arrangement, but it has been argued in this thesis that a specific approach is needed to set up a flexible governance arrangement to operate at the regional scale.

Sub-question 2: The regional scale and the province of Utrecht

The province of Utrecht develops various projects within the region and beyond the provincial region. Boeve & Groothuijse (2014) stated that the new Environmental Planning Act follows the subsidiarity principle. That means the lowest level is handled if not otherwise specified as Gabry (2013), Wyborn & Bixler (2013) and Morrison (2014) noted. Respondent 6 (program manager of the innovation program of the province of Utrecht) noted that it is important to divide scales. Dependent on the level of abstraction that actors can think on, different actors are involved in provincial projects. The province is an abstract organisation for people. A lower scale needs a lower level of abstraction to think on. Therefore, respondent 6 states that different scales need to be defined to organise conversations on. This is consistent with the statement of Hanssen et al. (2011) that the governance needs to be adapted to the scale on which the development takes place. Respondent 4 (Policy advisor at the province of Utrecht) stated that an analysis has been conducted to understand at what scale the province operates. It resulted in the scale differing considerably for each issue. Concluding from these experts, the province operates on different scales as was described in the existent academic literature. The different cases illustrate this, because each case takes place on different scales compared to the other cases, or even within the same case differences exist.

Figure 5 gave an overview of the locations of the different cases. In this figure, the difference in scales that the province moves on can be seen. The living lab new Environmental Planning Act is such a case varying at different scales. The projects defined within the living lab take place at different scales, starting at street level to a level of the development of a whole embankment. For each project within the living lab, different actors are involved, coinciding with the scale the project takes place on. The development of the Oostelijke Vechtplassen focusses only on the scale of the project, not on other scales. Hereby, different themes are approached together, because themes like soil, the ecosystem and water are entangled. Therefore, within the scale of the project, the area is approached as being a system in which everything changes if you change one thing. The area of the case covers two different provinces, which makes it a case crossing the borders of the province. The Noorderpark development is taking place within the Noorderpark that lies north-east of Utrecht. A lot of actors were involved in the project and the scale of the New Dutch Waterline, which is a much larger scale than just the Noorderpark is considered, because the Noorderpark development is part of this larger program. Even though the Noorderpark itself is not that big, a bigger scale is considered, because it is part of a bigger overall program. The New Dutch Waterline started by defining issues, the governance and scale are adapted to these issues, therefore, projects such as the development of the Noorderpark arise. This was an area within the New Dutch Waterline that was not used enough. Therefore, it needed to be developed to make it be used more. For the junction development in Bunnik, different scales are considered, from a very small one, that is the train station of Bunnik to a larger one, that is the whole region of other train stations.

It can be concluded that the regional scale varies on which the province of Utrecht develops projects. The province of Utrecht develops projects on a very small scale, street-level to a larger scale that transgresses different provinces, as in the program of the New Dutch Waterline.

Sub-question 3: Rescaling

Cohen (2014) defined three forms in which rescaling can take place. Downward, from the national state to the province or local scale, upward from the local scale to the provincial or national scale and outward to more open and inclusive forms of decision-making. For the case junction development Bunnik, three scales were defined by the project leader. These went from a local scale to the semi-regional scale to a more regional scale. This contradicts the scales Cohen (2014) described, but follows the movements Cohen (2014) described. For Bunnik, upward rescaling takes place and outward rescaling takes place, because more actors are involved than just governmental actors.

Rescaling can be achieved by making use of different aspects of governance. The first aspect needed for rescaling, is adapting the collaboration process to the scale on which the issue takes place as Termeer et al. (2016) stated. The project leader invites different actors for the different scales on which the development takes place. Once this is adapted, Termeer et al. (2016) defined a second aspect needed, sharing goals between actors and moving across scales to reach this goal. For junction development Bunnik, all actors come together at times to define what goals should be reached. If the issue is defined, goals can be formulated and actors can collaborate and move through scales to reach the goals. It is important to set up collaborations that are crossing borders to be able to collaborate through different scales. However, Kooiman (2008) stated that it is important to define the governance at a certain scale. Here inconsistency exists between different literature sources. A difference is made in governance taking place on a specific scale and governance crossing scales. In the junction development Bunnik, alliances are formed between actors operating on different scales to set up cross-border collaboration. Another aspect needed for rescaling of projects is setting up a strategic agenda with actors on other scales as Termeer et al. (2015) stated. Defining the governance structure, had the priority for the development in Bunnik, setting up agendas did not yet come up for discussion. One of the policy advisors of the province, stated in the interview that it is not possible anymore to set up a strategic agenda alone, and that this should always take place with other actors on other scales. That way, rescaling is based on the strategic agenda and actors collaborate easier across scales. Edelenbos & van Meerkerk (2015) stated that the presence of an independent regional process leader facilitates the process of collaborating across scales. For the project in Bunnik and the Noorderpark, the province takes on this role. For the New Dutch Waterline, the program manager has someone that helps to reflect on the program continuously. Setting up networks between scales is the last governance aspect that is needed to rescale in projects as Termeer et al. (2015) mentioned. These networks add to the collaboration between scales. When networks are already set up, collaboration and partners are easier to find and work together to develop projects. Within the living lab, a network is set up between the province, the municipality of Woerden and the water agency. Different scales are represented within the living lab.

In total, six aspects of governance can be adapted to rescale projects developed by the province of Utrecht. These aspects add mostly to the outward form of rescaling, in which more open and inclusive forms of decision-making are taken on. Within the cases downward and upward rescaling already took place without making use of the different aspects of governance. As concluded in the second sub-question, the province adapts to the different scales within the regional scale. Collaboration with other governmental actors comes easily for the province. Setting up networks with actors other than governmental actors is something the province adapts sometimes, but this does not become naturally in all projects developed.

Sub-question 4: The influence of the new Environmental Planning Act

The influence of the new Environmental Planning Act on governance arrangements is hard to define, because the act has not yet been implemented. As respondent 7, coordinator space, new Environmental Planning Act and water at IPO stated, the new Act is a codification of a changing relationship between the public administration services and society. That could presume that not much will change under the new Environmental Planning Act. That is not true, concerning governance, it asks mostly for a different attitude from the government towards other potential actors. Accordingly, people working at governmental institutions need to change. Politicians need to be more involved in the process. Consequently, they gain insight in the needs coming from society. Civil servants need to keep in mind that there is more out there than just their organisation. They need to inform their selves well enough to be capable of informing the politicians to take good decisions that will develop the physical environment effectively to full societal

needs. The civil servant will take on an important role within the new Environmental Planning Act. It will be capable of involving much more actors to come up with innovative solutions to complex problems. Program manager at the province of Utrecht explained that shared ownership of projects will arise even more. That needs a change of the government in which the government is a thinking partner in the development.

The goal of approaching the physical environment coherently can be elaborated on against the backdrop of governance. A coherent approach of the physical environment can be achieved by setting up policy integrally amongst sectors and themes. An integral process can be achieved by setting up a collaborative agenda with all actors involved. Therefore, collaboration with other actors than just governmental actors is needed as Termeer et al. (2016) suggested. The province applies this currently in some projects. Respondent 15, project leader at the province of Utrecht noted hereby that the province needs to improve itself to conduct governance well. Integral meetings are a regularity, although sectoral execution is the standard. Although this integral approach should be strived for in every project of the province and throughout the whole project. Defining the themes and strategic agenda from the perspective of an area, makes it easier to gain insight in relevant issues within the area a project takes place in. The next step is to review the actors involved to make sure these are still the relevant actors to solve the issue at hand. Hence, it should be kept in mind that actors have different perspectives, interests, information and goals. As respondent 17, project leader of the Oostelijke Vechtplassen noted, this is not always apparent in practice. For implementing the Act, a more active attitude is needed from the province in which it defines the manner collaboration is conducted. Respondent 1 (Coordinator of the experiments new Environmental Planning Act at the province of Utrecht) already stated that it has been noted down in the coalition agreement that the province is connecting. Under the new Environmental Planning Act, it needs to be defined how these connections are set up and maintained in order to maintain the physical environment and develop it to fulfil societal needs.

Besides that, the subsidiarity principle is intended in the new Act. It means that the problem should be approached at the lowest level possible. The level at which issues should be handled differs according to the findings in this thesis. This is contradictory to the approach of the new Environmental Planning Act that argues that the lowest level should be handled in principle. However, starting with this lowest level is comparable to starting by defining the issue on the lowest scale possible and then 'zooming out' until the issue can be defined on a larger scale. If the law is interpreted that way, both the findings in this thesis and the intention of the law are coherent. Cohen (2014) defined that there is a form of rescaling that is moving outward. I would like to highlight this form of rescaling once more, because it adds to governance. Consequently, more open forms of decision-making can be achieved. Different scholars noted that cooperation should take place on different scales to capture the variation in territorial reach of spatial planning problems. Therefore, this form of rescaling that moves outward should be considered by the province. The new Environmental Planning Act is not this specific on the topic, but it could add to approaching the physical environment coherently, because the physical environment would incorporate more than just the scale discussed.

