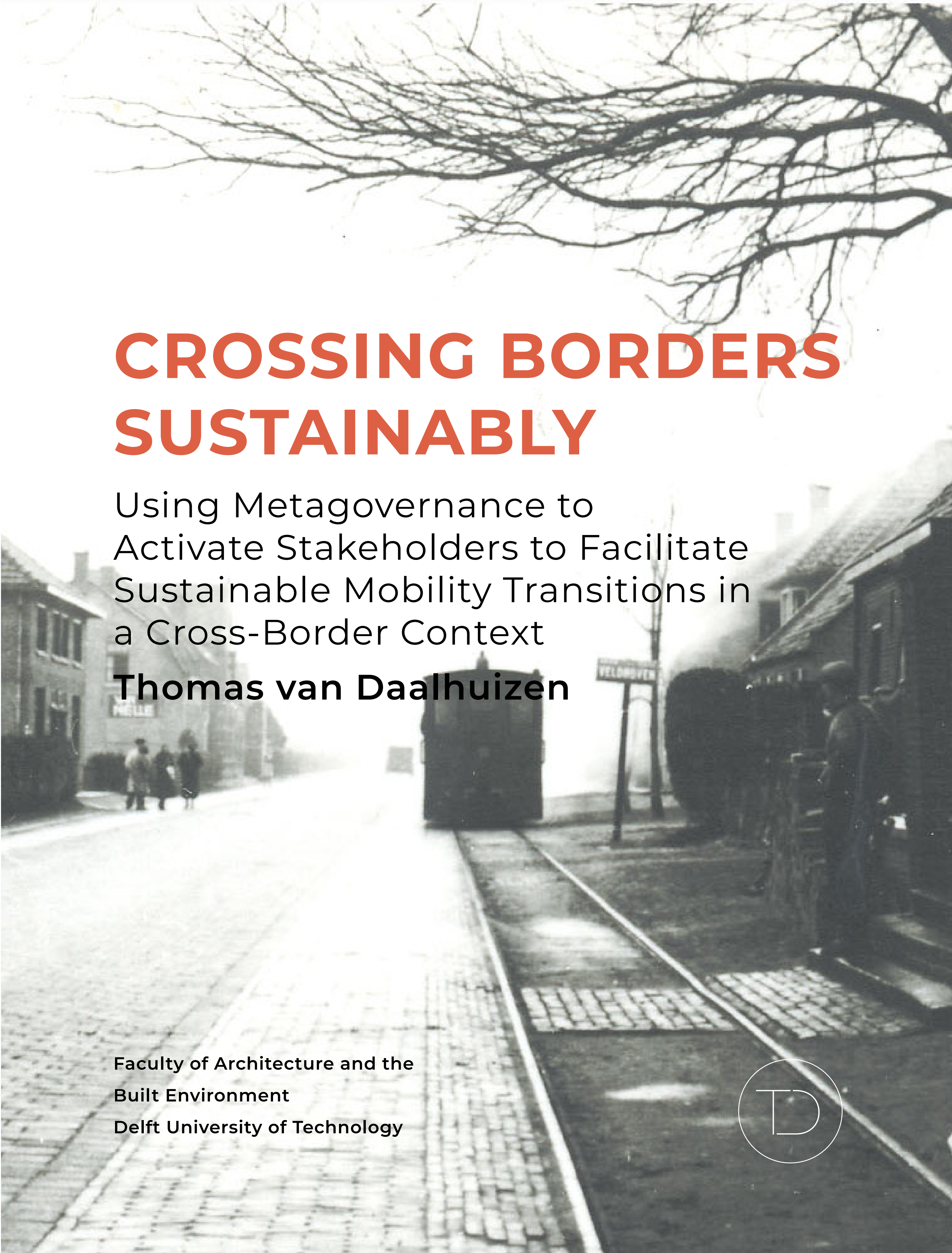

CROSSING BORDERS SUSTAINABLY

Using Metagovernance to Activate Stakeholders to Facilitate Sustainable Mobility Transitions in a Cross-Border Context

Thomas van Daalhuizen

Faculty of Architecture and the Built Environment
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"...You have to navigate through a tremendous amount of coordination in the entire process. For cross-border connections, it is always pioneering, always exploring how to approach it and how to get it done..." (Participant)

COLOPHON

Crossing Borders Sustainably

Cover image: Unknown, Collection RHce, nr. 0132275

Thomas van Daalhuizen
4598105

The 4th of January 2024

MSc graduation thesis in Urbanism
P5 report
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1st mentor: Prof. Dr. P.W. (Paul) Chan
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Delegate of the Board of Examiners: Prof.dr. M. (Maarten) van Ham

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The thesis is written as part of master programme Management in the Built Environment and contains all the products necessary for the P5 presentation.

TU Delft Department of Management in the Built Environment
BK Bouwkunde

CONTENT

ABSTRACT

There is a need to broaden discussions on sustainable mobility beyond the prevalent focus on electric cars, particularly considering the challenges faced by border regions and marginalized groups that rely on public and soft transport. This study aims to fill this gap by examining the intricate dynamics of cross-border mobility transitions in Belgium and the Netherlands, with a specific focus on activating stakeholders and facilitating sustainable mobility transitions through the application of meta-governance.

Utilising a multifaceted research methodology, including an extensive literature review, in-depth case studies of HSL-Zuid and IJzeren Rijn, stakeholder interviews, this research navigates the complex landscape of meta-governance in cross-border regions.

The study reveals three pivotal tensions that disrupt current decision-making processes for cross-border connections: (1) National and Regional Imbalance in Decision-Making, (2) Formal and Informal Routes to Decision-Making and Flexibility, (3) Conflicting Interests. These tensions intricately impact governance styles, creating challenges and inefficiencies.

To address the identified issues, the research proposes actionable recommendations. Emphasising the need to harmonise national-regional governance frameworks, work on nuanced approaches to formal and informal routes, considerate divergent national interests, and heightened awareness of governance style interplay. Moreover, the research also highlights that metagovernance is already ingrained in current practices. The key lies in raising awareness of its presence among stakeholders, enabling a more informed and seamless navigation of the cross-border governance landscape. Metagovernance's true value lies in its ability to articulate and navigate through different governance styles, adapting to various challenges and opportunities. While it may not always represent a novel approach, it serves as a critical analytical tool for understanding the dynamics of governance in complex infrastructure projects.

Keywords: *Metagovernance, Governance, Stakeholder, Cross-border, Sustainable Mobility, Transitions*

ACKNOWLEDGEMENTS

As I reflect on the past year, a journey marked by the dual challenge of completing my Masters in Urbanism and embarking on a new thesis for my Masters in Management in the Built Environment, I am filled with a sense of accomplishment. The task of intertwining these two significant academic pursuits was daunting, yet it presented a unique opportunity for growth and learning. Today, as I stand at the culmination of this journey, I am proud to have successfully navigated these challenges, a testament to the support and encouragement I received along the way.

I extend my heartfelt gratitude to my mentors, Paul Chan and Karel Van den Berghe, for their invaluable advice, steadfast support, and consistent encouragement throughout my research. Their expertise and perceptive critiques have significantly influenced the direction and quality of this thesis. Additionally, my thanks go to Maarten van Ham, a delegate of the board, for his meaningful contributions and fostering a supportive environment for our progress meetings.

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I owe a deep debt of gratitude to my family and friends for their relentless support, understanding, and motivation during this endeavor. A special mention to Tom for his constant support and for being a pillar of strength in overcoming the challenges faced in the past year. My parents deserve my profound thanks for their love, patience, and unwavering belief in me, which has been a source of continuous inspiration throughout my academic journey.

I am grateful to all the individuals and organizations whose work has been referenced in this thesis. Their research and insights have laid the groundwork that this thesis builds upon.

Finally, I recognize that the completion of this research would not have been possible without the collaborative efforts, support, and contributions of everyone mentioned. I am thankful for your involvement in this journey and for your assistance in bringing this thesis to successful completion.

Thomas van Daalhuizen
Den Haag | Jan 4th, 2024

01 | INTRODUCTION

Content

Trams crossing the border establishing a connection between Turnhout and Eindhoven in 1897
Photo: Unknown, Collection RHce, nr. 0132275

1.1 PROBLEM FIELD

1.1.1 European Green Deal

Awareness for a sustainable just future is increasing. With the current challenges in the world, the European Union has drafted an aspiring plan called the European Green Deal “Fit for 55” (fig 1.1). One of the main topics is mobility and especially the emissions originating from car traffic. Therefore, the European Commission has set the goal to decrease the use of cars by 75 percent by 2050 (European Commission, 2021). Replacing it with more public transport, making use of the waterways and supporting an increase in soft transportation modes. As such institutions have a huge impact on how our built environment looks, we will have to adapt to a new standard of mobility.

1.1.2 Car-centric Trends

Moreover, current paradigm is one in which entire cities have been designed to match its inhabitants that all have a personal vehicle to get around (Kherdeen, 2021). The last few years there has been an increase in the number of electric cars being sold and thus replacing older vehicles that still use fossil fuel (IEA, 2022) (fig. 1.2).

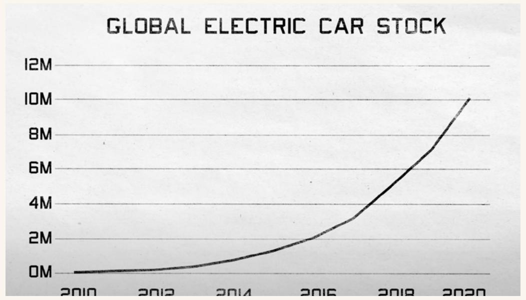


Figure 1.2 Increase in number of electric cars being sold (Harris, 2022)

The main aim is to decrease the amount of carbon emissions that has been rising quickly over de past decades (fig. 1.3). Electric cars rely on batteries. Like many other batteries, the lithium-ion in their turn rely on raw materials, like cobalt, lithium and rare earth elements that have been linked to grave environmental and human rights concerns (fig. 1.4). Cobalt has been especially problematic (Tabuchi & Plumer, 2021). This model is unsustainable, states Kherdeen (2021) and besides that it also depends on how the batteries

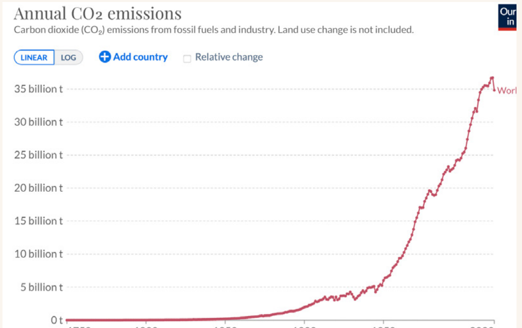


Figure 1.3. Annual CO2 emissions (Ritchie & Rosado, 2020)

for the electric car are charged (Kherdeen, 2021; Tabuchi & Plumer, 2021). Furthermore, Tire Wear Particles (TWP) that emerge from friction between the tires of vehicles and the road surface have caused widespread contamination in the environment (Ding et al., 2022) and are seen as a health hazard. The use of cars does not only create health hazards but pollutes the surrounding environment and presents several challenges in terms of the use of urban space for infrastructure, a scarce commodity (Ding et al., 2022). This trend to shift towards electric cars is thus not the solution for sustainable transportation.

Figure 1.1 Right (top) European Green Deal (European Commission, 2021)

Figure 1.4. Right (below) The Mutanda copper mine in Katanga province, Democratic Republic of Congo, in 2012. Photographer: Simon Dawson/Bloomberg

1.1.3 Metagovernance

There is a growing concern that strong institutional frameworks and well thought out planning system will not suffice to ensure the successful implementation of sustainability goals similar to the Sustainable Development Goals (SDG) (Meuleman, 2019). The SDG's have been set up by the UN as common goals that all nations should stand for. For this thesis especially SDG 9, 11 and 16 are relevant (UN Department of Economic and Social Affairs, 2023).

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation;

Make cities and human settlements inclusive, safe, resilient and sustainable;

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels.

To achieve sustainable goals such as a mobility transition and development getting the governance right is one of the main pillars from an academic perspective (Meadowcroft, 2011, p.536). Despite, political commitments made and the high investment in the physical space to promote Sustainable Urban Mobility (SUM), there is some inability to achieve the ambitious decarbonization targets through incremental planning methodologies.

As policy making is mostly about incremental change, a new form of governance was introduced by (Meuleman, 2019), namely metagovernance. Metagovernance tries to combine the three main governance styles of (1) Hierarchical governance, (2) Market governance and (3) Network governance and aims at system change. Metagovernance is especially relevant in cross-border contexts as a survey on governance trends for sustainable development concluded that there is a need to combine different governance style. The combination of styles is needed to achieve compliance of international agreements with expanding collaborative governance (Olsen et al., 2015). In 2001, the concepts metagovernance were introduced in Dutch legislation in order to accelerate systemic and disruptive changes (Bosch-Ohlenschlager, 2010). Since then, there have been no significant changes to our transport systems in the cross-border regions.

1.1.4 Cross-border regions

Taking a closer look at border regions and how they are currently supported to develop (sustainably), the European Cohesion Policy comes up. The European Union introduced the Cohesion policy that enhances a fair and sustainable development in all Euregions, while supporting the green and digital transition through funding (European Commission, 2022b). The Euregions consist of many different border regions. The Cohesion Policy can briefly be described with the following three point.:

1. A comprehensive and targeted approach to development: funding, governance, consistency, and synergies with national policies;
2. Place-based, multilevel, and partnership-led policies, tailoring its support to most vulnerable territories;
3. Continued adaptability to emerging and unexpected challenges.

The 8th Cohesion Report (Dijkstra et al., 2022) shows that Cohesion policy has helped to narrow territorial and social disparities between regions in the EU. Thanks to Cohesion funding, the GDP per capita of less developed regions is expected to increase by up to 5% by 2023 (European Commission, 2022a).

The Netherlands has seven Euregions on its borders with Belgium and Germany (fig. 1.5). These are formal cross-border administrative collaborations part of the European union. Projects in these areas are financed by many different subsidies such as the Interreg program. All the funds have to support the development and integration in the Euregion (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2018).

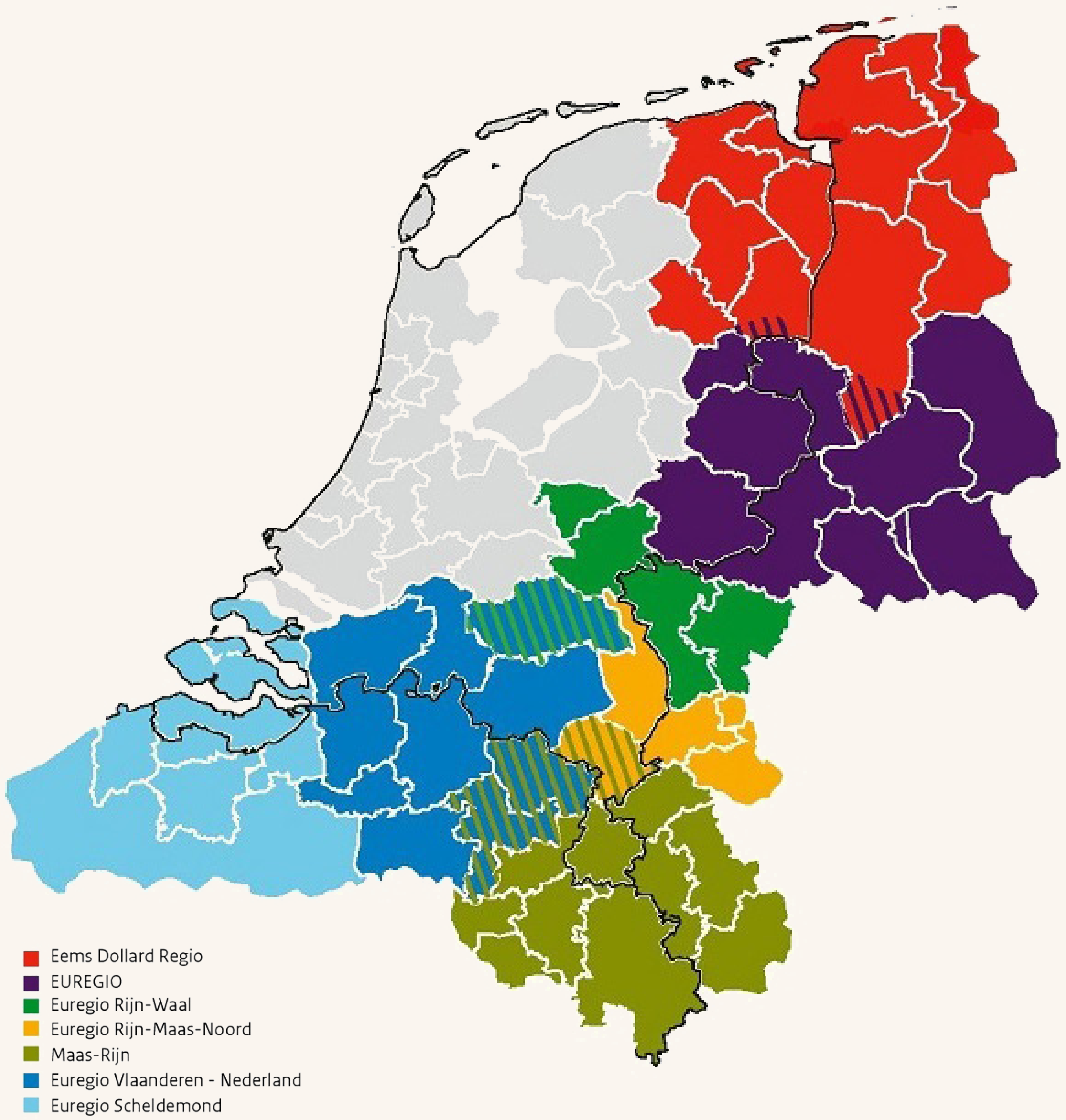


Figure 1.5. Euregions on the Dutch border with the Netherlands and Belgium (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2018)

Figure 1.6. Six factors that could work as a barrier for collaboration in cross-border regions (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2019)

The ministry of Interior and Kingdom Relations (2019) states 6 factors that could work as barriers in a cross-border context (fig. 1.6). Two of these factors are important when it comes to the shift in mobility when we look at the challenge from a regional spatial perspective.

- Lack of transport networks
- Institutional and administrative differences

During the last half of the 19th century and the first half of the 20th century there were multiple railroads and tramways that crossed the border between the Netherlands and Belgium (Lansink & Broek, 2021), see figure 7 (Departement van Waterstaat, 1931). These have all been closed and only three have remained (fig. 1.7). Besides that, the network mostly consists of roads that have no border crossing facilities due to the Schengen agreement. This shows that currently the movements over the border are mainly dependent on cars and other forms of soft transportation.

These barriers also present an opportunity to use cross-border regions as a case study to further investigate the usefulness of meta governance in mobility transitions that aim for a system change.

Figure 1.7. Right. Spoor- en tramwegkaart van het Koninkrijk der Nederlanden (Departement van Waterstaat, 1931)

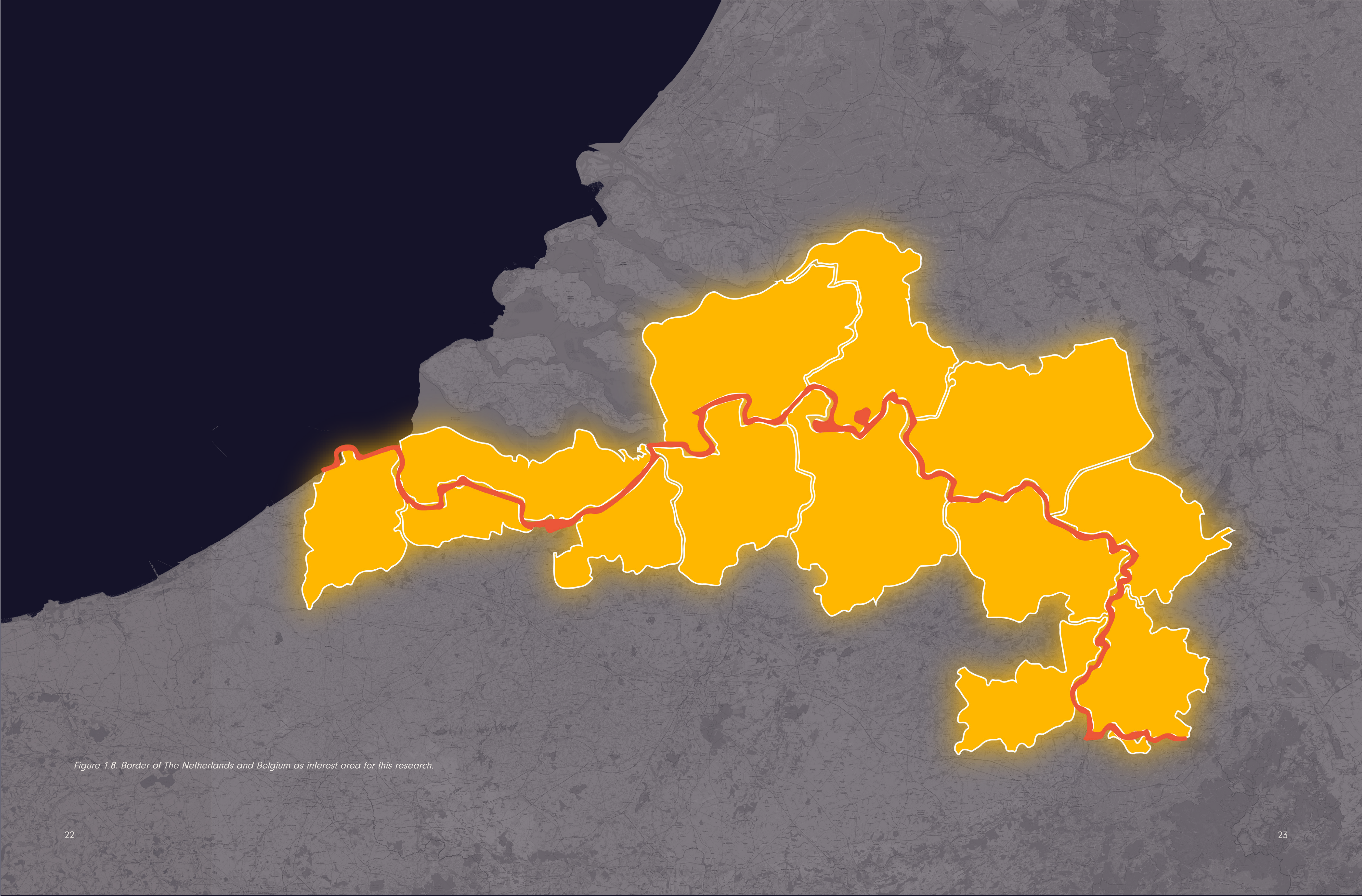


Figure 1.8. Border of The Netherlands and Belgium as interest area for this research.

1.1.5 Societal benefits

The lack of transport and institutional and administrative differences results in the lack of agglomeration benefits. People use their cars to travel to jobs and get access to services. The accessibility of these amenities is not only dependent on the infrastructure and travel mode but also the location of the city or region. Agglomeration benefits, such as increased job opportunities and access to services, that normally arise when cities and regions strengthen their economic space is not present in cities and regions that are divided by a national border (fig. 1.9) (Marlet et al., 2014). The stimulation of disadvantaged regions by means of extra funds has proven unsuccessful (Gorter & Ederveen, 2002). The most effective way to increase or sustain the level of services and job opportunities in border regions is to make better use of services and job opportunities across the border. Breaking down barriers created by borders could lead to the much-needed positive impulses and raise the pull factor of border regions to households and business (Marlet et al., 2014). Fig 1.10 shows the difference in access to jobs when taking into account the national or international market. Access to jobs rises drastically when opportunities across the border are included.

Good access to services and job opportunities is very important for the attractiveness as a region. The willingness to travel for these different needs decreases drastically with every minute spend in transit (fig. 1.11). Border regions that can't make use of the agglomeration benefits of regions across the border and therefore have a higher chance to see shrinkage of population. Furthermore they see higher unemployment rates and the outflow of higher educated personnel as

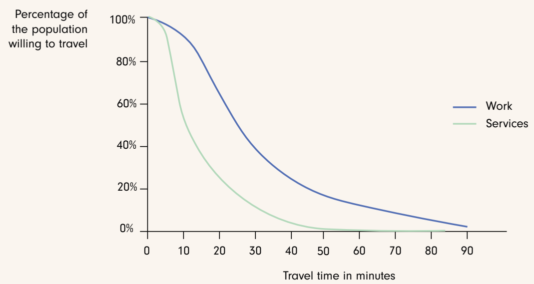
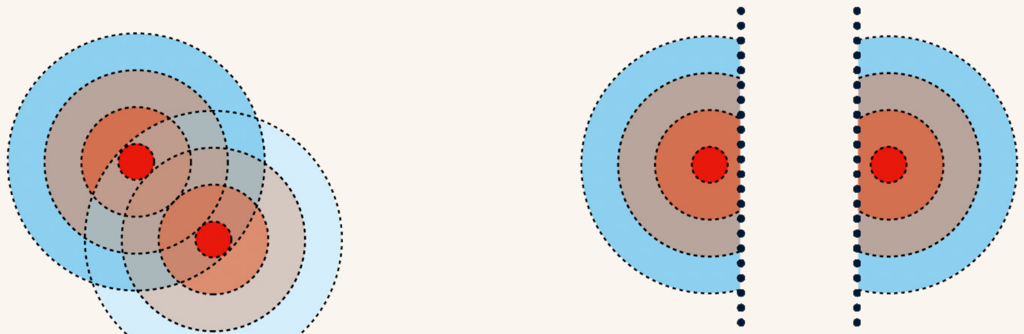


Figure 1.11. Willingness to travel to work or services in relation to travel time (Marlet et al., 2014)



Cities and regions inland

Cities and regions on borders

Figure 1.9. Difference in agglomeration benefits for cities and regions in a border region (Marlet et al., 2014).

well as promising young people (Redding & Sturm, 2008). Looking into new governance structures to support sustainable mobility transitions can therefore help to mitigate these challenges and ensure the long-term sustainability and prosperity of border regions.

By fostering collaboration and coordination among stakeholders from both sides of the border, these governance structures can facilitate the development and implementation of innovative mobility solutions. This, in turn, can improve accessibility, stimulate economic growth, and enhance the overall quality of life in border regions. By addressing these challenges through effective governance, border regions can create a more sustainable and prosperous future for their residents.

1.1.6 Knowledge gaps

In line with the need to find a new way of sustainable mobility and the challenges that Euregions are facing in terms of governance, current knowledge gaps have been identified by Nikulina et al. (2019). These gaps consist of (1) missing information on behavioural changes when transitioning into a new mobility network, (2) the difficulties of policy development that support these changes, (3) the institutionalisation of planning capacity and (4) social sustainability in mobility planning. Based on their literature review the notion is that in the future, mobility planning should be people-oriented, and place based, which meta-governance could allow for.

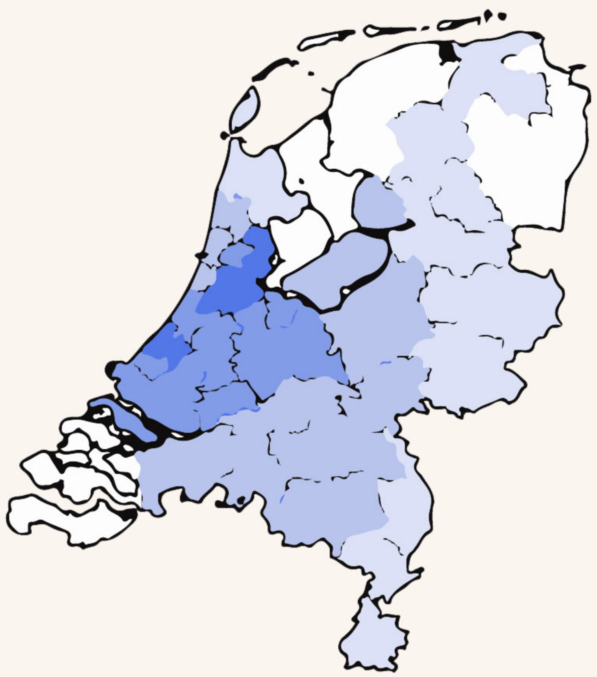


Figure 1.10a. Access to jobs within national borders (van den Berge et al., 2020)

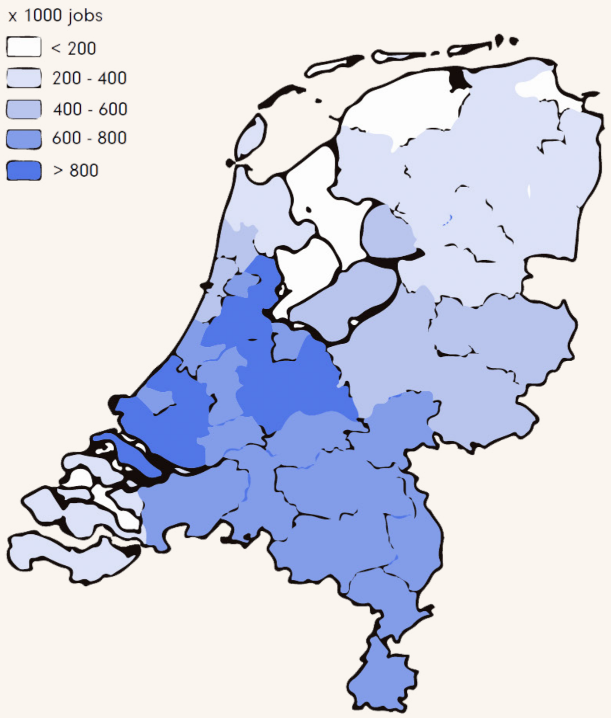


Figure 1.510. Access to jobs including jobs across national borders (van den Berge et al., 2020)

1.2 PROBLEM STATEMENT

There have been efforts to decrease the use of cars that emit a lot of greenhouse gasses. This translates to a new trend of transitioning to electric cars. Electric cars might help reduce the CO_2 emission but bring a new problem to table as it creates demand for scarce raw materials such as cobalt to produce the batteries, inevitably creating a new cycle in which use materials from a non-renewable source for our new way of "sustainable" transport (Kherdeen, 2021; Tabuchi & Plumer, 2021). Stepping away from using a car as preferred transportation method is difficult as entire cities, regions and countries have been planned so that every resident may travel by personal automobile (Kherdeen, 2021). However besides polluting the surrounding environment cars also present several other challenges in terms of health hazards and the use of urban space for infrastructure which is a scarce commodity (Ding et al., 2022). The European Commission has therefore set a goal to transition to a zero-carbon mobility network with the first milestone, a 75 percent reduction in the number of car trips, in the year 2050.

Despite, political commitments made and the high investment in the physical space to promote Sustainable Urban Mobility (SUM), there is some inability to achieve the ambitious decarbonization targets through incremental planning methodologies. A solution provided for this problem is metagovernance, which allows for a combination of different governance styles that together create the best framework to support transitions (Meuleman, 2019). While policy making is mostly about incremental change, metagovernance aims at system change.

Barriers such as differences in institutional and administrative difference, that occur in border regions and often prevent the sustainability transitions pose an opportunity to test the abilities of metagovernance. Furthermore, border regions are particularly vulnerable to changes in accessibility to services and job opportunities when changing transportation mod es. This is due to a lack of public transport infrastructures as well as agglomeration benefits. These conditions highlight the validity of cross-border regions as a case for the implementation of metagovernance.

In 2001, the concepts of metagovernance were introduced in Dutch legislation (Bosch-Ohlenschlager, 2010) associated with the sustainable development debate and complex social issues derived from unsustainable and persistent problems in order to accelerate systemic and disruptive changes.

However, since the introduction of metagovernance no such systemic/disruptive changes have taken place in connection to sustainable mobility. Therefore, it is relevant to research if metagovernance is able to activate stakeholders that can facilitate sustainable mobility transitions. This is in line with current knowledge gaps concerning the difficulties of policy development that support sustainable mobility changes (Nikulina et al. 2019)

The challenge is to investigate **if metagovernance** can be used to activate stakeholders that can facilate **sustainable mobility transitions**

1.3 RESEARCH QUESTIONS

Main Research Question

The main research question of this research is: To what extend can metagovernance activate stakeholders to facilitate sustainable mobility transitions in cross-border regions?

To answer this research question, multiple sub questions were formulated.

1. How can governance be conceptualised in relation to sustainable mobility transitions?
   a. Who are the stakeholders involved in a sustainable mobility transition?
   b. What are the cultural and traditional factors that influence governance in the context of sustainable mobility transitions in the Netherlands and Belgium?
   c. What institutions influence governance in the context of sustainable mobility transitions in the Netherlands and Belgium?
2. How do stakeholders perceive the current distribution of governance styles?
   a.How do governance styles influence stakeholders in their actions?
3. What changes in governance should be made for stakeholders to facilitate a sustainable mobility transition in cross-border regions?