Sub-question 5: The living lab methodology

A specific methodology has been analysed in this thesis, the living lab methodology. This informal methodology in which innovation and collaboration are at the basis of solving complex problems, contains interesting aspects to address complex problems as Dell'Era & Landoni (2014) stated. The informal aspect of the process leaves room for the context in which complex problems take place. However, the informality of the process was mentioned as being a disadvantage for the financial certainty and the division of responsibilities by respondents. A certain formality of the process is needed to make agreements on aspects as finance and responsibilities. Otherwise, without agreements, uncertainty exists on these aspects.

Besides that, the living lab methodology advises to involve specific actors in the process, to be able to come up with innovative solutions. Dell'Era & Landoni (2014), Niitamo et al. (2014), and Edwards-Schachter et al. (2012) stated that these actors are governmental actors, researchers, educational actors, businesses and neighbouring actors. By involving these different actors, a variety in perspectives is set up, but these actors all dispose of different sources of information. Therefore, a step must be taken for all actors to understand each other's perspectives. The context is considered in the living lab methodology as Niitamo et al. (2014) stated. Therefore, this methodology adds to different aspects of governance mentioned in this thesis.

Learning is important within the living lab methodology, because it originates from research. The objective of conducting a living lab is to learn from it. This is an interesting aspect of this methodology, because from the results and analysis it appeared to be important to bring in the lessons that were learned in the different projects. One of the experts, respondent 2 professor of innovation studies at the university of Utrecht claimed that it is important to organise the learning process. The province could prepare this learning process to implement the new Environmental Planning Act. This partially takes place already through the innovation program that conducts experiments to learn already how to work under the new Act. These lessons then need to be carried out through the whole organisation and possibly amongst the other actors involved. If different actors participated in this learning process, each actor can carry out the lessons to its own organisation. Besides that, the research aspect provides the opportunity to conduct (scientific) research on topics that need more examination. This makes the complexity of the problems manageable, because the complexity can be examined profoundly. Therefore, following Freeman & Millar (2017) and respondent 3, professor of innovation studies at the university of Utrecht, more collaboration should take place with knowledge institutes.

The living lab methodology has interesting aspects in it to solve complex problems within the physical environment, but the context is different in each project. Therefore, the methodology should be adapted to the problem and issue at hand. There is not 'one' methodology that is perfect for developing complex projects within the physical environment, but the approach of the living lab methodology is interesting because of the research aspect and the transdisciplinary approach of the actors involved. This could be used more by the province. As an organisation, it could learn from this methodology by reflecting more on processes and results of projects. Therefore, the living lab could be used to develop the province in its change to a new role within the new Environmental Planning Act.

5.2 From government to governance

The change from government to governance has been going on for a few years. With the new Environmental Planning Act coming in sight, the province of Utrecht needs to adapt to this change. The physical environment needs to be approached coherently and decision-making should be enlarged. The regional scale is a level on which complex problems take place. Therefore, the change to more informal approaches of governance could add to finding solutions to these complex problems. Governing issues on the scale these issues take place on with actors involved in these issues is the objective the province faces. Hereby, the province needs to keep different perspectives of actors in mind and involve each actor on a scale it can oversee. By adapting to an open process in which research is incorporated to find solutions to questions raised in the projects solving societal issues, the province can manage these complex problems taking place on the regional level with the actors involved. Civil servants need to be aware of the changing state of the position of the province. They should continuously take on a critical stand towards their work, attitude and project to monitor, evaluate and develop the process. Then lessons can be learned that could be implemented in other projects. The complexity and enthusiasm to participate of today's society asks for a changing government. Issues arise from the civil society and with the new Environmental Planning Act, the province is given the possibility to react to these issues and solve them together with the society.

Reflection

This reflection section focusses on the methodology and theory used in this research. Besides that, it reflects on the problems encountered in this research. Finally, recommendations are given for further research and recommendations are brought forward for the province of Utrecht. These recommendations are both based on the research conducted and on the internship followed.

5.3 Theoretical reflection

Different scientific articles are put forward in this research. Problems are complex within the regional scale. Besides that, the role of the government changes to a role in which other non-governmental actors are involved more in processes. Therefore, power structures change between the government and non-governmental actors. A difference between formal and informal governance was made to consider the differences and understand what suits the province best. It is interesting to discover that formal governance is mostly adopted by the province. Informal governance and the institutional context of the province are complicated to combine. Due to the political institution that the province is, it is complicated to maintain an open process. Termeer et al. (2015) and Termeer et al. (2016) formed the base of this research suggesting that the governance capabilities can be used to set up informal governance arrangements. Reflexivity, resilience, responsiveness, revitalising and rescaling are all capabilities that should be considered whilst developing complex projects within the physical environment. Additional aspects of governance from other authors were added. Even though these capabilities are reflected on, they appear to be hard to consciously implement in practice. Therefore, I stress that they are useful to analyse projects within the physical environment, because context is influencing the project. It is complicated to implement the capabilities directly, because they were based on theory and not specifically projects at the regional scale. Boogers (2013) claimed six preconditions underlie the governance process. These preconditions are considered to different extents by the province. Even though Boogers (2013) claims the preconditions give a foundation for the answer to the question on how to govern the region, the preconditions stay quite general. How the preconditions can be achieved is not explained by Boogers (2013). Therefore, other theoretical aspects by Ayres (2017), van Meerkerk et al. (2013), Emerson et al. (2011), Morrison (2014), Kooiman (2008) and others were added to these governance aspects and the discussion on rescaling. A perspective on the new Environmental Planning Act was added by Dieperink (2016) and Groothuijse et al. (2014). In total, forty-nine theoretical aspects have been discussed in different interviews and resulted in four objectives for the province of Utrecht. All these aspects and objectives still do not give an answer to the question how this can be used. Although, incorporating these aspects and considering them gives a first direction to set up governance arrangements between different scales, concerning different issues. However, the province needs to adopt an open attitude towards new forms of governance. The results indicated that it is hard for civil servants at the province to operate, because in the end, the political institute decides. Therefore, civil servants need to take responsibility to inform the politician in an open manner. Daring to give their opinion to each other and discuss the possibilities concerning the project.

The assumption that both governance and rescaling add to the new Environmental Planning Act is partly true, because governance needs to be organised within different scales to work integrally within the physical environment. However, the scope of the new Environmental Planning Act is much bigger than has been researched in this thesis and the approach in projects within the province differs. Therefore, the results in this thesis are only applicable to the part of the Act that has been considered.

At the beginning of this research, a difference was made between analytical and normative governance. Then, mostly the analytical part of governance has been elaborated on. Hereby, analytical governance focusses on the process. Normative governance focus on network-based models and good governance in which transparency and participation are described as democratic ideals. During the internship, it became clear that the province claims to aim for normative governance. However, in discussions with municipalities, it became clear that the province still works a lot on its own, stating that participation will take place, without result in the end.

5.4 Methodological reflection

A qualitative research methodology has been adapted in this thesis. Hereby, five cases were investigated that take place in the province of Utrecht. A more profound research could have been conducted by investigating all provincial projects and therefore the research would be more extensive. Interviews were based on the forty-nine aspects that should be considered by the province. However, forty-nine aspects are

impossible to discuss in an interview of an hour. It would have been better to make a combination of both quantitative and qualitative research. Then, the questions that need more elaboration could be asked in an interview and the other questions could be regarded in a questionnaire. That would also have made the analysis easier to conduct, because more structure could have been found amongst the different interviews. The quantitative part of the research would have provided the opportunity to make clear figures representing the results from the questionnaire. However, the expert interviews combined with the interviews from the cases gave a clear overview of the different approaches the province takes towards governance, scales and the new Environmental Planning Act. The cases gave clear examples and the experts provided an overview and a broader perspective on aspects. Even though the tablecloth session is not a defined research methodology, it appeared to be very efficient to get a clear overview of all actors involved in the living lab. The new Environmental Planning Act has not been implemented yet. This makes it complicated to reflect on it for the respondents. Different respondents noted that they have no idea what the influence of the new Environmental Planning Act will have and that they do not have sufficient information about the act to know what it encompasses. This is a pitfall to researching a law that has not been implemented yet. By focusing on the aspects that have an influence and cohere with the intention of the law, this struggle has been overcome. However, it is important to note that researching something that is not yet there is complicated to reflect on. Especially, understanding what the influence of the law will be is hard to understand. Therefore, it is complicated to give recommendations on implementing the law. Although recommendations were given, these recommendations were focused on developing complex projects within the physical environment and not on the new Environmental Planning Act specifically. Conducting interviews ends in a lot of different citations from the different interviews. That makes it complicated to keep a clear overview of the most important results. Besides that, twice an interview failed to be recorded, that lead to data being based on notes of the researcher. This makes the data derived from interviews less reliable.

5.5 Recommendations for further research and for the province

Further research could be conducted on all projects within the province. Besides that, an answer could be given on defining scales within projects and defining what the highest scale is that is considered. Issues relevant within the province could be elaborated on and an overview could be given of different issues taking place at different scales and issues changing compared to different scales. An answer could be given to the context in which governance approaches take place and continuous rescaling takes place. Researching specific issues could add to defining this context, because the context would be clearer. Besides that, specific theories on governance could be compared instead of considering all aspects of governance possible. In this research, it appeared to be complex to define a lot of different (governance) aspects and asking respondents to elaborate on them. Another recommendation for further research is approaching collaboration and rescaling from another level than the regional level. Or by making a combination between different levels and projects taking place or overlapping at different levels. That would give a more profound answer to the question how actors can collaborate in the new Environmental Planning Act. Another aspect that could be investigated more profoundly is incorporating the lessons learned in different experiments within the organisation and processes itself. That would make developments easier, because a research aspect could be added to it that would reflect on the processes and evaluate on them. Giving recommendations for these projects, based on lessons learned in the past would help solving complex problems within the physical environment and prevent the same mistakes from happening again.

During the internship at the province of Utrecht, different things were observed. The organisation is a political one. Therefore, civil servants advise the provincial executive and then the provincial council takes a decision. Most people working at the province have been working there for a long time (over ten years). Subsequently, change is rare, because the people working there have been working the same way for a very long time. Besides that, the opinion of the politics is valued highly. In one of the interviews the question was raised if people still have an opinion, because it seems that people do not dare to give their opinion anymore. That is something very dangerous in an organisation where people work the same way for years. Besides that, an overview of different projects the province is working on is lacking. That is an organisational problem, because the province works on a lot of different projects at the same time. Therefore, learning lessons from projects is hard, because an overview of the projects is already missing. It is the first step to have an overview of what is going on to work integrally and carry out the objectives of the province to other actors. The innovation program physical environment has an interesting aspect in the core of the program that makes change and development easier to conduct. Innovation cannot take place if a closed perspective is adopted towards other actors. Collaboration with a lot of different actors comes natural to the project leaders of the experiments conducted within the innovation program. This is partly due to the character of

the program and partly to the persons conducting the projects within the program. The working method adapted in this program is a good start for working under the new Environmental Planning Act. In this program aspects of a living lab method are practiced without being aware of it. The openness of the process, involving different actors and knowledge institutes are examples of these aspects.

The problem considered in this thesis consisted of three parts; governance, scale and the implementation of the new Environmental Planning Act. Each part of this problem statement has been elaborated on thoroughly. Four objectives for the province were defined based on the results of this research. An overview on how these objectives can be implemented by the province is given. Defining these objectives form the recommendations based on the research done for this master thesis.

The province should adapt to the changing role of the government, the extent of participation from society must be defined, cross-border collaboration must be set up to adapt governance to the issue at stake and the lessons learned in different projects need to be carried-out. The province should overlook the provincial scale and the governance processes that take place on this scale. The differences in scales should be communicated by the province with the other actors to define the issues that take place on these scales. Flexibility is needed here. Therefore, formal decision-making should be adaptable to the context in which the projects take place. This is not easy given the political and administrative structure of the province. However, the network society that is emerging asks for a changing context in which provinces are flexible.

Participation should be defined. Issues arising from society should be taken seriously. However, it must be investigated to what point citizens are interested in participating. The province should take on a facilitating role to react on issues that arise from society. A difference in knowledge and information exists and this should be acknowledged to know what actors can participate on what level.

Governance processes should be adjusted to issues taking place on different scales continuously. Setting up collaborative policy agendas helps to approach the physical environment coherently and set up integral policy making processes. When the area is taken as a starting point, issues are easier to define. Collaboration is needed with other actors, because projects are too complex and must interests coincide to come up with solutions supported by all. Trust is needed to set up collaborations and actors need to understand each other's perspectives and differences to collaborate. Reflecting on the process and evaluating the project is very important to improve the governance approach and the project as a whole.

Learning while doing is very important in transitions such as implementing a new legislation. It is important to set up a framework for the implementation based on lessons learned. A transdisciplinary approach can be used to set up this framework. Political and governmental differences can be bridged by learning collectively and by involving the politicians in the learning process. The new Environmental Planning Act asks for a different perspective towards the current procedures and routines. Developing an open attitude towards the processes involved represents quite a challenge. This research offers hopefully some insights in keys for success.

These objectives need to be implemented, otherwise the province cannot meet the goals of the new Environmental Planning Act. Therefore, a change in the attitude, behaviour, decision-making and working methods of people working and politicians at the province is needed. Responsibilities should be shared with the actors at the regional scale and other scales. A critical stand towards the own organization is needed to accomplish these changes.

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Appendix A: Composition topic list; forty-nine aspects of governance