The sub questions are partly based the seven steps on the metagovernance method introduced by Meuleman (2019):

1. Mapping the governance environment
2. Evaluate the current governance approach
3. Problem setting & definition
4. Formulating goals and policy options
5. Designing a governance framework
6. Managing the chosen framework
7. Reviewing the governance framework

The purpose of this research is to provide new information on the ability of metagovernance to activate stakeholders that can help facilitate sustainable mobility transitions in cross-border regions.

1.4 RELEVANCE

1.4.1 Scientific Relevance

Moving towards a more sustainable future has become increasingly important. Getting to the goal of a zero-carbon society has many challenges of which one is sustainable mobility. The thesis topic hopes to add to the body of knowledge on the ability of metagovernance to active stakeholders that can facilitate this transition to a zero-carbon network. Besides that this thesis can help bridge the current knowledge gap on how to overcome the difficulties of policy development that support these changes (Nikulina et al., 2019).

1.4.2 Societal Relevance

This research on meta-governance in cross-border regions and stakeholder collaboration is highly relevant to society. It examines how effective metagovernance can foster collaboration among diverse stakeholders in addressing transboundary issues. The findings can inform the development of inclusive and participatory governance frameworks, ensuring the legitimacy and effectiveness of decision-making processes. A societal transition such as towards sustainable mobility has to be inclusive so that policy and projects are supported and there is compliance with possible regulations. Furthermore, the research can help contribute to the development of cross-border regions as frontrunners in sustainable multi-modal transport networks. Not only focusing on the infrastructure aspect but even more on increasing the social capacity of the region. Border regions are usually the ones that see the disappearance of services and job opportunities which creates a need to travel longer distances. This thesis can contribute to mitigating the results of higher unemployment rates and the outflow of higher educated personnel and promising young people as well as preserve services in the region.

02 | THEORY

Content

Border crossing at Reusel specifically designed for cars in 1966
Photo: Jos Pé, Collection RHCe, nr. 0014209

2.1 (META)GOVERNANCE

The first main concept of this research that needs to be explored further is (meta)governance. The next paragraph will define governance as well as explain the three different governance styles that metagovernance incorporates. Furthermore, it will look into the creation of a metagovernance framework.

2.1.1 Defining governance

To achieve sustainable goals and development getting the governance right is one of the main pillars from an academic perspective (Meadowcroft, 2011, p.536). However, in most countries the public sector is organised in line with hierarchical governance principles introduced by Max Weber (Weber et al., 1978). Examples of this type of governance are 'silos', which is the division of tasks that could have integrated, a clear chain of command and a heavy focus on stability and legality (Meuleman, 2019).

Before looking at the different types of governance a definition of governance is needed. Many scholars have defined governance completely different. One definition (Bevir, 2011) gives is very broad: governance is about "issues of social coordination and the nature of all patterns of life". This definition stays rather vague as to in which fields governance operates. Another scholar, Rayner (2015) states governance as a "heuristic lens through which the contextual realities of coordination of multiple actors and institutions in the policy system can be reconstructed in detail". Rayner's definition shows it strength in the relational context. Additionally, *"We can define governance as a collection of normative insights into the organization of influence, steering, power, checks and balances in human societies"* (in 't Veld, 2013). Meuleman (2019) states that: *"Governance is how societal challenges are tackled and opportunities are created. Governance is about polity (institutions) and politics (processes) and not about policy (the substance)."* This definition of governance already becomes clearer as it states what governance is about and what it excludes, but it only mentions the institutions explicitly and no other actors. The United Nations (UNDP, n.d.) takes a more state-centric approach in their definition of governance, in the context of this thesis this makes sense. This leads to the following understanding governance in which both the definition of Meuleman (2019) and the United Nations (UNDP, n.d.) are integrated:

Governance is about polity and politics, it comprises the mechanisms, processes and institutions, through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences. Governance is explicitly not about the contents of the policy itself but focusses on the process of implementing and creating the policy.

2.1.2 Governance styles

Most governance literature distinguishes three different basic styles, namely hierarchical, network and market governance (Meuleman, 2019). These different styles mimic the three modes of social order introduced by Streeck & Schmitter (1985), state (hierarchical), community (network) and market (fig. 2.1). Of all three styles hierarchical governance is still the most practice style worldwide. It remains an important tool to provide solutions in specific context and issues. This style is derived from the fact that there can be enforcement by means of legitimate authority. Examples of this are employer and employee relationships (Steenkamp & Geyskens, 2012). In more detail hierarchical governance is based on the notion that decision-making is done top-down, in silos and without any interaction with possible stakeholders. Hierarchical governance values stability, rationality and sees strategy as a planning and design tool.

Network governance has seen an increase in use and especially in the Netherlands is widely practiced (Meuleman, 2019). It includes ways to deal with complexity and is very suitable for sustainable development. This style can be described as cooperative instead of focusing on coercion and competition. It can be used to manage complex networks that consist of a diverse variety of stakeholders both from different levels in the government as well as societal groups, institutions, and private organisations (Kickert et al., 1997). Network governance favours dialogue and participation which are opposites of the discourse in hierarchical governance. On the other hand, it can be seen as governance style that manages an evolution instead of a revolution. Therefore, the speed at which we have to change our systems to achieve the sustainability goals set both by the EU and UN might not be compatible with this type of governance as network governance leads more to incrementalism instead of taking big steps.

Lastly market governance showed that it can lead to efficient but also ineffective solutions. It is a style that is based around the idea that organisations should functions as if they were business units as private companies are thought to be more efficient and effective. Therefore, this type of governance prefers the use of market-based instruments, such as taxes. It focuses on efficiency, competition and empowerment. Besides these three basic styles many combinations are practiced.

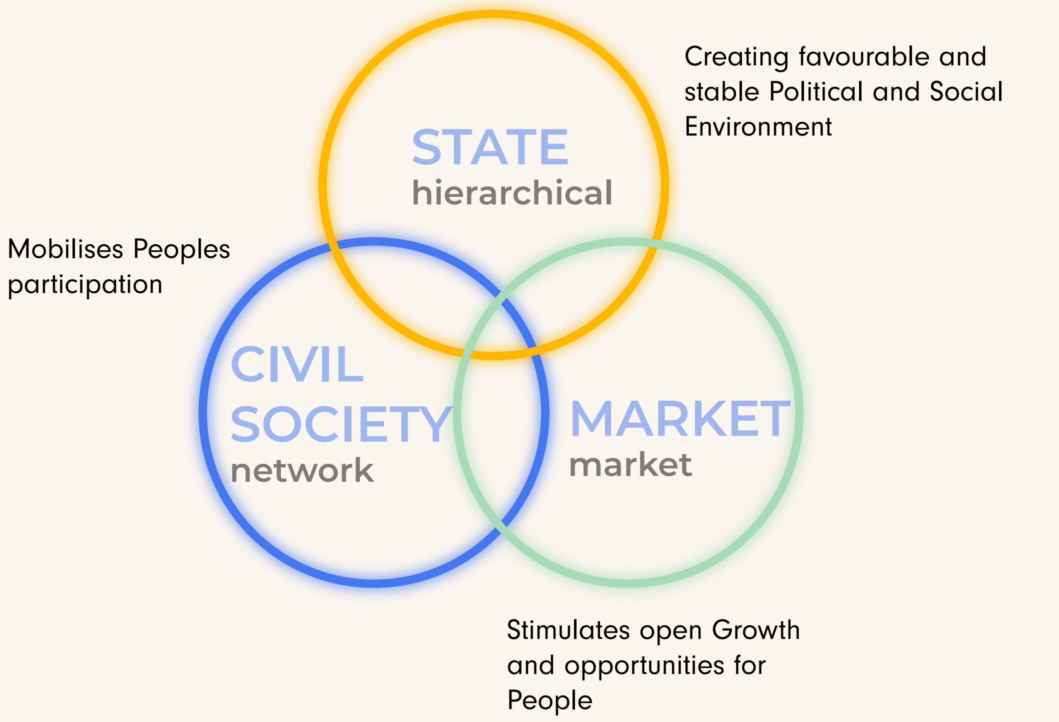


Figure. 2.1. Three modes of social order (adapted from Streeck & Schmitter, 1985)

2.1.3 Metagovernance

Sustainable developments are all about creating a balance between the environmental, economic and social dimensions of life, while keeping in mind future generations. Meadowcroft (2011) argues that these three lenses should not be handled separately as it leads to unwanted consequences. Therefore, an integrated approach is needed also called meta-policy. This shows the similarities with metagovernance which also has three main styles and argues that they should be in balance. When combining the dimensions of Meadowcroft and the three governance styles it shows that holistic goals need holistic governance (fig. 2.2)

Metagovernance can be explained as the governance of governance that is used to create a coordinated governance style to achieve the best possible outcome. This governance style is created through designing and managing combinations of all three basic governance styles, hierarchical, market and network (Meuleman, 2019).

Metagovernance occurs at many sites and scales, as governance problems or the shifting balance of forces prompt efforts to improve governance or change its strategically selective impact on ideal and material interests (Jessop, 2016). This definition underscores the dynamic nature of metagovernance, acknowledging that it is not a static model but one that continuously evolves in response to changing governance challenges and power dynamics. Jessop's perspective points to the fact that metagovernance is not merely about the coordination of different governance styles, but also about understanding and influencing the strategic choices that shape these governance efforts. This approach recognizes the complexities and nuances of governance, where different interests and ideals often compete, requiring a flexible and responsive metagovernance framework to navigate and balance these forces effectively.

Metagovernance, though intended to offer a comprehensive governance framework by integrating hierarchical, market, and network styles, faces significant critique for its potential to induce complexity and inefficiency in organizational structures. One prominent concern, as articulated by Sørensen and Torfing (2009) is that the amalgamation of diverse governance styles can lead to bureaucratic entanglements that slow down decision-making processes. This complexity arises from the challenge of balancing different governance approaches, each with its own set of rules and expectations. The need for constant adjustment and balance among these styles can also create a vacuum in clear leadership and direction, hindering an organisation's or government's ability to respond effectively to new challenges or opportunities. While the goal of metagovernance is to foster a holistic and adaptable governance system, it can paradoxically result in fragmented and indecisive management structures, counteracting the objectives of efficiency and adaptability it aims to achieve (Sørensen & Torfing, 2009)

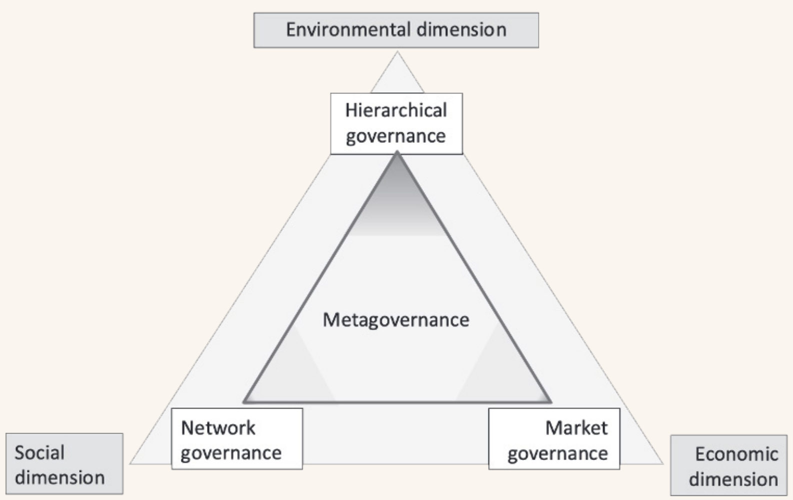


Figure. 2.2. Sustainable development and metagovernance: holistic goals meet holistic governance (Meuleman, 2019)

Sustainability (meta) governance principles (*)	*Features of hierarchical governance*	*Features of network governance*	*Features of market governance*
Institutions			
* *Rule of law*			
* *Equity*			
* *Accountability*			
* *Transparency*			
* *Resilience*			
Instruments			
* *Context-specificity*			
* *Intergenerational justice (long-term orientation)*			
Processes			
* *Horizontal coherence (coordination/ integration)*			
* *Vertical coherence (coordination/ integration)(multi-level)*			
* *Reflexivity*			
* *Flexibility*			
* *Knowledge-based*			
Roles of actors			
* *Inclusiveness*			
* *Participation*			
* *Collaboration*			

Fig 2.3. A template for a metagovernance framework (Meuleman, 2019)

2.1.4 Metagovernance framework & Co-creation

Often when governance is mentioned it is followed by 'framework'. A governance framework serves as a means for all involved stakeholders to gain a comprehensive understanding of each others expectations, goals, performance, risk tolerance and communication obligations. As a result, governance frameworks function as a guidance system that comprise of established management practices that are tailored to the specific needs of a transition (Talbot & Jakeman, 2009). Meuleman (2019) created a template (fig 2.3) for a metagovernance framework focusing on 4 different elements (1) institutions, (2) instruments, (3) processes and (4) roles of actor that are taken from the three main types of governance. These elements should not mutually undermine, but enforce and complement each other, with a view on multi-level, multi-actor, cross-cutting and long-term aspects.

The process of filling in the metagovernance framework template is not described by Meuleman (2019), leaving it open to interpretation (Meuleman, 2019). A co-creation approach has the potential to guide mobility transitions and contribute to slowing climate change (Ruiz-Mallén, 2020).

Co-creation in planning can be understood as a collaborative knowledge creation process that takes a multidirectional approach to problem-solving, unlike traditional top-down or bottom-up processes (Leino & Puumala, 2021).Co-creation involves the constructive exchange of various forms of knowledge, resources, competences, and ideas among public and private actors attempting to solve a shared problem (Torfing et al., 2019). It aims to produce public value and foster continuous improvement and innovative step-changes in understanding and solving the problem (Torfing et al., 2019).

While co-creation in urban planning processes through participation in decision-making phases has been widely accepted, the challenge remains to achieve effective implementation (Kavouras et al., 2023). It requires an institutional transformation to overcome resistance to power redistribution and to enhance the planning process in terms of inclusivity and equity (Ruiz-Mallén, 2020). Gamification of co-creation processes has been proposed as a solution to address these challenges (Kavouras et al., 2023).

2.1.5 Influences on governance

A governance framework is always in interaction with its context. The relation between its surroundings can be both predictable and unpredictable. The importance of understanding this context is important as it may influence the feasibility of specific solutions based on governance styles. There are multiple aspects that influence governance such as culture & traditions, division of tasks and roles of governments and societal stakeholders and the institutional setting (Meuleman & Niestroy, 2015). In the case of this research the context consists of the Dutch-Belgian border. Regarding culture and traditions another comment can be made. Insights presented and underpinned by databases such as Hofstede and Meyer can help get a better understanding of specific features and challenges, when it comes to implementing goals and policies across countries. However, they are more widely recognised in the private sector than in the public sector (Meuleman, 2019).

As a sustainable mobility transition will include both private and public parties looking at cultural and traditional differences and similarities could shine a new light on current used governance frameworks. The presence of cultural diversity in between countries should be viewed as an advantage rather than a barrier when it comes to implementing sustainable transitions. This is because cultural diversity has two key benefits: firstly, it establishes a connection between the transition and people's beliefs and values, and secondly, it expands the range of potential solutions available. Consequently, instead of focusing on integration or assimilation, it may be more beneficial to strive for compatibility as a means of addressing cultural diversity (Meuleman, 2019).

2.2 SUSTAINABLE MOBILITY TRANSITION

The other main concept of this research is the sustainable mobility transition. In this thesis the mobility transition is defined by its goal of achieving mobility justice (Sheller, 2018) while taking into account the goals set by the European Commission to reduce car trips with 75 percent (European Commission, 2021)

2.2.1 Mobility justice

The awareness around justice in its many forms is increasing. The connection to sustainability and sustainable cities is addressed by Dillard et al. (2008) and Larsen (2008) who argue that growing inequality, socio-spatial fragmentation, and lack of access to public goods are threats to our cities. Border regions especially are dealing with these threats, high skilled workers are leaving the regions and moving to bigger cities there is a decrease in socio-spatial unity, and the lack of agglomeration benefits due to the borders (Marlet et al., 2014). All this impacts the access to public goods. Accessibility of goods has a relation with the movement of citizens throughout the region. The possibilities to move around are diverse and depend on the mobility of a citizen group.