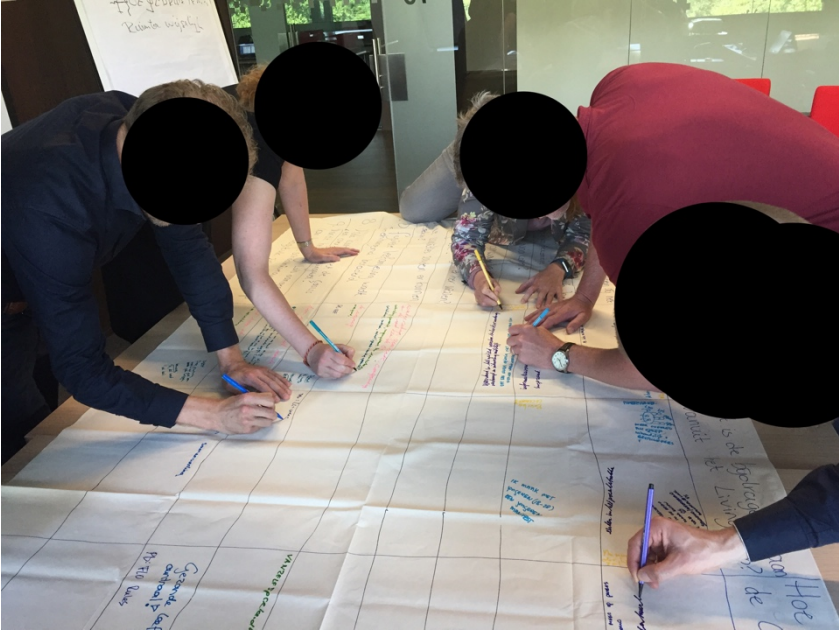
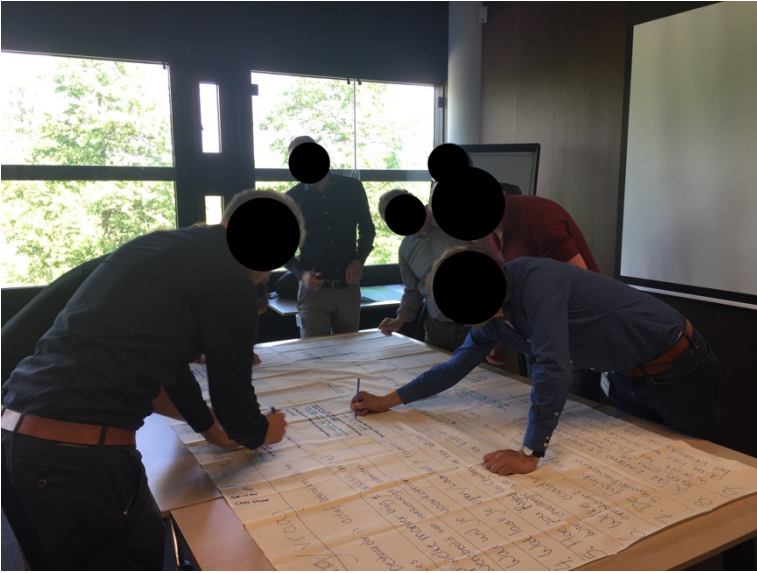
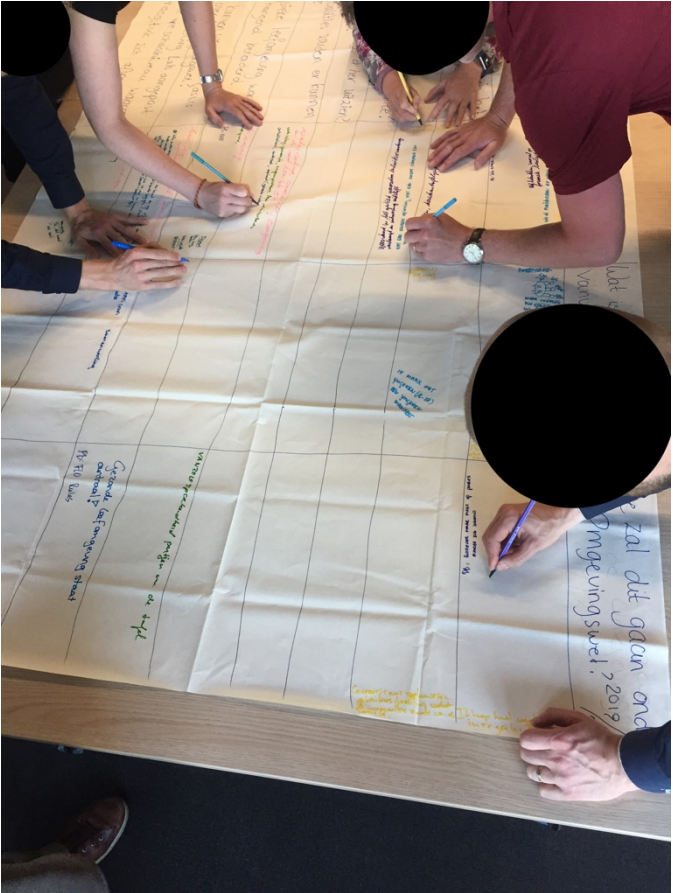
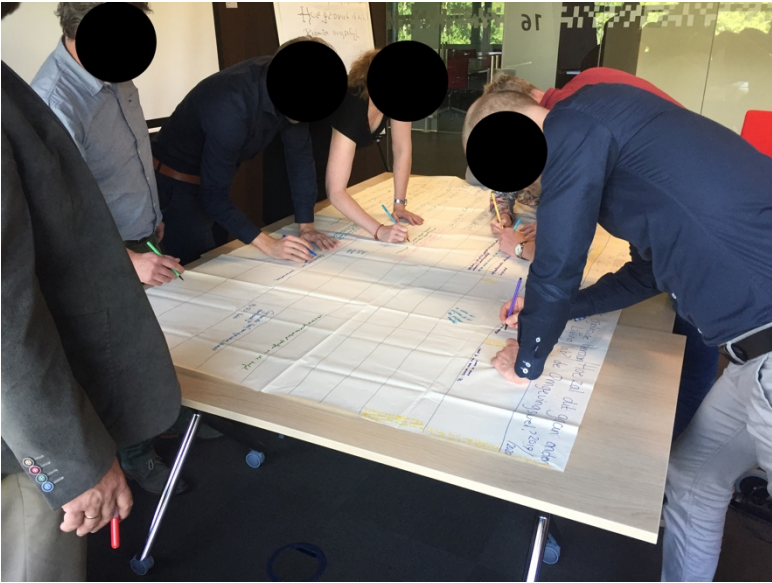
Categorie	Theoretische onderbouwing	Vraag	Code	Literaire onderbouwing	
Positie actoren	Reflexiviteit	Hoeveel actoren zijn er betrokken? Welke zijn dit?	Act_involved	Termeer et al. (2015)	
	Reflexiviteit	In hoeverre zijn de betrokken actoren gelijkwaardig aan elkaar?	Act_equivalence	Boogers (2013)	
	Formal governance arrangements	Welke actoren zijn er betrokken die geen deel uitmaken van een overheidsorgaan?	Act_governmental	Lester & Reckhow (2012)	
	Formal governance arrangements	Welke actoren zijn er betrokken die wel deel uitmaken van een overheidsorgaan?	Act_governmental	Lester & Reckhow (2012)	
Relaties tussen actoren (mens achter actor)	Reflexiviteit	Is er rekening gehouden met verschillende perspectieven van actoren?	Act_perspective	Termeer et al. (2015)	
	Informal governance arrangements	Is er sprake van vertrouwen tussen partijen?	Act_mutual trust	Meerkerk et al. (2013)	
	Informal governance arrangements	Hebben partijen en gedeelde verantwoordelijkheid?	Act_mutual responsibility	Meerkerk et al. (2013)	
	Informal governance arrangements	Begrijpen actoren elkaars positie en belang?	Act understand power and interest	Emerson et al. (2011)	
	Informal governance arrangements	Zijn actoren te vertrouwen?	Act reliable	Emerson et al. (2011)	
	Informal governance arrangements	Is er ruimte voor actoren om buiten rollen en formele posities te acteren?	Act outside role	Edelenbos & van Meerkerk (2015)	
	Informal governance arrangements	Wordt er een verschil gemaakt tussen 'voor' en 'achter'?	Act front/act back	Ayres (2017)	
	Preconditions	Gelijke macht en doelen van betrokkenen	act equal power and goals	Boogers (2013)	
	Preconditions	Behoeft aan participatie bij het samenwerkingsproces van betrokkenen	participation need	Boogers (2013)	
	Preconditions	Ervaring met samenwerking en conflicten tussen betrokkenen	experience collaboration	Boogers (2013)	
	Preconditions	Wordt er geïnvesteerd in onderliggende contacten en worden successen gevierd?	celebrate succes	Boogers (2013)	
	Proces opzet (veilige omgeving)	Veerkracht	Wordt er geleerd door te doen? Wordt verschillende kennis hierbij gebundeld?	learning knowledge	Termeer et al. (2015)
		Veerkracht	Worden mogelijke storingen van het proces in kaart gebracht?	interruption process	Termeer et al. (2015)
Veerkracht		In hoeverre wordt er gereflecteerd op het proces door de actoren?	reflection process	Termeer et al. (2015)	
Responsiviteit		Wordt relevante informatie gemonitord en gefilterd?	monitoring information	Termeer et al. (2015)	
Responsiviteit		Op welke manier wordt er prioriteit gegeven aan regionale problematiek?	priority regional problems	Boogers (2013)	
Revitaliserend		Is het project wel eens vastgelopen?	project stagnation	Termeer et al. (2015)	
Revitaliserend		Zijn betrokkenen zich bewust van stagnerende patronen in projecten?	consciousness stagnation	Termeer et al. (2015)	
Revitaliserend		Worden er maatregelen genomen om stagnatie tegen te gaan? Zo ja, welke?	measures stagnation	Termeer et al. (2015)	
Preconditions		Is er echt sprake van samenwerking of is er elders ook een mogelijkheid tot een andere besluitvorming?	other decisionmaking	Boogers (2013)	
Aanwezigheid onafhankelijk leider/coordinator		Veerkracht	Is er sprake van een regionale, onafhankelijke leider die het proces dirigeert?	regional leader	Edelenbos & van Meerkerk (2015)
	Revitaliserend	Is er een partij die eventuele stagnatie van het project in de gaten houdt? Binnen of buiten de organisatie?	stagnation observant	Termeer et al. (2015)	
	Preconditions	Aanwezigheid van een leider?	presence leader	Boogers (2013)	
Mate van integrale samenwerking op verschillende schaalniveaus	Reflexiviteit	In hoeverre wordt er een verbinding gelegd tussen organisaties, beleidsvelden en overheidslagen?	connection organisations etc.	Termeer et al. (2015)	
	Veerkracht	Worden er netwerken tussen actoren opgezet door verschillende schaalniveaus heen?	networks scales	Termeer et al. (2015)	
	Responsiviteit	Worden strategische agendas samen met andere schaalniveaus opgezet?	strategic agenda scale	Termeer et al. (2015)	
	Responsiviteit	Worden strategische agendas opgesteld met andere beleidsvelden?	strategic agenda policy	Termeer et al. (2015)	
	Responsiviteit	Wordt er gereageerd op bepaalde maatschappelijke kwesties?	reaction societal issue	Termeer et al. (2015)	
	Responsiviteit	Op welke manier wordt inzicht verkregen in de vraag van de omgeving?	insight environment	Termeer et al. (2016)	
	Responsiviteit	Is er sprake van een sterk sociaal engagement?	social engagement	Boogers (2013)	
	Herschalen	Wordt het samenwerkingsproces aangepast aan het schaalniveau waarop het vraagstuk zich afspeelt? Zo ja, hoe?	governance scale	Termeer et al. (2016)	
	Herschalen	Wordt er gestreefd naar samenhang in het opstellen van beleid om integraal beleid op te stellen? Zo ja, hoe?	integral policy making	Termeer et al. (2016)	
	Herschalen	Worden externe factoren meegewogen? Op welke manier?	external factors	Kooiman (2008)	
	Herschalen	Worden doelen samen opgesteld met actoren? Zo ja, hoe?	goals set up	Termeer et al. (2016)	
	Informal governance arrangements	Delen actoren een doel en bewegen zij zich op verschillende schaalniveaus om dit doel te behalen?	shared goal	Edelenbos & van Meerkerk (2015)	
	Informal governance arrangements	Zijn er samenwerkingsverbanden opgesteld die (overheids)grensoverschrijdend zijn?	cross-scale cooperation	Edelenbos & van Meerkerk (2015)	
	Goals new environmental planning act	Wordt de fysieke leefomgeving samenhangend benaderd?	coherence environment	Aan de slag met de Omgevingswet (2017)	
	Goals new environmental planning act	Wordt besluitvorming in de fysieke leefomgeving versneld en verbeterd?	decision-making improvement	Aan de slag met de Omgevingswet (2017)	
Regelgeving	Veerkracht	Is er sprake van flexibele wetgeving die mogelijkheid geeft tot het doen van experimenten?	flexible legislation	Termeer et al. (2015)	
	Veerkracht	In hoeverre is het mogelijk om formele besluitvormingsregels aan te passen?	adaptation decision making	Hooghe & Marks (2001)	
	Formal governance arrangements	Zijn er regels opgesteld voor de samenwerking? Zo ja, welke en op welke manier zijn deze vastgelegd?	rules collaboration	Boonstra & Boelens (2011); Witte et al., (2016); Hooghe & Marks (2011)	
	Formal governance arrangements	Is er sprake van gemaakte afspraken tussen actoren voordat het proces van start gaat?	rules set	Ayres (2017)	
	Goals new environmental planning act	Wordt de bestuurlijke afwegingsruimte vergroot?	enlargement decision-making	Aan de slag met de Omgevingswet (2017)	
	Goals new environmental planning act	Is er sprake van een vergroting van de duidelijkheid, voorspelbaarheid en gebruiksvriendelijkheid van het omgevingsrecht?	enlargement clearness	Aan de slag met de Omgevingswet (2017)	
Unexpected outcomes	Unexpected outcomes	Op welke manier is de politiek van invloed op het project?	Politics	Ayres (2017)	
	Unexpected outcomes	Zijn er dingen binnen de organisatie waar je tegenaanloopt?	Internal struggle at the province		
	Unexpected outcomes	Loop je tegen miscommunicatie aan binnen het project?	Communication		
	Unexpected outcomes	Op welke manier zijn persoonlijkheden van invloed op het proces?	Person		