2.2.2 New paradigm on mobilities

Mobility justice combines the new paradigm on mobilities and different theories of justice. The new paradigm on mobilities is introduced by Sheller and Urry (2006) focussing on how mobilities rather than being secondary to space have always been the precondition for different kinds of subjects and scales. She continues the spatial turn in social sciences that has been introduced by scholars such as Lefebvre (1991) building on the relational analysis of space and the understanding that space is always under construction. Therefore, we should think about mobility in the same terms, as being relational and always under construction. Thus, movement is not the outcome of spatial and political relations, but in fact a necessary component in their making (Sheller, 2018).

Furthermore, mobility justice is different from spatial justice and transport justice as it is based on movement whereas spatial justice and transport justice are derived from a standstill position of the individual. Adopting a mobility justice framework creates the possibility to look beyond the social analysis from the perspective that nation-states, societies, or people are sedentary, and we are able to uncover relational power dynamics creating friction in movement and mobilities (Cheung, 2020). Mobile commons is another term Sheller (2018) introduces which is a "socially produced shared space" (p. 160) with communal decision making and governing "outside of capitalism and beyond or beneath the limits of national borders" (p. 169) (Cheung, 2020).

2.2.3 Types of Justice

The mobility justice model is made up of 5 different types of justice that together create the concept of mobility justice (fig. 2.4).

The first type of justice is Distributive justice, this focusses on providing a critical minimum of accessibility for all people. This requirement is also supported by (Martens, 2017). It highlights prioritising the planning and funding of mobility systems instead of the traditional cost-benefit analysis that can show the expected effects of transport infrastructure intervention.

The next type is Deliberative justice. This describes the access previously excluded actors have to processes of deliberation through which substantive values are arrived at. Such a process is grounded in pro-active recognition of persons, especially those presently excluded from deliberation and their active participation in it.

Procedural justice is concerned with the fairness of processes by which mobility systems are governed. This is dependent on the way that relevant information is provided to affected citizens. It therefore includes the accessibility of information and therefore enables the possibility for informed consent (Petzer et al., 2020).

Restorative justice introduces the recognition of those immobilized or bound into mobilities and a pro-active undertaking to address injustice and thereby supporting their inclusion and participation (Sheller, 2018).

The last type of justice is epistemic justice. This relates to the sharing of knowledge or knowing something. This type of justice ensures that there is proactive production of knowledge but at the same time the capacity to adapt to external influences (Petzer et al., 2020).

The addition of both restorative and epistemic justice to the model shows the importance of giving attention to immobilities created by specific forms of mobility. One example of such immobilities is the negative effects of a highway passing through an inner-city community that was built to serve suburban car commuters. (Petzer et al., 2020). The model provides a way to look at mobility issues from an analytical point of view, with specific consideration given to groups whose interest have traditionally been marginalised in the mass automobility era (Golub et al., 2016; Lugo, 2018; Pereira et al., 2017).

Overall, this model of mobility justice including its many types of justice shows that the distribution of mobility options is not the only important component in mobility justice to achieve transport equity. The model includes aspects that go beyond the physical movement and shows what regulatory changes must be made to decision-making processes relating to mobility systems.

2.2.4 Including the EU goal

The mobility justice model as introduced by Sheller is very people-oriented and doesn't include the sustainability aspect of the transition that is envisioned by the European Commission (2021). Therefore the model can be adjusted by adding a boundary or a goal of reducing the amount of car trips by 75 percent in order to comply with the goals that are part of the European Green Deal (fig. 2.4).

Figure 2.4. New Mobility Justice Model including the People and Planet Perspective (adapted from Sheller, 2018)

2.3 CONCEPTUAL FRAMEWORK

The figure below (fig. 2.5) shows the relation between the core concepts of this research. The two main concepts are metagovernance and sustainable mobility transitions. The connecting factor is Stakeholders as stakeholders play a crucial role in transitions. Metagovernance is based on different governance styles that are influences by stakeholders (SQ1.1), culture and traditions (SQ1.2) and institutions (SQ1.3). All these factors shape the context that influence the used governance style. As stakeholders play an important role governance should activate stakeholders to facilitate the sustainable mobility transitions (RQ). For governance to do this we first have to know how the current governance framework is perceived (SQ2) and how this should change according to stakeholders to support a mobility transition (SQ3). Based on all this information and involving stakeholders it is possible to investigate if metagovernance can indeed help to activate stakeholders to facilitate sustainable mobility transitions in a cross-border context.

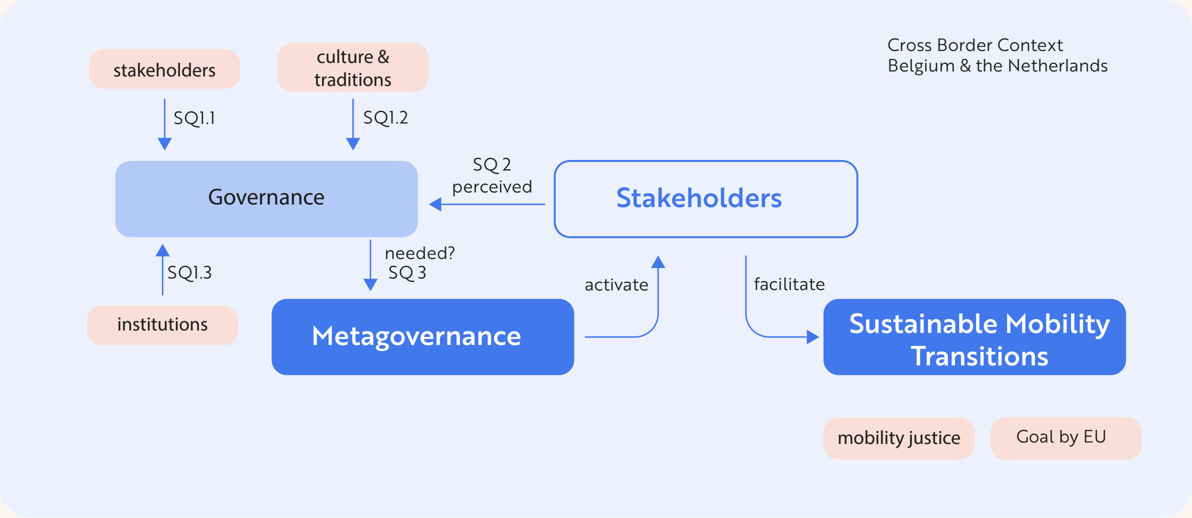


Figure. 2.5 Conceptual framework

03 | METHODOLOGY

Content

Border crossing in the middle of the small town of Galder in Noord-Brabant
Photo: Rolf van den Broek

3.1 METHODOLOGY FRAMEWORK

3.1.1 Flowchart

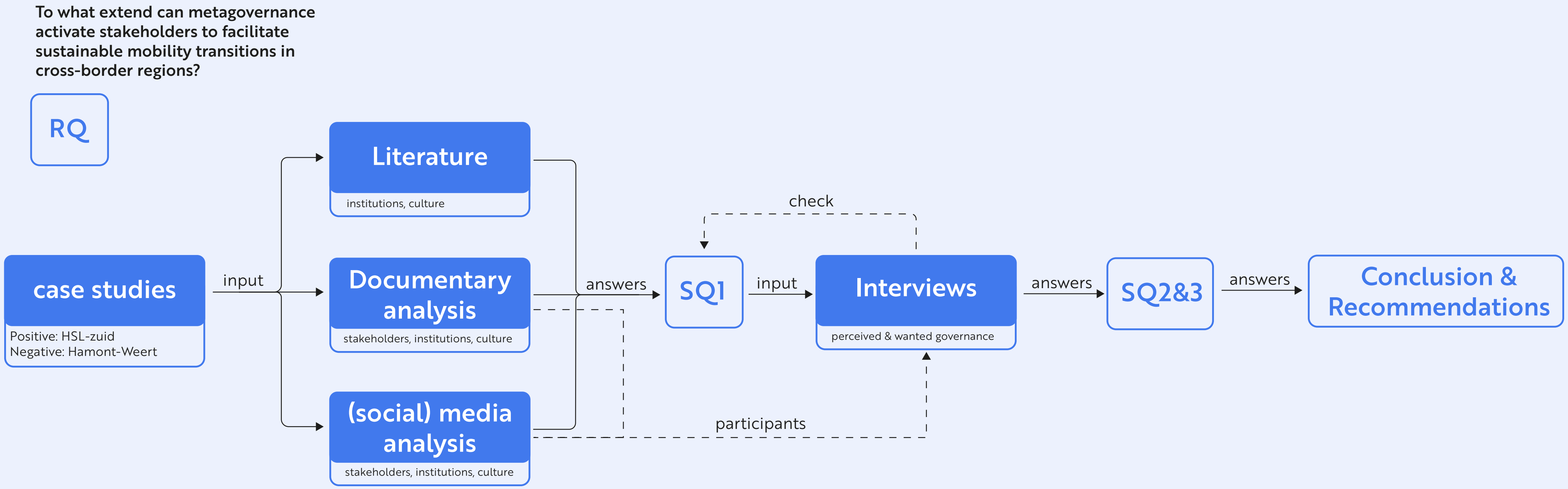
To answer the research question an abductive approach will be used. An abductive logic of enquiry aims to understand social life in terms of social actors in meanings and motives (Blaikie & Priest, 2019). The main research question focusses on stakeholders and their ability to facilitate transition. Therefore, this type of logic of enquiry will be used most.

The methods used to answer the sub questions are of a qualitative nature. Table 3.1 shows the main methods used to answer each particular question. Figure 3.1 shows the sequence of these methods and if they (1) answer the question, (2) give input for the next method, or (3) check previous findings. This figure also shows for each method the goal or subject to gain insights on.

Table 3.1 (right) Methods used to answer sub questions

Figure. 3.1 (below) Flowchart of methods used to answer each question and their sequence (own image)

Sub question	Method
1. How can governance be conceptualised in relation to sustainable mobility transitions? a. Who are the stakeholders involved in a sustainable mobility transition? b. What are the cultural and traditional factors that influence governance in the context of sustainable mobility transitions in the Netherlands and Belgium? c. What institutions influence governance in the context of sustainable mobility transitions in the Netherlands and Belgium?	Literature, Documentary Analysis (Social) Media Analysis Case Study
2. How do stakeholders perceive the current distribution of governance styles? a. How do governance styles influence stakeholders in their actions?	Case Study Interviews
3. What changes in governance should be made for stakeholders to facilitate a sustainable mobility transition in cross-border regions?	Case Study Interviews



3.1.2 Case study

The research will make use of a Case Study to help provide (1) contextual understanding and (2) possibility of a more in-depth analysis (Crowe et al., 2011).

1. Contextual Understanding: A case study allows researchers to delve deep into a specific real-world situation or phenomenon, providing a rich and contextual understanding of the subject of study. It helps in capturing the complexities, dynamics, and nuances that may not be apparent in broader or more generalized research approaches.
2. In-depth Analysis: Case studies provide an opportunity for in-depth analysis of a particular case or scenario. Researchers can examine various aspects, factors, and variables related to the case, gaining a comprehensive understanding of the subject matter.

Comparative analysis

For the case study analysis two projects were used to be able to compare them. With the comparative analysis in mind a case that is already finished and a case that is still to be opened were chosen. As two opposite cases could prove usefull when looking for the succes or barriers of different governance styles

Case 1: HSL

The first case study selected is the 'HSL-Zuid' (fig 3.2). A newly built high speed rail corridor between Amsterdam, Rotterdam, via Breda to Antwerp and Brussels. This project was plagued by a long planning period due to challenges in the decision-making process when it came about the route. Furthermore the project was very complex and was the last large scale rail infrastructure that was newly built in the Netherlands (Decisio, 2020). The HSL-Zuid has been selected based on the following factors.

1. New connection
2. Needs Cross-border collaboration.
3. Lot of available correspondence (in terms of news articles, documents & reports)
4. Has been part of political programs
5. Been postponed numerous times

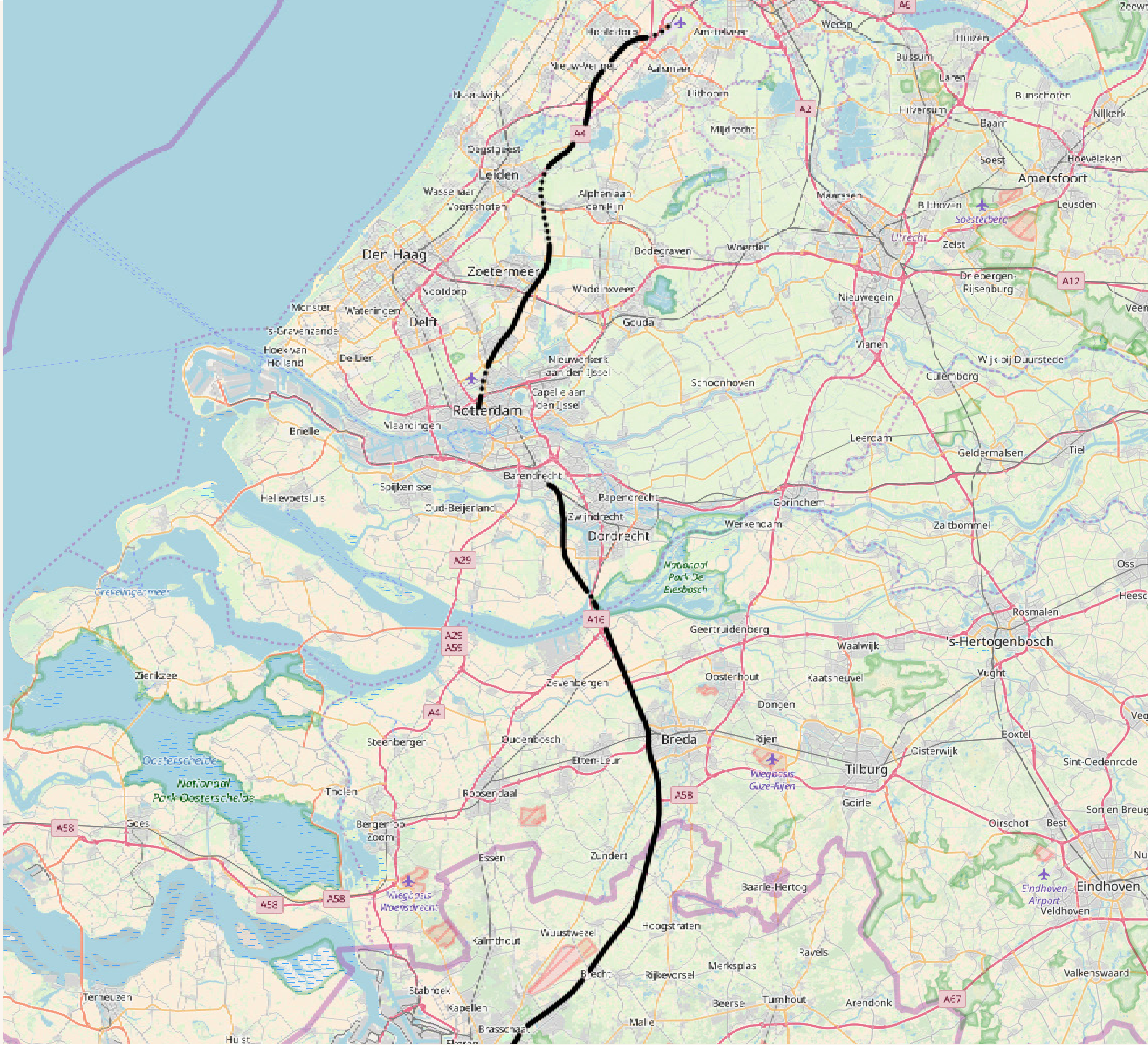


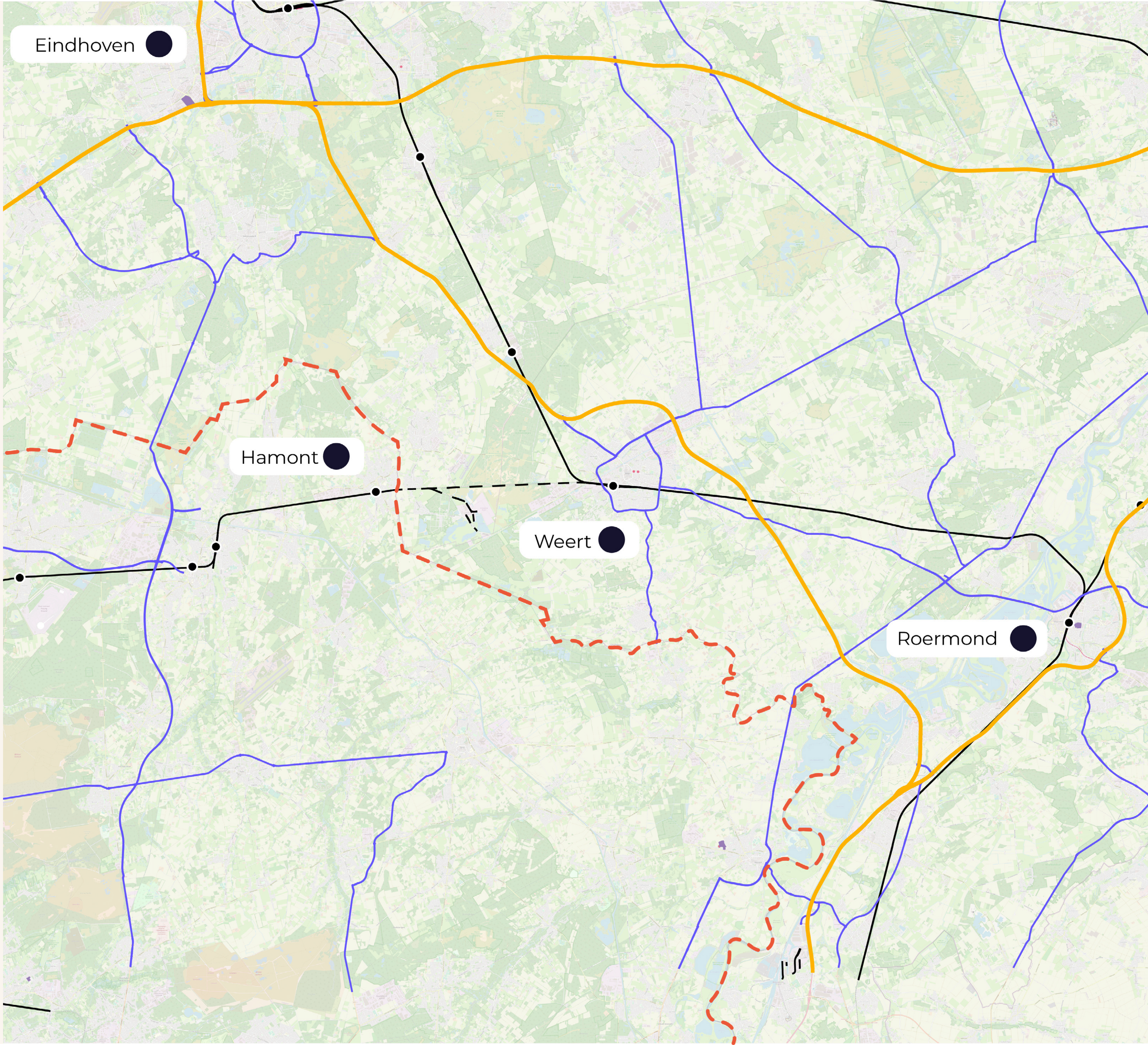
Figure. 3.2. (Right) Location of case study 'HSL-Zuid' the black line is the newly built track to provide cross-border public transport (OpenStreetMap Contributors)

Case 2: IJzeren Rijn (Hamont-Weert)
The second case study selected is the 'IJzeren Rijn', more specifically the border section between Hamont and Weert (fig. 3.3). A rail corridor that has the potential to become a new cross-border connection that provides sustainable transport. The IJzeren Rijn only needs an upgrade for 8 more kilometres to be fully operational, but has been in this state since 2018 (Braam & Seetz, 2021). The IJzeren Rijn has been selected based on the following factors:

1. New connection based on Existing infrastructure
2. Needs Cross-border collaboration.
3. Lot of available correspondence (in terms of news articles, documents & reports)
4. Has been part of political programs
5. Been postponed numerous times

There are currently only two other places across the border where a similar condition is present, being Terneuzen-Gent and Maastricht-Hasselt. However, for both these corridors there is currently no promises or political commitment to develop the connection.

Figure. 3.3. (Right) Location of case study 'IJzeren Rijn' the dashed black line is the section that has to be upgraded in order to provide cross-border public transport (own image)



3.2 SUB QUESTION 1

3.2.1 Introduction
By selecting the 'IJzeren Rijn' rail connection as the case study, it provides an opportunity to conduct a comprehensive analysis through documentary and (social) media analysis, which can shed light on how governance can be conceptualised in relation to sustainable mobility transitions (SQ 1).

3.2.2 Documentary analysis
The documentary analysis will focus on investigating the stakeholders involved, the relevant institutions, and to some extent, the influence of cultural and traditional factors on governance. This analysis will involve examining policy documents, planning studies, agreements, and other relevant sources to understand the roles and perspectives of different stakeholders in the development of the rail connection. Research, through documentary analysis, can suggest new alternatives and can reveal conflict and incompatibilities that currently happening within the policy frameworks of the Dutch and Belgian governments. It can reveal appropriate and inappropriate policy instruments and furthermore, it can help to ensure that solving one problem will not give rise to a more serious one (Bracken, 2014).

3.2.3 (Social) Media Analysis
To further understand the involvement and attitudes of stakeholders and citizens, a (social) media analysis will be conducted. This analysis will utilize platforms such as Facebook groups, including looking at Facebook groups such as "Openbaar Vervoer" (https://www.facebook.com/groups/openbaarvervoer), as well as news websites and their comments sections. It will also involve exploring the websites of citizen groups such as Rover in the Netherlands and TramTreinBus in Belgium. This analysis aims to provide insights into public perceptions, concerns, and engagement regarding the rail connection project.

3.2.4 Literature Study
In addition to these analyses, literature will be utilized, primarily focusing on cultural and traditional factors that may influence governance. This literature review will contribute to understanding how norms, values, and cultural aspects shape the governance framework in the context of sustainable mobility transitions.

3.2.5 Conclusion
By combining documentary analysis, (social) media analysis, and literature review, a cohesive and comprehensive understanding of governance in relation to sustainable mobility transitions in the cross-border context of Belgium and the Netherlands can be achieved.

3.3 SUB QUESTION 2&3

3.3.1 Introduction
Based on the information found to answer SQ 1 a stakeholder analysis can be done. Considering and understanding stakeholders and then acting to engage them is generally agreed as being one of the most critical parts of any managed change initiative (Murray-Webster & Simon, 2006). To have interviews with the right people a stakeholder analysis is necessary. A Stakeholder analysis is the process of identifying and assessing the interests, influence, and impact of different groups of people who have a stake in a proposed urban development project. Stakeholders can include residents, passenger organisations, government agencies, and other groups that may be involved in the 'IJzeren Rijn' project. Doing this stakeholder analysis will provide the right stakeholders to invite for an interview. The stakeholder analysis will be done by using the previously mentioned literature study, documentary analysis and (social) media analysis.

3.3.2 Interview
3.3.2.1 Sampling and Participant Selection
The aim of this research was to conduct 12-15 interviews with stakeholders representing a diverse range of perspectives and roles in sustainable mobility transitions within the cross-border regions of Belgium and the Netherlands. The selected stakeholder groups include ministry representatives, provincial authorities, residents, passenger organizations, infrastructure companies, and municipalities from both the Dutch and Belgian sides. To ensure comprehensive insights, participants were selected using purposive sampling, which aimed to have an equal representation from each stakeholder group. Snowballing was also used after a first group of participants was selected, leading to some of the other participants. An overview of the participants, their function and associated case is given in table 3.2.

Table 3.2. Overview of participants, including function/organistion, involved case and country of origin

	Function	Case	Origin
Participant 1	vTv lobby group	IJzeren Rijn (Hamont-Weert)	BE
Participant 2	vTv lobby group	IJzeren Rijn (Hamont-Weert)	NL
Participant 3	Rover Limburg	IJzeren Rijn (Hamont-Weert)	NL
Participant 4	Infraspeed	HSL	NL
Participant 5	Rover National	HSL/IJzeren Rijn (Hamont-Weert	NL
Participant 6	Province of Limburg	IJzeren Rijn (Hamont-Weert)	NL
Participant 7	Municipality of Weert	IJzeren Rijn (Hamont-Weert)	NL
Participant 8	Prorail	HSL	NL
Participant 9	BAM groep	HSL	NL
Participant 10	Ministry of Infrastructure & Water, The Netherlands	HSL	NL
Participant 11	Federal Government of Belgium	IJzeren Rijn (Hamont-Weert)	BE
Participant 12	Federal Government of Belgium/NMBS	IJzeren Rijn (Hamont-Weert)	BE

3.3.2.2 Interview Design

The interviews were semi-structured to allow for flexibility and in-depth exploration of stakeholders' perceptions (Magaldi & Berler, 2020). The questions were sent beforehand to help steer the interviewee in the direction of the topic of this research. The questions were adjusted during the interview based on direction but provide guidelines and left room for follow up question that allow for a further exploration of the themes the interviewee talks about.

Example interview questions:

- *Can you describe your specific involvement in sustainable mobility initiatives within the cross-border regions?*
- *How do you perceive the decision-making processes and collaboration between stakeholders involved in the 'IJzeren Rijn' rail connection project?*
- *From your perspective, what factors do you think have played a significant role in either facilitating or hindering the success of sustainable mobility transitions in the context of the 'IJzeren Rijn' rail connection?*
- *Could you provide specific examples of instances where stakeholders' actions have had a notable impact on the planning, implementation, or outcomes of sustainable mobility projects, particularly in relation to the development of the 'IJzeren Rijn' rail connection?*

3.3.2.3 Probing

Probing in an interview refers to a technique used by the interviewer to gather more in-depth information from the interviewee. It involves asking follow-up questions or seeking clarification in response to the interviewee's initial responses. The primary purpose of probing is to delve deeper into a particular topic, gain a more comprehensive understanding of the interviewee's thoughts, feelings, or experiences, and to ensure that the interviewee provides detailed and relevant information. There are 7 different probing types of probing that could be useful during interviews (Edwards & Holland, 2013):

1. Silence: This involves staying quiet after the interviewee has finished answering a question, allowing them time to reflect. It can be challenging for interviewers but is effective when used sparingly.
2. Echo: The interviewer repeats the last point made by the interviewee, showing understanding and encouraging them to elaborate, especially when discussing a process or event.
3. Affirmation: Responding with "yes," "I see," or similar phrases during the interview affirms what the interviewee has said and encourages them, similar to nodding in agreement.
4. Encouragement: After an initial response, this probe encourages interviewees to provide more information through follow-up questions like "Why do you feel that way?" or "Can you tell me more about that?"
5. Long Question: These probes can be helpful at the start of interviews or for sensitive topics, offering a detailed introduction to the discussion.
6. Leading: While considered potentially biased, leading questions can be useful, as interviewees are capable of correcting or providing their perspective.
7. Baiting: Involves the interviewer acting as if they already know something, which can prompt interviewees to open up or correct any misunderstandings.

For the interviews in this research probing types (2) Echo, (3) Affirmation and (4) Encouragement are most useful.

3.3.2.4 Rapport

The advantages of establishing a positive connection between interviewers and respondents, with regards to encouraging their active involvement in research, have received widespread approval (Horsfall et al., 2021). However, rapport can have both positive and potentially negative effects on data quality. While it may encourage participation it might also lead to more socially desirable responses. The consistency of responses, however, does not appear to be significantly affected by the level of rapport. This underscores the importance of carefully considering the role of rapport in research interviews and being aware of its potential impact on data quality. For the interviews in this research the beginning of the session will start with some 'small' talk to ease into the real interview, this will not be recorded. During the interview paying attention to the interviewee and their answers is important, as it can help to establish a positive connection.

3.3.2.5 Data Collection

The interviews will be conducted either in person or through video conferencing, based on the participants' preferences and feasibility. Prior to the interviews informed consent will be obtained from each participant in line with the Human Research Ethics Committee Protocol. The interviews will be audio-recorded with participants' permission, ensuring accuracy and comprehensive data collection. Field notes will be taken during and after the interviews to capture non-verbal cues and contextual information.

Table 3.3 50 features of governance (Meuleman, 2019)

Vision & Strategy	Institutions & Instruments	Processes & People	Problems & Solutions
1. Cultures/ 'Ways of Life' 2. Relational values 3. Theoretical Background 4. Key concepts 5. Mode of Calculation 6. Primary virtues 7. Common motive 8. Motive of subordinate actors 9. Roles of government 10. Metaphors 11. Strategy styles 12. Response to resistance 13. Orientation of organisations 14. How actors are perceived 15. Selection of actors 16. Aim of stock-taking of actors	17. Institutional logic 18. Addressing organizational silos 19. Typical policy instruments 20. Unit of decision making 21. Main control mechanism 22. Coordination mechanism 23. Transaction types 24. Degree of flexibility 25. Commitment among parties/partnerships 26. Communication styles 27. Roles of knowledge 28. Type of science-policy interface 29. Approaches to impact assessment 30. Access to information accountability style/tools 31. Accountability style/tools	32. Context 33. Process and project management 34. Public sector reform approach 35. Innovation 36. Relation types 37. Societal interactions 38. Roles of public managers 39. Leadership styles 40. Degree of empowerment inside organisations 41. Values of civil servants 42. Key competences of civil servants 43. Objectives of management development 44. Dealing with power 45. Conflict resolution types	46. Suitability for problem types 47. Framing of problems 48. Typical governance failures 49. Role of public procurement 50. Typical output and outcome

Table 3.4. Example of feature 17. Insitutional Logic and how it can be observed in the three different governance styles (Meuleman, 2019)

Feature	Hierarchical governance	Network governance	Market governance
17. Institutional logic	Line organisation, centralised control systems, project teams, stable/fixed	Soft structure, with a minimum level of rules and regulations	Decentralised, semi-autonomous units/agencies/teams/ contracts

3.3.2.6 Thematic Analysis
The recorded interviews will be transcribed for analysis, either manually but preferably with the use of transcribing software. A thematic analysis will be employed, following the 50 features of governance outlined by Meuleman (2019) as a coding framework. The 50 features of governance proposed by Meuleman provide a comprehensive framework for understanding the various aspects and dimensions of governance. These features encompass a wide range of elements that influence decision-making processes, collaboration, and power dynamics within governance systems. The governance features can be observed across three governance styles: hierarchy, market, and network and have been grouped in 4 categories (1) Strategy/Vision, (2) Institutions/Instruments, (3) Processes/Actors and (4) Problems/Outcomes and can be seen in table 3.3. An example of a feature and how it can be observed is provided in table 3.4. The analysis will be conducted using qualitative analysis software ATLAS.ti

3.3.3 Conclusion
The use of the 50 features of governance as coding framework will help to determine how the participants perceives the current governance practices (SQ2) and how changes could would help their role in facilitating a mobility transition (SQ3). Moreover, the interviews can help to check the answers to SQ1.

The full interview protocol can be found in Appendix 2 along with the invitation for the interviews in Appendix 3.

3.4 RESEARCH OUTPUT

3.4.1 Research goals & deliverables
The goal of this research is to understand how and if metagovernance can help to activate stakeholders to facilitate sustainable cross-border mobility transitions. It aims to generate valuable insights to the understanding of sustainable mobility transitions, cross-border cooperation and metagovernance. The results of the research could provide a new framework to support the much needed mobility transition. The deliverables of the research will be the following

1. Overview of perceived governance styles in cross-border mobility projects
2. Overview of wanted governance styles or wanted switches to other governance styles for specific aspects of the study.
3. Guidelines to co-create a (meta)governance framework for sustainable mobility transitions, this can take the form of a policy brief.

3.4.2 Dissemination & Audience
Dissemination of the research findings will be carried out through the TU Delft repository and making the research available to all participants. The intended audience for the research output includes policymakers, government agencies, local authorities, transportation operators, academic researchers, citizens and other relevant stakeholders involved in sustainable mobility and cross-border cooperation. By targeting a diverse audience, the research aims to foster a multidisciplinary dialogue and facilitate knowledge exchange among different sectors.

3.4.3 Personal targets
Since the beginning of this research, I have set personal study targets to further enhance my understanding and expertise in key areas. One of my study targets is to delve deeper into the concept of governance styles, particularly in the context of sustainable mobility transitions. This research project offers an opportunity to move beyond the use of the term governance in a project as having the 'right' process and explore the nuances of different governance styles and their implications. This will expand my knowledge and provide a more comprehensive understanding of how governance can be effectively utilised.