Appendix B: Coding scheme

Code	Explanation
Position actors	
Act_involved	The amount of and different actors involved.
Act_Equivalence	The extent to which actors involved are equivalent to each other.
Act_governmental	Extent to which actors involved are governmental actors.
Relationship between actors	
Act_perspective	Extent to which it is considered that actors have different perspectives.
Act_mutual trust	Extent to which there exists trust between actors.
Act_mutual responsibility	Extent to which actors share responsibility.
Act_understand power and interest	Extent to which actors understand each other's power and interest.
Act_reliable	Extent to which actors can be trusted.
Act_outside role	Extent to which actors can step outside their formal role and position.
Act_'front'	Difference made between 'front stage' and 'back stage', focussed on aspects of 'front stage'.
Act_'back'	Difference made between 'front stage' and 'back stage', focussed on aspects of 'back stage'.
Act_equal power and goals	Extent to which actors have equal power and goals.
Participation_need	Extent to which collaboration is required by actors.
Experience_collaboration	Extent to which actors have collaborated in the past.
Celebrate_succes	Extent to which investments are made for collective contacts and celebration of successes.
Process design	
Learning_Knowledge	Extent to which actors learn by doing and share knowledge.
Interruption_process	Extent to which potential interruptions in process are monitored.
Reflection_process	Extent to which actors reflect on the process.
Monitoring_information	Extent to which relevant information is monitored.
Priority_regional problems	Way in which priority is given to regional problems.
Project_stagnation	Extent to which the project has stagnated.
Conciouness_stagnation	Extent to which actors are conscious of the stagnation of the project.
Measures_stagnation	Extent to which measures are taken to prevent stagnation.
Other_decisionmaking	Possibility to take the decision-making process elsewhere.
Independent leader	
Regional_leader	Presence of a regional independent leader that guides the process.
Stagnation_observant	Presence of someone that keeps an eye on possible stagnation.
Presence_leader	Presence of a leader.
Integral cooperation on different scales	
Connection_organisations etc.	Extent to which there is a connection with organisations, policy areas and governmental layers.
Networks_scales	Extent to which networks are set up through scales.

Strategic_agenda_scale	Extent to which strategic agendas are set up with actors on other scales.
Strategic_agenda_policy	Extent to which strategic agendas are set up with actors from other policy areas.
Reaction_societal_issue	Extent to which a response is given to societal issues.
Insight_environment	Extent to which insight is given in demand of the environment.
Social_engagement	Extent to which social engagement is present.
Governance_scale	Extent to which governance is adapted to scale that the problem takes place on.
Integral_policy_making	Extent to which policy is set up integrally.
External_factors	Extent to which external factors are considered.
Goals_set_up	Extent to which goals are formulated with actors.
Shared_goal	Extent to which actors share a goal and move between scales to achieve this goal.
Cross-scale_cooperation	Extent to which collaboration takes place across scales.
Coherence_environment	Extent to which physical environment is approached coherently.
Decision-making_improvement	Extent to which decision-making in the physical environment is improved and sped-up.
Regulations	
Flexible_legislation	Extent to which flexible legislation exists in which experiments can take place.
Adaptation_decision-making	Possibility to change formal decision-making rules.
Rules_collaboration	Extent to which rules are set up for collaboration.
Rules_set	Extent to which agreements are made before process started.
Enlargement_decision-making	Extent to which governmental decision-making can be enlarged.
Enlargement_clearness	Extent to which the comprehensiveness, predictableness and the user-friendliness of the environmental law can be enlarged.

Appendix C: Table cloth living lab new Environmental Planning Act



<p>stelling/vraag</p> <p>Wat is de bijdrage hiervan vanuit het Living lab?</p>	<p>Hoe gaat dit nu?</p> <p>2017</p>	<p>Hoe zal dit gaan onder 2019/2020</p> <p>de Omgevingswet?</p>
<p>in bestuurder is actief betrokken bij het proces</p>	<p>welke manier krijg je inzicht in het insbeeld van toekomstige gebruikers?</p>	<p>Wat is de bijdrage hiervan vanuit het Living lab?</p>
<p>at wil je voorkomen?</p>	<p>laait je open/waar laat je ruimte?</p>	<p>Wat is de bijdrage hiervan vanuit het Living lab?</p>
<p>zou "Right to Challenge" er hier uitzien? "challenge" wie?</p>	<p>ke coalities zouden er kunnen staan?</p>	<p>Wat is de bijdrage hiervan vanuit het Living lab?</p>
<p>e fysieke leefomgeving wordt samenhangend benaderd.</p>	<p>at kunnen we met de casus en over de Omgevingswet?</p>	<p>Wat is de bijdrage hiervan vanuit het Living lab?</p>
<p>ordt het Living Lab aangepast in het vreschaalniveau waarop vraagstuk zich afspeelt?</p>	<p>Optimaliseren van participatie</p> <p>Samenwerking</p> <p>Optimaliseren van participatie</p>	<p>Wat is de bijdrage hiervan vanuit het Living lab?</p>

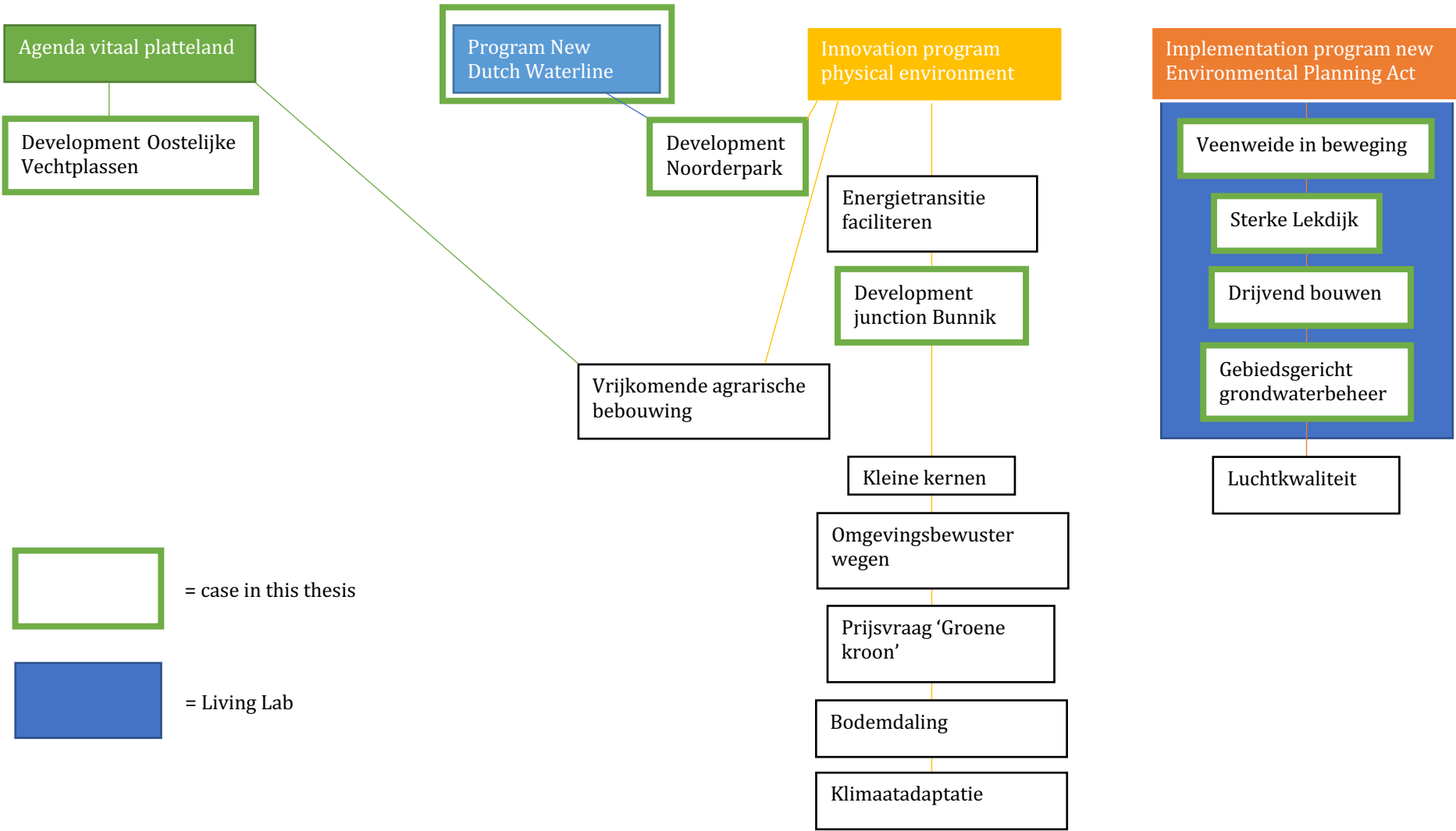
Appendix D: Outcomes tablecloth session Living lab

Stelling/vraag	Hoe gaat dit nu? 2017
1. Mijn bestuurder is actief betrokken bij het proces.	<p>Heeft goedkeuring gegeven</p> <p>Wel betrokken, maar te weinig inhoudelijk</p> <p>Wel betrokken, vooral op formele besluitmomenten.</p> <p>Ik benader bestuurders via de ambtenaren en praat ze periodiek bij.</p> <p>Mijn portefeuillehouder/bestuurlijk opdrachtgever: top! Rest gedeputeerden 2/3 top, 1/3 zaad.</p> <p>Wel roepen, niet eerst doen.</p> <p>Is geïnformeerd dat we hiermee aan de slag willen, verder nog niet actief. (Drijvend bouwen)</p> <p>Is geïnformeerd, wordt via bestuurlijk overleg bijgepraat. (Veenweide)</p>
2. Op welke manier krijg je inzicht in het wensbeeld van toekomstige gebruikers?	<p>Workshops, kaarten</p> <p>Loopt uiteen van concreet tot 'wij bedenken het wel'</p> <p>Via praten met de omgeving</p> <p>Informatieavonden, keukentafelgesprekken, inspraak</p> <p>Veel partijen onwetend/slecht geïnformeerd</p> <p>Daar voor deze studie de lokale landschap/stedenbouwkundige te betrekken (lokale kennis) en te ontwikkelen</p>
3. Wat wil je voorkomen?	<p>Kneejerik: 'wij bedenken wel wat er moet gebeuren'</p> <p>Weerstand + een lacherige reactie</p> <p>Tunnelvisie</p> <p>Dat drijvend een niet onderbracht wensbeeld blijft</p> <p>Dat een logische oplossing niet kan, omdat niemand zich hier verantwoordelijk voor voelt (taken discussie)</p> <p>Wantrouwen</p> <p>Mooi bedacht, maar geen omgevingsvergunning</p> <p>Weerstand in het gebied, waardoor besluitvorming vertraagt en uitvoering uitblijft</p>
4. Wat laat je open/waar laat je ruimte?	<p>Proces is nog open/deadline niet</p> <p>Bestuurlijke afwegingsruimte (varianten)</p> <p>De werkvorm</p> <p>Alle partijen ruimte geven</p> <p>Maximaal scoren op zoveel mogelijk doelen (maar niet transparant)</p> <p>De uitkomst</p>
5. Hoe zou 'Right to challenge' er hier uitzien? Wie 'challenge' wie?	<p>Niet</p> <p>Moeilijk, en wordt negatief ervaren</p> <p>Eenrichtingsverkeer gemeente --> provincie, waterschap --> provincie</p> <p>Iedereen elkaar</p> <p>Gemeente --> waterschap, drinkwaterbedrijf</p>
6. Welke coalities zouden er kunnen ontstaan?	<p>Waterschap, gemeente, omgeving, en de rest van de O's</p> <p>Waterschap, gemeente, omgevingsdienst, provincie, drinkwaterbedrijven</p> <p>Ontwikkelaar(s), onderzoek, overheid (gemeente, waterschap, provincie) - Drijvend</p> <p>Gebeurt nauwelijks</p> <p>Te weinig</p> <p>Alle</p>
7. De fysieke leefomgeving wordt samenhangend benaderd.	<p>Te weinig</p> <p>Ondergrond</p> <p>Nee</p> <p>Niet echt</p> <p>Kan nog beter - Drijvend</p> <p>Repeat - Veenweide</p> <p>Positionpaper HDSR, bodemdaling van weide gebied</p> <p>Op de belangrijkste thema's en zij overlappen wel, rest niet</p> <p>Deels, maar nog erg vanuit thema's</p> <p>Dte weinig, iedereen kijkt vanuit eigen perspectief met andere info</p>
8. Wat kunnen we met de casus leren over de Omgevingswet?	<p>Hoe we eigenlijk moeten samenwerken.</p> <p>Welke onderwerpen lenen zich voor en kaart en zijn wij hard en welke onderwerpen kunnen een bandbreedte leggen (slaat eigenlijk meer op omgevingsvisie/plan)</p> <p>Welke instrumenten er zijn en hoe we die in kunnen zetten in de praktijk. Hoe komen we en hier toe (ambtelijk en bestuurlijk)</p> <p>Dat dit werken kansen biedt - de toekomst is.</p> <p>Probleem ligt op bordje overheden, maar welke overheid?</p>
9. Wordt het Living lab aangepast aan het schaalniveau waarop het vraagstuk zich afspeelt?	<p>Drijvend: deze finetuning moet in het PVA een plek krijgen</p> <p>Veenweide: ja dat moet ook wel.</p> <p>Dat hoop ik wel!</p> <p>Is de verwachting</p> <p>Ja</p> <p>Nee hoop ik, ja vrees ik</p> <p>Nee, eenheidsaanpak</p> <p>Ja</p>