Another study target I have identified is to deepen my knowledge and skills in creating governance frameworks. The development of a metagovernance framework in this research project will be a valuable learning experience, and I aim to gain practical insights into the process of designing effective governance frameworks. This knowledge will be very useful in my professional career, as it will enable me to contribute to the development of sustainable mobility strategies and policies.

Furthermore, I am keen on exploring innovative techniques such as gamification to enhance stakeholder engagement and facilitate a creative participation process. By studying and experimenting with gamification methods, I aim to expand my toolkit for effective stakeholder interaction and co-creation. This will enable me to design more engaging and inclusive processes that foster active participation and collaborative decision-making.

3.5 DATA MANAGEMENT

3.5.1 Data Management Plan
A data management plan is made by using the DMPonline tool of the TU Delft, https://dmponline.tudelft.nl/?perform_check=false. The form can be found in appendix A and has more details on data collection and storage as well as data sharing and long-term preservation. More information on consent is given in the next paragraph.

3.5.2 Informed consent
Under the General Data Protection Regulation (GDPR), consent needs to be (1) affirmative and (2) granular, seeking consent for different forms of data and for different use purposes (Wolford, 2019). With personal data involved the participants will be asked to sign a consent form. A template of the Human Research Ethics Committee (HREC) will be used (HREC, 2022b). In this template a clear overview of the personal information gathered, the analysis and sharing of this data will be given. Both for the interview and focus group the participants will sign a separate consent form. This gives participants the possibility to change their mind. Moreover, it is a way to remind participants of the personal data that is being gathered. The participation in this study is entirely voluntary and the participant can withdraw at any time. Participants are also free to skip any question in line with the guidelines of the HREC. In order to ensure nothing the research is compliant with the HREC guidelines, the HREC checklist will be used (HREC, 2022a).

3.5.3 Data sharing
The data gathered in this research will not be shared. As the interviews will be done with stakeholders from a specific case, they are easily traceable, making it difficult to keep the anonymity of the participants. Instead, the metadata will be available with the original data only available upon request. The recordings of the interviews and workshop also contain highly personal information and will thus not be shared. For the workshops there is a possibility to anonymise the data and make it available. This data will also only be available on request and is only available after being processed and anonymised. The products that will be available are transcripts, analysis, pictures of mind-maps etc.

The data gathering process will be based on the principles of FAIR-data, (1) findable, (2) accessible, (3) interoperable and (4) re-usable (Wilkinson et al., 2016).The data can be accessed through the TU Delft repository. Authentication and authorisation are needed to access the data due to anonymity concerns as explained. To prevent personal information leaks this data is not available for everyone. Lastly, while doing the research keeping re-usability in mind is important. Including the dates and conditions of the data gathering and being transparent in the used software throughout the analysis will increase the re-usability. In short the correct metadata should be provided (FAIR, 2016).

3.6 ETHICAL CONSIDERATIONS

Ethics play a crucial role in any research project, requiring researcher to be mindful of the ethical considerations that may arise throughout the entire research lifecycle. It is essential to cultivate a culture of ethical reflection, open debate, and mutual learning in the research community (ESRC, 2021). To ensure ethical practice, researchers should adopt an ethical framework that guides their decision-making process.

In this research project, the six principles of ethical research set forth by the Economic Social and Research Council (ESRC) in the UK will be utilized (ESRC, 2021). These principles serve as a foundation for reflecting on and addressing potential ethical issues that may arise. The six principles are as follows:

1. **Maximising benefit while minimising risk and harm**
   The research aims to maximise societal benefit by generating valuable insights into sustainable mobility transitions and meta-governance. The workshops can also be used to the advantage of the participants as they are able to gain valuable information on the structuring of a governance framework.
2. **Respecting rights and dignity**
   The rights and dignity of individuals and groups participating in the research should be respected to the best of the researcher's ability. Consent forms will be used to inform participants about their rights, and their voluntary participation will be ensured through a transparent and informed briefing process.
3. **Voluntary and informed participation**
   Participation in the research activities will be entirely voluntary, and participants will be provided with clear and comprehensive information about the research. Consent forms will be tailored to either the interview or workshop, again emphasising the voluntary nature of participation.
4. **Integrity and transparency**
   The research will be conducted with integrity and transparency, ensuring that participants have the final say in the publication of their data. Transparency will be maintained throughout the research process, with participants being informed about the stage of the research and any potential complications that may arise.
5. **Defined lines of responsibility and accountability**
   As this research will be carried out by only one researcher the responsibility and accountability are clear.
6. **Maintenance of research independence**
   Research independence will be maintained, and any conflicts of interest will be explicitly addressed. Researchers will maintain transparency throughout the project, informing participants about the research progress and any interactions that may pose potential complications.

The research design also acknowledges the importance of objectivity, aiming to provide a balanced understanding the influence of metagovernance on sustainable mobility transitions in cross-border regions. As the research is based on just one case study it is difficult to claim that the conclusions are completely objective as there can always be a bias that influences the stakeholders.
Integrity and transparency are key principles that will guide the research process, and consent forms will serve as reminders of the voluntary nature of participation and data collection.
By fostering a supportive and open research environment, the participants are encouraged to address conflicts of interest and uncomfortable situations.

04 |

RESULTS

Content

Beneluxtrain that was used as a connection between Amsterdam and Brussels
Photo: Cock Koelewijn

4.1 INTRODUCTION

This chapter presents the results of our comprehensive analysis, structured to methodically address the research question. The chapter's architecture unfolds as follows:

4.1.1 Setting the Context

We commence by establishing the background, focusing on the diverse influences impacting governance. This initial section is crucial as it lays the groundwork for understanding the complexities and dynamics that shape the governance landscape in cross-border mobility projects. The insights gathered here are instrumental in framing the subsequent analysis.

4.1.2 Case Study Analysis

The HSL Case: The first case delves into the High-Speed Line (HSL), explored in a chronological manner. We look into the developments over the years, unraveling the roles and impacts of key stakeholders. This exploration is underpinned by a robust documentary analysis supplemented by a thorough examination of relevant social media narratives, providing a multifaceted view of the HSL's governance journey.

The Hamont-Weert Case: Following a similar approach, the second case study revolves around the Hamont-Weert railway project. As with the HSL, we traverse the timeline of events, dissecting the influence and involvement of various stakeholders. The analysis is enriched through documentary evidence and social media content, offering a comprehensive perspective on the governance processes that shaped the project.

The documentary analysis focuses on official documents—reports, evaluations, and parliamentary records—related to cross-border rail connections. It aims to extract insights from formal channels, providing a structured understanding of the topic. In tandem, we'll explore informal documents and social media discourse to capture a comprehensive view of the dynamics surrounding cross-border rail connections. For the social media analysis news articles, X (twitter), Facebook, and comments below articles were used. The aim is to capture sentiments expressed by citizens who often don't have a formal voice. Taking a temporal approach, the analysis tracks evolving sentiments over time to understand how public perceptions shape and change.

4.1.3 Cross-Case Analysis

Building on the individual case studies, we engage in a cross-case examination. This segment is predominantly anchored in empirical research, primarily derived from interviews conducted with key participants and experts. The cross-case analysis is instrumental in drawing parallels, identifying contrasts, and unearthing patterns across the two cases.

4.2

Influences on governance

Literature review

4.3.1

Case 1 | HSL

Documentary analysis
(Social) Media analysis

4.3.2

Case 2 | Hamont - Weert

Documentary analysis
(Social) Media analysis

4.4

Cross-Case Analysis

Interviews

4.2 INFLUENCING GOVERNANCE

4.2.1 Introduction

To fully understand everything that is at play in the chosen case studies it is worthwhile to take a closer look at different aspects that influence governance. For this thesis the following aspects were investigated:

1. Governmental structure
2. Culture
3. Policy Integration in Planning
4. Public transport systems

4.2.2 Government & Governance

The government structures of the Netherlands and Belgium differ greatly (fig 4.1). The Netherlands has a constitutional monarchy with a parliamentary system. On the other hand Belgium operates under a consistutional monarchy with a federal parliamentary democracy. In The Netherlands the monarch plays mostly a ceremonial role whereas in Belgium the monarch has more significant executive powers. The federal system in Belgium results in very complex structure with powers divided between federal government government, regional governments of Flanders, Wallonia and Brussels and the Dutch, French and German language communities. This results in 4 institutional layers from federal government all the way down to municipalities. The Netherlands has a unitary state where powers are concentrated in the central government resulting in only 3 institutional layers. Looking at these institutional layers and their planning competences another difference shows. Where in The Netherlands the National government has planning powers, the federal Government in Belgium doesn't (Belgische Federale Overheidsdiensten, n.d.; Rijksoverheid, n.d.).

The governance styles in both countries also differ. The Netherlands has a long history of participatory democracy with citizens actively involved in the decision-making process. Therefore, the Netherlands has a governance style that leans to

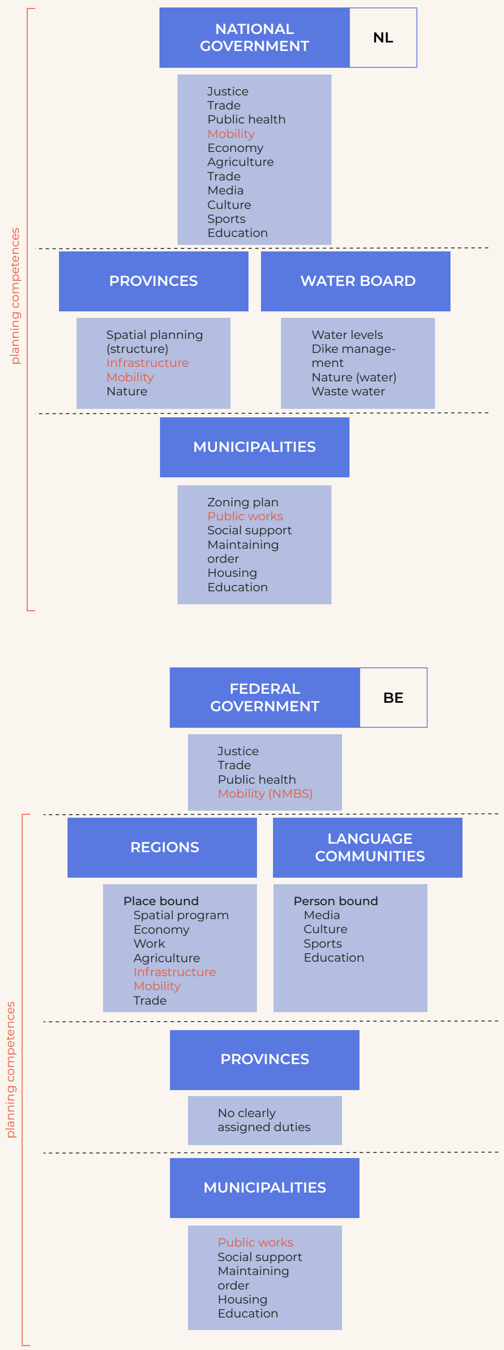


Figure 4.1. Organisational diagrom of the Dutch and Belgian Governments, showing planning competences. In orange it shows the departments in charge of infrastructure and transport (Belgische Federale Overheidsdiensten, n.d.; Rijksoverheid, n.d.).

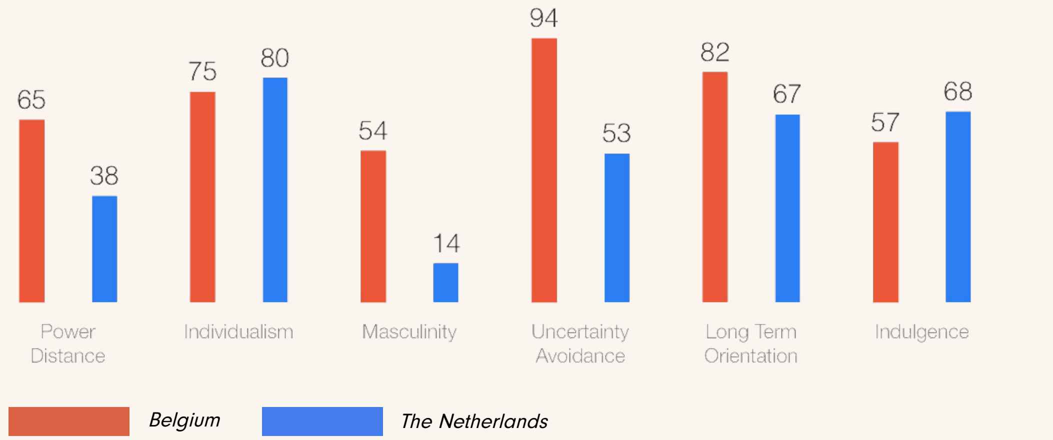


Figure 4.2. Diagram showing the difference scores of The Netherlands and Belgium In Hofstedes Cutural Dimensions Model (Hofstede Insights, n.d.)

network and market governance. Belgium relies on a more representative democracy with in general a hierarchical governance style (Swenden, 2006).

4.2.3 Culture

One way to compare two countries' culture when it comes to international management is Hofstedes cultural dimension model (fig. 4.2). Hofstede introduces six different dimensions, (1) Power Distance, (2) Individualism, (3) Masculinity, (4) Uncertainty Avoidance, (5) Long Term Orientation and (6) Indulgence (Hofstede, 1980).

The first dimension, Power Distance, already shows a significant difference. In Belgium acceptance of power distance is way more accepted. This can be related to the governance style mainly being hierarchical. The Netherlands on the other scores lower and with power being decentralised and a participative character. When it comes to the second dimension of Individualism both countries score very high, meaning that they both prioritise individual interests over group interests. This culture trait could make it difficult to shift to a different method of transportation where personal transport is no longer the standard. Belgium also scores relatively high on the third dimension of masculinity. In general Belgian accept more competition, and value achievement and assertiveness. Comprimising or 'Poldering' as the Netherlands is known for is thus less practiced. The Netherlands on the other hand scores very low and is a more feminine society. The fourth dimension of uncertainty avoidance also shows a big difference. Belgium scores very high where the Netherlands stays in the middle. Making changes is thus very difficult in Belgium as generally they won't easily move away from the current rules and policies. The Netherlands scores lower but also values rules and certainty. Belgium scores very high on the fifth dimension of long term orientation closely followed by The Netherlands. This means that both cultures value long-term planning and perseverance. The last dimension of indulgence is one where The Netherlands scores a little higher. Both countries tend to have a positive attitude and are optimistic, they also value their free time and spend it as they wish (Hofstede Insights, n.d.).

The biggest difference can be found in the power distance, masculinity and uncertainty avoidance, meaning that for these dimensions solutions have to be found to persuade to aim for a change while keeping in mind the cultural norms and values.

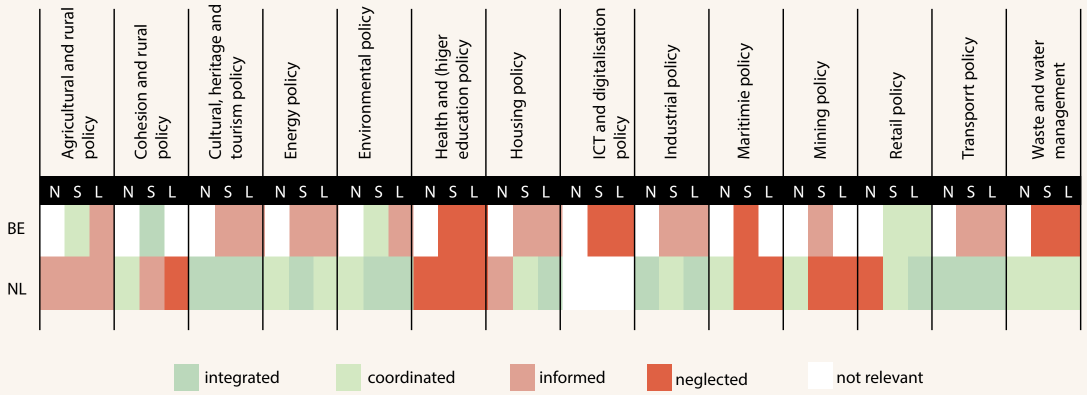


Figure 4.3. Integration of different policy sectors and spatial planning (Nadin et al., 2018) n=national, s=subnational l=local

4.2.4 Policy Integration in Spatial Planning

A comparative analysis of territorial governance and spatial planning systems was done by Nadin et al. (2018). This analysis provides valuable insights on the integration of different policies both regional, and international in spatial planning. An overview given in fig. 4.3 shows the differences between Belgium and The Netherlands. Overall, The Netherlands has more integrated approach when it comes to spatial planning. The most notable policy not being integrated yet is the Cohesion and rural policy which plays a crucial role for large scale system transitions. Belgium has integrated this policy better but lacks integration on almost all other sectors.

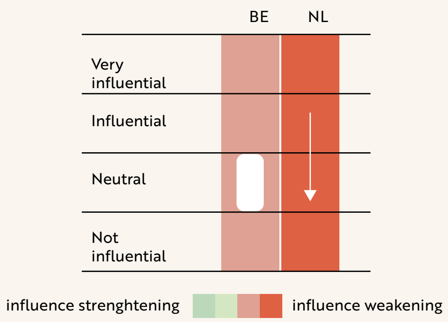


Figure 4.4. Change in the influence of cohesion and rural policy on spatial planning debates between 2000 and 2016 (Nadin et al., 2018)

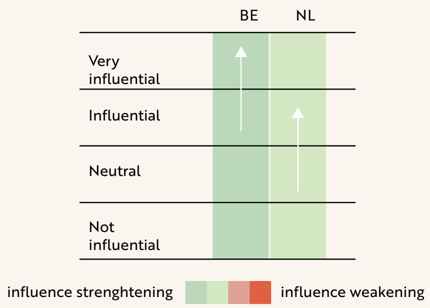


Figure 4.5. Change in the influence of transport policy on spatial planning debates between 2000 and 2016 (Nadin et al., 2018)

For each of these policies the changes influence was documented (Nadin et al., 2018). There are some sectors that are worth looking into for a mobility transitions. First the forementioned Cohesion and rural policy. Both countries show a low level of influence even which is even decreasing in The Netherlands (fig. 4.4). When it comes the Transport policy both countries are strengthening the influence on spatial planning debates (fig 4.5). Lastly, we can look at the change in citizen engagement in relation to spatial planning and teritiorial governance processes. Both countries show an movement towards more engagement, but Belgium is currently performing lower than The Netherlands (fig 4.6). This all together creates the need for a better integration of cohesion and rural policies and citizen engagement in future mobility strategies. Both

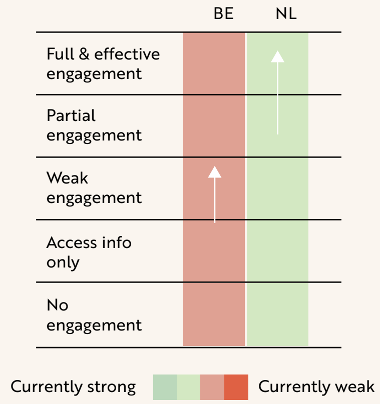


Figure 4.6. Change in citizen engagement in spatial planning and territorial governance processes 2000 - 2016 (Nadin et al., 2018)

these aspects are of importance as the rural areas will be highly impacted and systemic changes need the support of citizens to succeed. Involving them in the process can create the necessary support.

4.2.5. Public Transport Systems

The public transport systems in the Netherlands and Belgium differ in several ways, including market type, operators, and infrastructure companies (Table 4.1). In the Netherlands, the public transport system is characterizsd by a semi-open market with concessions except for the main train network and the largest cities (Ministerie van Infrastructuur en Waterstaat, 2021). In contrast, the public transport system in Belgium is more centralized, with state-owned companies holding a monopoly on most public transport services (Belgische Federale Overheidsdiensten, n.d.-b). In the Netherlands, the main operators of public transport services are private companies such as Connexxion, Arriva, and Keolis, as well as the state-owned Nederlandse Spoorwegen (NS) railway company. In Belgium, the main operators of public transport services are state-owned companies, including the National Spoorwegen Maatschappij België (NSMB) for trains services and De Lijn buses, and trams in the Flanders region (Belgische Federale Overheidsdiensten, n.d.-b). Both countries have a separate company that is responsible for the rail infrastructure and are state-owned.

These two different approaches lead to a more competitive environment in the Netherlands with a diverse range of services, while in Belgium there is greater coordination between modes, but less innovation.

Table 4.1 Comparison between Dutch and Belgian public transport systems based on (Ministerie van Infrastructuur en Waterstaat, 2021 & Belgische Federale Overheidsdiensten, n.d.-b.)

	The Netherlands	Belgium
Market type	Semi-open market Concessions (expections for main train network and cities of The Hague, Rotterdam and Amsterdam)	Closed market Monopoly (exceptions for international services)
Train operators	NS, Arriva, QBuzz, Connexion, etc.	NSMB
Tram, Metro, Bus operators	Arriva, QBuzz, Connexion, EBS, RET, GVB, HTM	De Lijn - Flanders TEC - Wallonia MIVB - Brussels
Infrastructure (rail)	Prorail	Infrabel

4.3 CASE STUDY ANALYSIS

4.3.1 HSL-Zuid

This case study analysis includes both the documentary and social media analysis. The findings are discussed in a chronological order. The difference between official documents and public opinion is portrayed by the blue line. With the blue line indicating that it is public opinion.

As the HSL was built in the early 2000's and the planning was done at the end of the 20th century there is no social media available that portrays public opinion. Instead news articiles and interviews published at that time are used.

4.3.1.1 First study

The first exploration into the HSL dates back to the 1970's. During this period both France and Germany were working on their high-speed rail networks, respectively, the TGV and ICE. In the Netherlands the first study starts in 1973, called AMROBEL (Amsterdam-Rotterdam-Belgium). This study is ordered by the Directorate-General Traffic and also includes stakeholders such as NS, the Provinces and Ministry of VROM (Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer) (Reconstructie HSL-Zuid: Besluitvorming uitvergroot, 2004). The study is finished in 1977 and mentions the following principles are set (Ministerie van Verkeer en Waterstaat, 1977):

- Relieving the parallel infrastructure;
- Taking over short and medium-haul air traffic;
- Connection to the Channel Tunnel (between France and the UK);
- Connection to a high-quality European high-speed network to prevent an isolated position of the Netherlands in this regard.

4.3.1.2 International Study

In the 1984 an international working group for the PBKA-project (Paris-Brussels-Cologne-Amsterdam) is tasked with a feasibility study of high-speed rail corridors in Western Europe. The report is finished in 1986 and is seen as in important milestone (Reconstructie HSL-Zuid: Besluitvorming uitvergroot, 2004). It describes the 4 different trajectories of the new rail line, including if they use old or new infrastructure and travel times. As a result, Minister Smit-Kroes of Infrastructure and Water gives her preference to a variant that bypasses Antwerpen and stresses the need for new infrastructure within the Netherlands, this also seems to be profitable.

public opinion

Opposition in 1990

In 1990, the contentious decision regarding the High-Speed Line (HSL) route triggered fervent protests from local municipal authorities. The Alderman of Leiderdorp strongly opposed the proposed route, asserting that it would be detrimental to the city's inhabitants. The resounding message was a commitment to do everything within their power to avert what they perceived as a potential disaster (Leidsch Dagblad, 1990).

4.3.1.3 Optimism & Rigidity

What follows is a period of 25 years between the publication of the report and the completion of the new high-speedline marked by fluctuating sentiments. Initially, optimism prevails regarding the connection to this new European transportation system. The necessity of it remains scarcely disputed over those 25 years, but enthusiasm wanes at regular intervals. This is primarily due to a turbulent process of preparation, decision-making, and implementation. This process is dominated by an overly rigid stance of the various cabinets involved in the HSL-Zuid. This rigidity is evident in various aspects: first, in an initial policy document that needs to be withdrawn during public consultation due to insufficient justification. Second, in a contentious parliamentary debate where the government appears unwilling to distance itself from the preferred option. Third, in a procurement procedure that unfolds as both haphazard and mysterious (Reconstructie HSL-Zuid: Besluitvorming uitvergroot, 2004).

public opinion

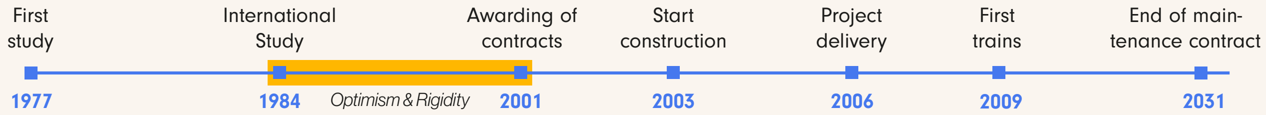
Rising Resistance in 1995

By 1995, the resistance against the HSL, along with other rail projects, gained traction. An article in De Groene Amsterdammer raised concerns about the environmental impact of new rail lines, emphasizing potential drawbacks for nature and the environment. Despite prevailing cynicism, a subtle shift was noted in the government's approach to citizens. Rijkswaterstaat's 'Infralab' experiment, involving stakeholder collaboration to identify and address issues before formal planning, marked a departure from conventional practices. However, challenges like 'projects without backyards' highlighted the complexities of large-scale infrastructure projects. The article also contemplated the possibility of a national corrective referendum, acknowledging a perceived gap between government decisions and public sentiments (De Rijk, 1995).

4.3.1.4 Relation Belgium & the Netherlands

Looking closer into the relation of The Netherlands and Belgium during this time, it is a period marked by ongoing negotiations and challenges. The Dutch government sets up a PKB in 1987, a PKB is an official document that concerns itself with long term spatial planning decisions. In the Netherlands decision concerning the route were made and released over time with a definitive agreement with Belgium pending, and financial negotiations still ongoing (Reconstructie HSL-Zuid: Besluitvorming uitvergroot, 2004). The Dutch approach is causing irritation among the Belgian negotiating partners. They are surprised that the Netherlands appears to have already chosen a route before negotiations with Belgium have been concluded (PBL, 2007).

During this time the Dutch government releases multiple document under the PKB procedure for the HSL-Zuid without finalising matters with Belgium. Successive Ministers focus their attention on the "Belgium dossier," particularly the debate over routes. In late 1996, a final agreement is reached, with Belgium accepting the route preferred by the Netherlands through Breda in exchange for a one-time payment of NLG 823 million from the Netherlands. Achieving this final



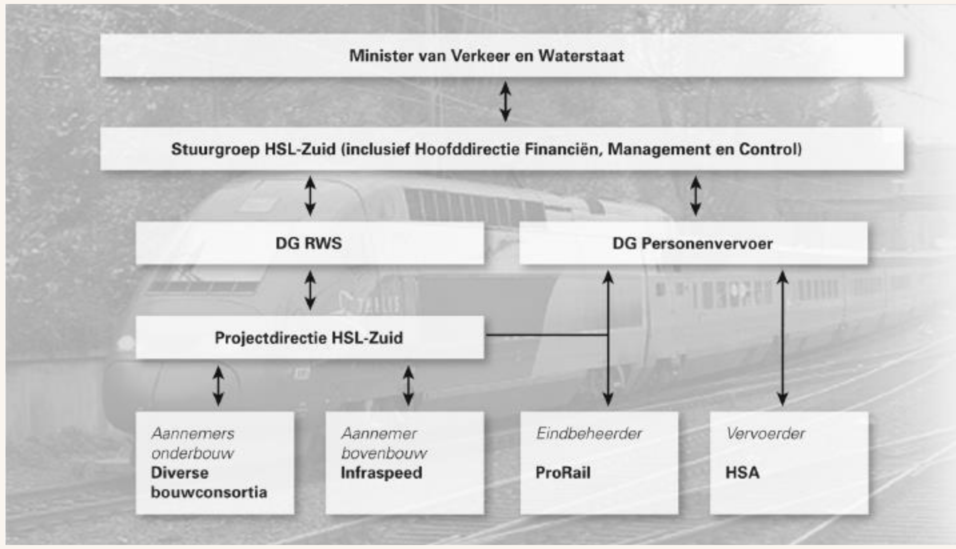


Figure 4.7 Overview of project organisation of HSL-Zuid (Algemene Rekenkamer, 2007)

result required the government to repeatedly adjust the negotiating mandate of the Minister of Transport and Public Works. It takes until 1997 for the final PKB to be released, that finally includes the outcome of negotiations with Belgium. One significant contributing factor to the delay between the appearance of the start note for the PKB HSL in 1987 and the approval of the PKB in 1997 lies in the protracted negotiations with Belgium regarding the HSL route. Many crucial aspects, such as the allocation of costs and benefits, travel times, and city service, are subjects of negotiations between the national railway companies (Reconstructie HSL-Zuid: Besluitvorming uitvergroot, 2004).

public opinion

Shifting Sentiments in 1998
Fast forward to 1998, and a Leidsch Dagblad article painted a more optimistic picture of local sentiments toward the HSL. A survey by the NIPO research bureau, encompassing 770 local residents and an additional 500 citizens from across the country, revealed that half of the respondents considered the train crucial for the Dutch economy. A smaller portion acknowledged environmental benefits. Despite the intricate political process, residents expressed overall satisfaction with the information provided, albeit with a desire for more details on potential disruptions and safety in the area. Intriguingly, while the majority conveyed contentment with the information flow, there was a noticeable gap in knowledge about the HSL itself, indicating a need for enhanced public education on the project (Kramp, 1998).

4.3.1.5 Contracts and Start of Construction
The infrastructure project involved a two-phase contracting approach. The substructure was awarded through a Design and Construct format, with a total of seven contracts executed for its realisation. On the other hand, the superstructure was eventually procured through a Public-Private Partnership (PPP) construction in the form of a Design, Build, Finance, and Maintain (DBFM) contract. In 2001, Infraspeed was awarded this contract, tasked with constructing and maintaining the superstructure for 25 years in exchange for an annual fee (obtainable from the moment the line became 'available') (Algemene Rekenkamer, 2014).

The organisational structure evolved during the project. Initially, from 1997 to 2002, a project organisation, consisting of RWS, NS-RIB, and consulting firms DHV and Holland Railconsult, operated under the Directorate-General for Passenger Transport (DGP) (Algemene Rekenkamer, 2007). However, from March 4, 2002, the implementation organisation took charge with a new distribution of tasks and authorities. Rijkswaterstaat managed the contracts for the construction of both substructure and superstructure, connection to the existing rail, and handled inter-contract interfaces while being responsible for risk management and timely and budgeted completion of the substructure. DGP was responsible for necessary adjustments in legislation, such as amendments to the Railway Act. In the operational phase, DGP would oversee the transport concession with HSA and infrastructure management (ProRail would manage

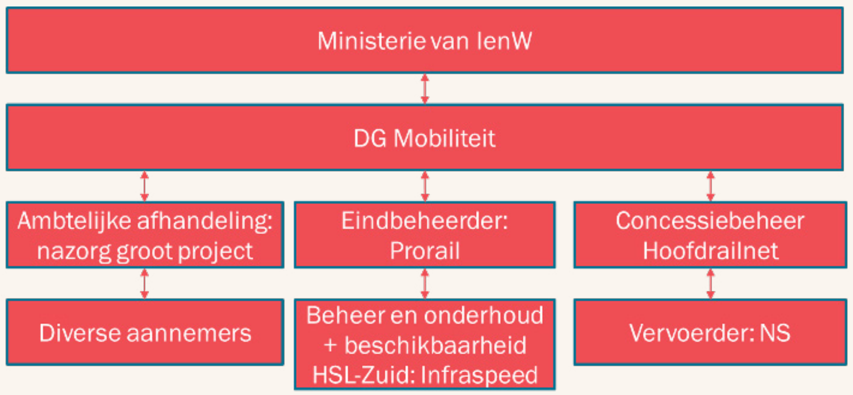


Figure 4.8 Overview of project organisation of HSL-Zuid in 2019 (Decisio, 2020)

the contract with Infraspeed on behalf of DGP for the 25-year operation and maintenance of the HSL) (Decisio, 2020). Figure 4.7 has an overview of the project organisation (Algemene Rekenkamer, 2007).

The prevalent "market thinking" played a crucial role in the approach to HSL infrastructure contracts. The government aimed to achieve savings through public-private collaboration and the D&C construction method for both substructure and superstructure contracts. However, for the substructure, submitted bids turned out to be significantly more expensive than budgeted, attributed to low estimates, unfamiliarity with the new contract form, potential cartel activities, and negotiation challenges. Intense negotiations followed, laying out risks for the government (Algemene Rekenkamer, 2007).

The chosen PPP approach for contracting, more of a governmental preference than market demand, complicated the outsourcing of construction, management, and operation of the HSL-Zuid to market parties. Many financial risks remained with the government, leading to a situation dominated by distrust and hindering effective collaboration.