Stelling/vraag	Wat is de bijdrage hieraan vanuit het Living lab?
1. Mijn bestuurder is actief betrokken bij het proces.	<p>Beter in proces betrekken (eerder, consistent)</p> <p>Dan zijn de bestuurders ook inhoudelijk en open betrokken.</p> <p>Meer overleg als groep, inhoudelijk + bestuurders. LTO, WS, Prov, Gemeente</p> <p>Eerder in het proces betrekken.</p> <p>Essentieel voor meenemen van het gebouw draagvlak in de region in beeld naar buiten deel van gs sturend/informerend activerend voor PS</p> <p>Nu nog weinig, ik hoop dat het die uitslag positief zal beïnvloeden</p>
2. Op welke manier krijg je inzicht in het wensbeeld van toekomstige gebruikers?	<p>Participatie afhankelijk van het schaalniveau</p> <p>Ik maak met jongeren (18-28) een jongeren manifest</p> <p>Door ze aan tafel te vragen (fysiek en virtueel)</p> <p>Praten, transparant maken (stap 1: waterbeschikbaarheid)</p> <p>Beter leren co-creatie!</p>
3. Wat wil je voorkomen?	<p>Borgen dat er een kwalitatief goed proces is doorlopen. Dat verhoogt het draagvlak voor oplossingsrichtingen.</p> <p>Leren dat open samenwerking niet eng is en meer oplevert!</p> <p>Oefenen bouwen aan vertrouwen, stapjes zetten, kennis verzamelen en delen</p> <p>Tunnelvisie voorkomen, samen breder te kijken</p> <p>Realistisch participatie proces met Tygron</p> <p>Poolese landdag</p> <p>ik hoop dat het werkelijkheid wordt: dat de hardste schreeuwers bepalen wat er gebeurt</p>
4. Wat laat je open/waar laat je ruimte?	<p>Niet alleen de werkvorm heeft ruimte nodig, ook de oplossingsrichting</p> <p>Meer inzicht in waar de ruimte zit voor ruimte oefenen in los laten & kaderstellen = leuke paradox uitkomst</p>
5. Hoe zou 'Right to challenge' er hier uitzien? Wie 'challenge' wie?	<p>Ondernemers de overheid</p> <p>Iedereen elkaar</p> <p>Mensen aan het wiel, dat dit kan en juist goed is</p> <p>Er kan meer!</p>
6. Welke coalities zouden er kunnen ontstaan?	<p>Alle partijen om tafel?</p> <p>Uitproberen</p> <p>Alle</p> <p>Kaas, water mobiliteit, bodembeheer, mest</p> <p>Belanghebbenden die meerwaarde verwachten en die daar aan bij willen dragen</p> <p>Hangt af van de maatschappelijke opgave</p> <p>Oefenen, oefenen, oefenen!</p>
7. De fysieke leefomgeving wordt samenhangend benaderd.	<p>LL - integraal. FLO moet meer integraal</p> <p>Gezamenlijke prioriteit door belanghebbenden</p> <p>Iedereen toegang tot dezelfde info</p> <p>Idealer doorbreek het thematisch denken!</p> <p>Integratie sterk op situatie</p> <p>Leren hoe je dat moet doen</p> <p>Ja</p> <p>Consequenties keuzes op lange termijn bij juiste partij leggen</p>
8. Wat kunnen we met de casus leren over de Omgevingswet?	<p>Optimaliseren van samenwerking en participatie</p> <p>Integraler werken</p> <p>Hoe ontstaat de wil om over veranderingen na te denken bij alle partijen</p> <p>Ontdekken hoe peilbesluit zich verhoudt tot omgevingsvisie/plan</p> <p>Meer goede voorbeelden! Meer onderzoek en legitimatie</p> <p>Openheid</p> <p>Hoe reageert de burger/maatschappij op de luxe van 'mee mogen denken' hoe pakt zij de ruimte</p>
9. Wordt het Living lab aangepast aan het schaalniveau waarop het vraagstuk zich afspeelt?	<p>Ja, aftasten, proberen</p> <p>Belang van het in oog houden van alle schaalniveau's naar voren</p> <p>Ja, verschillende opgaven op andere schaalniveau's</p> <p>Ja!</p> <p>Samenhang tussen visies</p>

Stelling/vraag	Hoe zal dit gaan onder de Omgevingswet? 2019/2020
1. Mijn bestuurder is actief betrokken bij het proces.	<p>Open en constructief (wensgedachte)</p> <p>Misschien meer bestuurlijk onderhandelen</p> <p>Actiever maar meer op proces minder die inhoud</p> <p>Vanaf de start van het proces</p> <p>Vanaf start is vanzelfsprekendheid bestuurder durft risico te nemen</p> <p>Ik voorzie dat de hiërarchie tussen raad/college/ambtenaar verandert. Bandbreedte in besluitvorming biedt veel meer ruimte voor discussie.</p>
2. Op welke manier krijg je inzicht in het wensbeeld van toekomstige gebruikers?	<p>Via gebiedsplatforms</p> <p>Overheid weet wat de maatschappij wil, beslist mét, niet vóór</p> <p>Gebruikers werken meer direct mee aan het plan</p> <p>De gebruiker/initiatiefnemer staat veel meer centraal</p> <p>Participatie +innovatie met een blik op de grotere belangen.</p> <p>Cocreatie met toekomstige gebruikers/p... wordt de normaalste zaak van de wereld</p> <p>gebruik digitale kaarten</p>
3. Wat wil je voorkomen?	<p>Online verbeelding in combinatie met laan van de leefomgeving</p> <p>Ik wil graag die ivoren toren voorkomen geen wij/zij, hunnie/zullie</p> <p>Je collega (-bestuurder) opdrachtgever etc. spreekt je er op aan als je teveel te lang alleen bedenkt</p> <p>Dat de hardste schreeuwers bepalen wat er gebeurt</p>
4. Wat laat je open/waar laat je ruimte?	<p>Flexibel inzetten op doelen (wateroverlast, kwaliteit, bodemdaling etc.)</p> <p>(Op perceelsniveau)</p> <p>De oplossing</p> <p>Uitkomst</p>
5. Hoe zou 'Right to challenge' er hier uitzien? Wie 'challenge' wie?	<p>Alle partijen (overheid)</p> <p>Iedereen kan iedereen uitdagen</p> <p>Iedereen elkaar</p> <p>Overheden elkaar?</p> <p>Tweerichtingsverkeer: gemeente en provincie, waterschap en provincie, omgevingspartijen en provincie, burgers en provincie</p>
6. Welke coalities zouden er kunnen ontstaan?	<p>Vanzelfsprekendheid partijen om de tafel</p> <p>Overheid midden in samenleving, beleid(s)keuzes + uitvoering breed gedragen</p> <p>Ik ben benieuwd!</p> <p>Afhankelijk van het schaalniveau</p> <p>Alle</p>
7. De fysieke leefomgeving wordt samenhangend benaderd.	<p>Ja</p> <p>Gezonde leefomgeving staat centraal</p> <p>FLO rules</p> <p>Bovengronds bij betrokken</p> <p>Waterpeil is onderdeel van de leefomgeving, water als ordenend principe</p> <p>Hopelijk vanuit integrale, niet thematische programmering</p>
8. Wat kunnen we met de casus leren over de Omgevingswet?	<p>Samen eerst opgaven in beeld door onderzoek - daarna rest van het proces</p> <p>Hèhè dat wordt het moment voor iedereen!</p> <p>Wat moet wat mag hoe komen we tot een afspraak</p> <p>Hopelijk!</p>
9. Wordt het Living lab aangepast an het schaalniveau waarop het vraagstuk zich afspeelt?	<p>Chaotisch wellicht leidend tot het trapje op trapje af met visie (vgl. KRW)</p> <p>We dansen door alle schalen heen</p> <p>Ja!</p> <p>Programma's met OP aandacht voor alle schaalniveaus</p> <p>Flex, toegesneden etc.</p>

Appendix E: Overview of the programs and projects of the province of Utrecht conducted within the new Environmental Planning Act.



Appendix F: Thesis summarised in Dutch.

Complexe problemen bestaan binnen de fysieke leefomgeving, voornamelijk op het regionale schaalniveau. Governance en het aanpassen van schaalniveaus moeten in acht genomen worden om oplossingen te vinden voor deze problemen. Een nieuwe wet wordt geïmplementeerd in Nederland; de Omgevingswet. Deze wet richt zich op een gezonde fysieke leefomgeving die effectief ontwikkeld wordt om te voldoen aan behoeften in de maatschappij. Het doel van deze masterscriptie is te definiëren welke aspecten van informele en formele governance overeenkomsten gebruikt kunnen worden door de provincie Utrecht om projecten op een regionaal schaalniveau te ontwikkelen binnen de kaders van de Omgevingswet. De transitie naar een nieuwe wet is een lastige taak, omdat zesentwintig wetten over de fysieke leefomgeving in één worden samengevoegd. Daarom helpt dit onderzoek een duidelijker beeld te krijgen van de opgaven waar de provincie voor staat ten opzichte van de implementatie van deze wet. Hierbij is het belangrijk te definiëren wat de rol van samenwerking met andere actoren wordt in dit proces.

Deze scriptie voegt een Nederlands, regionaal planningsperspectief toe aan het debat over het aanpassen van governance aan schaalniveaus zoals beschreven door Evers & de Vries (2013). Veel onderzoek is gedaan over governance en het besturen van het regionale schaalniveau. In dit onderzoek wordt een verschil gemaakt tussen formele en informele governance. Hierbij wordt formele governance beschouwd als hiërarchisch, institutioneel en vastgelegd in wet- en regelgeving. Informele governance wordt beschouwd als opgezet in netwerken. Onderzoek is gedaan over governance, het aanpassen van schaalniveaus en het debat over het regionale schaalniveau. Deze drie thema's zijn echter nog niet gecombineerd om een antwoord te vinden op deze drie vervlochten onderwerpen samen. Daarbij is de living lab methodiek uitgelicht als methodologie waarmee de Omgevingswet geïmplementeerd kan worden en complexe problematiek op het regionale schaalniveau kan worden aangepakt. In een living lab worden verschillende actoren betrokken in het oplossen van complexe problematiek door middel van innovatie. Het is een onderzoeksmethode waarbij leren door te doen een belangrijk onderdeel is.

Door middel van kwalitatieve onderzoeksmethoden is een antwoord gevonden op de vraag op welke manier deze onderwerpen gecombineerd kunnen worden om de Omgevingswet te implementeren. Negentien personen hebben deelgenomen aan het onderzoek in ofwel de vorm van een interview ofwel een discussiegroep. Dit zijn experts in living labs, de Omgevingswet, de provincie Utrecht of het regionale schaalniveau of deelnemers van de verschillende casussen die onderzocht zijn. Vijf casussen zijn geselecteerd om de processen te vergelijken die gebruikt worden om met oplossingen te komen voor complexe problemen in de fysieke leefomgeving. De eerste casus is een living lab Omgevingswet, waarin vier verschillende projecten worden ontwikkeld om al te kunnen werken volgens de werkwijzen waar de Omgevingswet om vraagt. De tweede casus gaat over knooppuntontwikkeling in Bunnik. Hierbij wordt een treinstation ontwikkeld waarbij de gehele omgeving meegenomen wordt in de ontwikkeling. Verschillende waarden binnen de directe omgeving van het knooppunt verbinden is de algemene opgave in deze ontwikkeling. In de derde casus, worden de Oostelijke Vechtplassen ontwikkeld. De kwaliteit van het natuurgebied wordt hierbij verbeterd door het gehele gebied te ontwikkelen. Speciale aandacht wordt gegeven aan de waterkwaliteit in het gebied. De vierde casus is de herontwikkeling van het Noorderpark. Hierbij wordt een park ten noordoosten van Utrecht ontwikkeld. De laatste casus gaat over de Nieuwe Hollandse Waterlinie, waarbij provincies samenwerken om deze oude militaire verdedigingslinie te onderhouden.

Een literatuuranalyse geeft een overzicht van de bevindingen van dit onderzoek binnen de context van bestaande literatuur. Complexe problemen bestaan in de ruimtelijke ordening. Deze problemen kunnen zelfs 'wicked' worden genoemd. Kennis moet worden opgedaan om met verschillende oplossingen voor deze problemen te komen. Daarbij moet de context waarin de problematiek plaatsvindt worden meegenomen (Rittel & Webber, 1973). Een verandering vindt plaats van 'government' naar 'governance' (Rhodes, 2007). Governance kan gebruikt worden om complexe problemen op te lossen (Termeer et al., 2010). In governance, werken private en publieke actoren samen en delen zij verantwoordelijkheden (Evers & de Vries, 2013). Governance kan zowel formeel als informeel benaderd worden. Verschillende aspecten van governance worden uitgelicht door diverse auteurs (Termeer et al., 2015; Termeer et al., 2016; Emerson et al., 2011; Edelenbos & van Meerkerk, 2015; Ayres, 2017). Deze governance aspecten definiëren wat meegenomen moet worden in samenwerking tussen verschillende actoren van verschillende organisaties. Deze zijn verdeeld in vijf governance capaciteiten: reflectie, vernieuwing, responsiviteit, veerkracht en het aanpassen van schaalniveaus (Termeer et al., 2015; Termeer et al., 2016). Schaal is niet

vanzelfsprekend, het is politiek en sociaal geconstrueerd (Wyborn & Bixler, 2013). Het regionale schaalniveau wordt steeds belangrijker, omdat initiatieven van onderaf komen en door decentralisatie meer nationale taken van bovenaf komen (Spit & Zoete, 2013). Het integreren van verschillende vraagstukken en het samenhangend benaderen van de fysieke leefomgeving is een doel van de Omgevingswet. Daarbij, wordt het subsidiariteitsbeginsel nageleefd in de nieuwe wet. Hierin wordt het laagste niveau gehanteerd om problemen op te lossen, omdat ervan uit gegaan wordt dat de problematiek daar ontstaat (Boeve & Groothuijse, 2014). Het is van belang te monitoren en ruimtelijke strategieën op het regionale schaalniveau te evalueren om zich aan te kunnen passen aan de meest effectieve schaal voor regionale planning (Alden, 2006). Het aanpassen van schaalniveaus voor governance is onvermijdelijk (Swyngedouw, 2005).

Uit de resultaten van de interviews en de discussiegroep die gehouden zijn, blijkt dat de provincie zich met het oog op de Omgevingswet aan moet passen aan veranderingen die plaats vinden in de samenleving. De verandering van 'government' naar 'governance' is een dergelijke verandering die al een aantal jaar plaats vindt. Steeds meer worden private en maatschappelijke partijen door de overheid betrokken om maatschappelijke problemen op te lossen. De fysieke leefomgeving moet samenhangend benaderd worden en de bestuurlijke afwegingsruimte moeten worden vergroot onder de Omgevingswet. Het regionale schaalniveau is een niveau waar complexe problemen plaatsvinden. Daarom moet er een verschuiving komen naar meer informele governance om deze complexe problematiek te kunnen aanpakken. Het besturen van vraagstukken op het schaalniveau waarop deze vraagstukken zich afspelen samen met de actoren die bij deze vraagstukken betrokken zijn is de opgave waar de provincie voorstaat. Hierbij, moet de provincie rekening houden met verschillende perspectieven van actoren en in gedachte houden dat actoren betrokken moeten worden op een schaalniveau dat te overzien is voor deze actoren. Door een open proces aan te nemen, waarbij onderzoek meegenomen wordt om oplossingen te vinden voor vragen die opkomen in de projecten die maatschappelijke opgaven aanpakken, kan de provincie deze complexe problemen aanpakken samen met de betrokken actoren. Ambtenaren moeten zich bewust zijn van de veranderende rol en positie van de provincie. Zij moeten continu een kritische houding hebben tegenover hun werk, houding en projecten monitoren en evalueren om het proces ontwikkelen. Dan kunnen lessen geleerd worden die geïmplementeerd kunnen worden in andere projecten. De complexiteit en het enthousiasme van de huidige samenleving vraagt om een veranderende overheid. Opgaven voort uit de maatschappij en met de Omgevingswet krijgt de provincie de mogelijkheid te reageren op deze vraagstukken en deze samen met de samenleving op te lossen.

Het probleem dat benaderd is in dit onderzoek bestaat uit drie onderdelen; governance, schaal en de implementatie van de Omgevingswet. Vier opgaven voor de provincie Utrecht zijn voortgekomen uit dit onderzoek. De eerste opgave is dat de provincie Utrecht zich moet aanpassen aan de veranderende rol van de overheid. Daarnaast moet de manier waarop er geparticipeerd wordt gedefinieerd worden. Vervolgens moet er aangegeven worden wat er met de uitkomsten van het participatieproces gedaan wordt. Bovendien moeten er meer grensoverschrijdende governance processen worden opgezet om het governance proces aan te kunnen passen aan het betreffende vraagstuk. Ten slotte, moeten lessen die geleerd worden in verschillende projecten worden uitgedragen. De provincie moet het provinciale schaalniveau kunnen overzien en weten welke governance processen plaats vinden op dit schaalniveau. De verschillen in schaalniveaus waarop de provincie opereert moeten gecommuniceerd worden door de provincie aan de andere actoren. Om schaalniveaus en governance aan te passen aan de opgave, is flexibiliteit benodigd. Daarom moeten besluitvormingsprocessen worden aangepast aan de context waarin deze plaats vinden. Dit is niet gemakkelijk gezien de politieke- en bestuurlijke organisatie die de provincie is. Toch vraagt de netwerksamenleving om een veranderende context waarin provincies flexibel zijn. Deze opgaven moeten geïmplementeerd worden om de doelen van de Omgevingswet na te kunnen leven. Daardoor is een verandering in houding, gedrag, besluitvorming en werkwijzen van mensen die werkzaam zijn bij de provincie en de politiek nodig.