As the Temporary Commission on Infrastructure notes, "the model for the contracting of the HSL-Zuid was significantly influenced by thinking about the market and the role of PPP that gained currency in the late nineties." (Reconstructie HSL-Zuid: Besluitvorming uitvergroot, 2004)

With the expectation of cost savings in mind, the government sought to achieve efficiencies in the construction costs of the substructure through D&C contracts. The government believed that D&C is a contract form in which responsibility for design and construction, along with associated risks, is transferred to the contractor. This contract form generally motivates contractors to optimize the construction process with clever solutions in design or construction methods, thereby achieving substantial savings in construction costs or reducing construction time (Reconstructie HSL-Zuid: Besluitvorming uitvergroot, 2004).

However, the project organisation's anticipated contract value of 4.17 billion guilders for the five substructure contracts (excluding the bored tunnel) exceeded this amount by 1.5 billion guilders. This surpassed the available budget of 3.9 billion guilders by a considerable margin. The tender board, advising the project organisation, identified causes such as limited capacity, the complexity of the project, and the short timeframe as contributing factors to the budget overrun (Decisio, 2020; Reconstructie HSL-Zuid: Besluitvorming uitvergroot, 2004).

Eventually the HSL-project was finished in 2006 with the first trains testing the tracks slowly after this. It took until 2009 before the national and international trains started using the HSL.

4.3.1.6 Later years
With the completion of the infrastructure the project organisation changed again (fig. 4.8). In 2019 there is now one overarching department controlling the project mainly focusing on maintenance. Furthermore the HSA (High Speed Alliance) that was supposed to operate the train services has gone bankrupt and has been replaced by NS as the HSL is now incorporated in the Hoofdrailnet concession (Decisio, 2020).

public opinion

Operational Focus in Subsequent Years
In subsequent years, as the HSL project progressed, a noticeable shift in news coverage emerged. Later articles predominantly centered around reporting on project advancements, providing updates on construction milestones, technical developments, and logistical achievements. Notably, there was a discernible decrease in articles highlighting public sentiments or local reactions. This shift in media focus reflects a transition from the initial stages of contention and public engagement to a more operational phase of the infrastructure project.

4.3.1.7 Input for interviews
The documentary analysis provided invaluable insights for shaping the interviews. In particular, understanding the nuances of the contract setup

and identifying the opportunities and barriers inherent to these contracts and the project. Furthermore, the intricacies of the DBFM (Design, Build, Finance, and Maintain) contract with Infraspeed, unraveling the roles, responsibilities, and expectations outlined in this agreement, were used to set up the questions. The analysis also shows that the dynamics of communication between various parties could be of interest during the interviews, with a special focus on coordination between Dutch and Belgian contractors was achieved. By grounding the interviews in the findings of the documentary analysis, a comprehensive understanding of the collaborative efforts and challenges during the implementation of the High-Speed Line project was actively pursued.

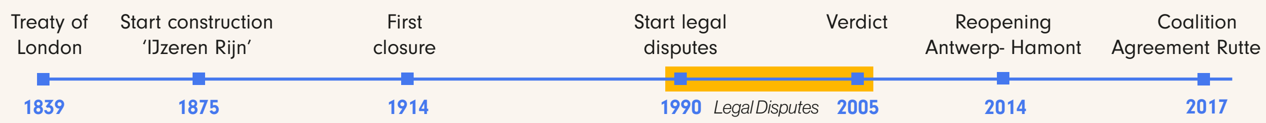
4.3.1.8 Conclusion
It's imperative to acknowledge that this analysis primarily concentrates on the formative years and planning stages of new infrastructure, examining the dynamic interplay between the government, citizens, and evolving public perceptions. The shift in media emphasis to technical and operational aspects underscores the natural progression of infrastructure projects from conceptualization to implementation.

This thesis intentionally excludes the operational phase post-completion of the new railway, as its primary objective is to delve into the intricate process of creating and establishing new infrastructure. By narrowing the scope to the developmental phases and initial public interactions, this analysis seeks to offer valuable insights into the challenges, successes, and evolving attitudes surrounding large-scale infrastructure projects during their crucial early years.

The evolving sentiments captured in the chronicles of the HSL project from 1990 to 1998 reflect a nuanced interplay between public perceptions, governmental decision-making, and the ongoing discourse surrounding large-scale infrastructure development. The initial opposition gradually gave way to a more positive outlook, marked by a growing recognition of the economic importance of the HSL. However, the journey also underscored the need for effective communication and public engagement to bridge the information gap and foster a more informed and participatory dialogue on critical infrastructure initiatives.

4.3.2 Hamont-Weert

4.3.2.1 Early years
In the 1830s, the separation of the Netherlands and Belgium gave rise to territorial disputes that persisted for approximately eight years. It wasn't until the Treaty of London in 1839, also known as 'de 24 artikelen' in Dutch, that the differences were resolved, and the Netherlands officially recognized the independence of Belgium. This treaty significantly influenced the delineation of borders, with the Netherlands claiming Limburg, creating a partial separation of Belgium from the industrial Ruhr area. Article 12 of the Treaty of London specifically guaranteed Belgium the right of transit by rail or canal over Dutch territory, providing access to the German Ruhr (Treaty of London, Tractaat Tussen Het Koninkrijk Der Nederlanden En Het Koninkrijk België Betreffende de Scheiding Der Wederzijdse Grondgebieden, 1839).



Interestingly, rather than relying on Article 12, in 1843, Belgium completed the construction of the first Iron Rhine, connecting Antwerp, Leuven, Liege, Aachen, and Cologne. This railway traversed the hilly regions of Belgium just south of the Dutch border near Maastricht.

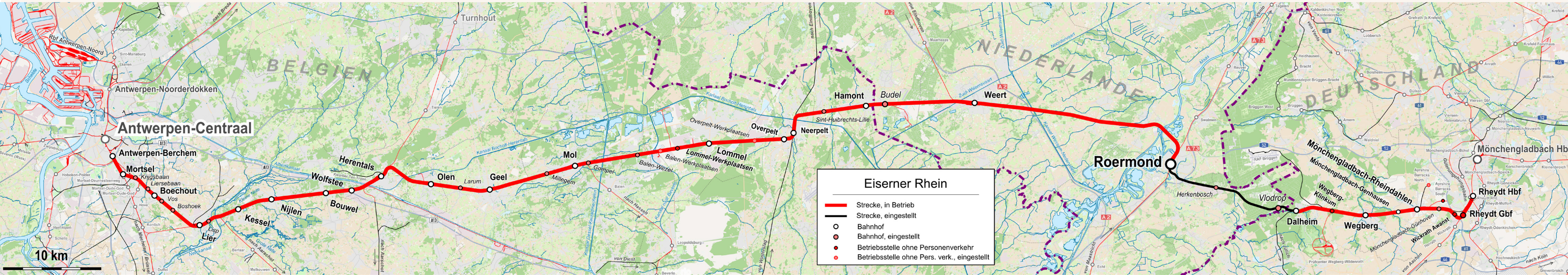
4.3.2.2 Building a new railway line
On May 31, 1863, the Belgian government issued a decree aimed at outsourcing the route from 'Article 12' to a private enterprise, as detailed in historical records (Belgien Parlament Chambre des Représentants, 1873).

Construction commenced in 1875, with the formal opening of the (second) Iron Rhine (fig 4.9) taking place on July 20, 1879. Initially, the railway was singular in its configuration, but the infrastructure was designed to accommodate a second track. As traffic increased, the line underwent almost complete duplication. By 1910, a thousand wagons passed through daily, and transportation operations continued day and night (Freriks, 2004). Notably, passenger trains also operated, catering to German citizens boarding ships in Antwerp bound for the United States (Baedeker, 1880)

4.3.2.3 Deactivation
Following the outbreak of the First World War in 1914, the Iron Rhine was closed to German rail traffic, citing Dutch neutrality. After the war, it was reactivated, but its significance steadily waned. Between 1915 and 1917, the Germans constructed an alternative rail line, known as the Montzenroute or Montzenlijn. This new route connected the port of Antwerp to Aachen in Germany, passing through Aarschot, Hasselt, the Voerstreek, and Montzen, bypassing the southernmost point of the Netherlands. Belgium increasingly favored this alternative after 1918. It traversed Belgian territory entirely, making it easier to manage and more cost-effective due to customs control solely at the German border (De Jonge, 2023; Ministerie van Verkeer en Waterstaat, 2001).

Over time, the volume of freight trains gradually decreased, with only 2-4 trains currently running daily in 2001 (Ministerie van Verkeer en Waterstaat, 2001). Concurrently, the number of passenger trains also declined, eventually ceasing around the 1950s when cars took over trains as the primary mode of transportation (Temmerman, 2014).

Figure 4.9 (below) Map of the Iron Rhine connecting Antwerpen with Mönchengladbach (Pechristener, 2015)



4.3.2.4 Legal disputes

In a landmark ruling on May 24, 2005, the Permanent Court of Arbitration settled a longstanding dispute between Belgium and the Netherlands regarding the railway track, reaffirming the right of passage (Permanent Court of Arbitration, 2004).

The roots of this legal battle trace back to the 1990s when the Montzenroute, an alternative rail line, reached its capacity. Faced with a surge in freight transportation and in alignment with the European policy for a modal shift, Belgium reconsidered the viability of the shorter and flatter Iron Rhine as an additional connection between Antwerp and the Rhineland. This led to negotiations initiated by the Belgian government, acting on behalf of NMBS, in 1998 with the Netherlands and Germany for the reopening of the Iron Rhine (Blomme, 1998)

However, the Netherlands raised concerns, arguing that the passage through the nature reserve Meinweg should receive 'protective environmental conditions' (Permanent Court of Arbitration, 2004). Belgium countered, asserting the continued validity of the right to a connection over Dutch territory as outlined in Article 12 of the 24 Articles. Furthermore, Belgium emphasized that the regional benefits of transporting goods by train instead of trucks outweighed the impact on 'Meinweg.' (Blomme, 2000) Public opinion in Belgium speculated that the Netherlands might be leveraging ecological concerns to intentionally delay the reactivation. The potential strengthening of the port of Antwerp, at the expense of the port of Rotterdam, and the anticipated reduction of traffic via the Betuweroute, scheduled to open in 2007, added complexity to the situation.

In July 2003, both nations sought resolution from the globally competent Permanent Court of Arbitration in The Hague. The legal question centered around whether the Netherlands could impose a modified or new route and who should bear the associated costs. The verdict, announced on May 24, 2005, clarified that Belgium could demand the reactivation of the existing route, and the Netherlands could not hinder this with unilateral decisions and excessive costs. The financial responsibility for reactivation primarily fell on the Netherlands, given their ownership of the line and maintenance obligations.

However, Belgium was obligated to contribute to environmental protection measures, including tunnels, sound barriers, or detours, and the exact cost-sharing needed further investigation (Permanent Court of Arbitration, 2004). This legal resolution marked a crucial turning point in the protracted Iron Rhine saga, providing clarity on the route's future and the responsibilities of both nations.

4.3.2.5 Recent years

Freight services on the IJzeren Rijn have reached an all-time low, with approximately 12 trains running on weekdays, mostly heading to the port of Antwerp, and only 2 trains utilizing the rail infrastructure between the Dutch border and Weert (Twynstra Gudde & Decisio, 2019)

public opinion

Petition and Local Support (2012-2013)
In 2012, a grassroots movement materialised, propelled by a petition aimed at reopening the IJzeren Rijn for passenger services. Garnering 4,100 signatures, predominantly from local officials and municipalities, this initiative gained traction and materialized in the summer of 2013 (Brouwers, 2012).

Social Media Advocacy (2010-2015)
Simultaneously, a Facebook group, "De trein van Neerpelt naar Hamont (of Weert) is wel nuttig," was initiated in 2010. This group actively disseminated news articles on the potential reopening of the railway, shedding light on Dutch vehicles at Hamont train station and questioning the delay in extending the line to Weert (Tijskens, 2015). While the group conveyed positive sentiments and underscored the perceived necessity of the new passage service, varying levels of awareness about the project's complexity surfaced. Over time, the group retained an optimistic outlook but witnessed a decline in activity (Tijskens, 2010)

In Belgium, the connecting Line 19 became operational for passenger transport up to Hamont in 2014, and the route was electrified in 2020. The NMBS currently operates an intercity service between Antwerp and Hamont (Rebel Group, 2023).

public opinion

Twitter Activism and Disappointment (2012-2014)
Twitter played a pivotal role in amplifying advocacy efforts, with hashtags like #struisvogel spotlighting individuals who could contribute to the reopening (Kelchtermans, 2012). By 2014, a sense of disappointment and impatience permeated Twitter discussions, fueled by perceptions of a sluggish pace, especially when juxtaposed with advancements in Belgium (Gabriels, 2014).

Symbolic Train Ride
In 2015, a symbolic train ride unfolded, showcasing the potential of revitalizing the railway for tourism (fig. 4.10) (Helsen, 2015). Concurrently, working groups amassed ten thousand signatures for a petition advocating passenger transport between Hamont and Dutch municipalities, emphasizing the imperative of cross-border collaboration (Nieuwsblad, 2015).

In a surprising turn of events, the IJzeren Rijn found a place in the coalition accord in 2017, sparking local groups' astonishment. The accord stated, "In connection with the Belgian investment on the Antwerp - Hamont line, the connecting section Hamont - Weert will be reactivated for passenger trains, with co-financing from regional governments" (Rijksoverheid, 2017).

With the commitments outlined in the coalition accord, the Ministry of Infrastructure and Water granted ProRail the task of conducting a quick scan in 2018. Subsequent second opinions and multiple cost-benefit analyses were carried out, revealing estimated costs ranging between 50 – 150 million euros (ProRail, 2019). This led to the ministry postponing the decision, as reported by the Rebel Group (2023).

In 2022, the Secretary of State pledged to commission a new study on minimal investments. Rebel Group conducted this research, proposing a departure from Dutch or mixed standards in favor of building according to Belgian rail standards. This resulted in a significant cost reduction,

Figure 4.10 (below) Impression of last passenger train running on the IJzeren Rijn, part of a symbolic train ride to show tourism potential (Helsen, 2015)

making it a viable option. However, with the fall of the cabinet, the final decision has been deferred, leaving the matter currently unresolved (Rebel Group, 2023; Actualiteiten Internationaal Spoor Zuid, 2023).
The future of the IJzeren Rijn remains uncertain as it navigates through a complex web of political, financial, and infrastructural considerations.

public opinion

Continued Advocacy (2017-2022)
The year 2017 marked a significant inclusion of the project in the government coalition agreement, eliciting both enthusiasm and skepticism within lobby groups (TreinWeertBelgië, 2017). Subsequently, social media platforms became vibrant hubs for intensified discussions.

Fast forward to 2022, where the lobby group vTv presented a petition to BBB (fig 4.11), evoking positive responses. Conversations ensued, delving into the prospect of reopening the Antwerp-Hamont-Weert route, prompting inquiries regarding its connection to the broader narrative of the IJzeren Rijn (BBB BoerBurgerBeweging, 2022).

4.3.2.6 input interviews
The documentary analysis provides crucial historical context and invaluable insights for the forthcoming interviews on the "IJzeren Rijn" project. Recognizing this historical background becomes instrumental in guiding interviewees through questions and elucidating their perspectives on the ongoing project. It is essential to remain attuned to other interests at play, particularly the emergence of a new freight corridor, as this can significantly influence the discussions and also has done in the past. Some interviewees may naturally touch upon these aspects, shedding light on their relevance. Additionally, delving into the diverse roles of various interviewees throughout different studies is intriguing and can offer deeper insights into the reasons behind multiple studies and the recurring delays in decision-making. Exploring these facets will enrich the understanding of the project's complexities and the dynamics shaping its trajectory.

Figure 4.11 (below) Lobby group vTv presenting the petition to members of Political Party BoerBurgerBeweging (BBB BoerBurgerBeweging, 2022)

4.3.2.7 Conclusion
The journey to reactivate the IJzeren Rijn has been characterised by the collective efforts of grassroots movements, social media advocacy, and significant moments in political discourse. While optimism and determination have propelled the cause forward, occasional disappointments and complexities inherent in cross-border projects have added layers of nuance to the narrative.

4.4 CROSS-CASE ANALYSIS

4.4.1 Introduction

The cross-case analysis in this chapter offers a nuanced exploration of governance dynamics as revealed through the empirical research. Guided by the methodology outlined earlier, the analysis employs the 50 features of governance, as conceptualised by Meuleman (2019), to systematically code the interview data. These features provide a structured lens to identify and analyse the various governance styles referenced by the interview participants. Alongside these predetermined categories, the analysis evolved to include additional code categories emerging from the data. This led to the creation of two new categories: (1) 'Politics NL vs BE,' highlighting the national differences in governance approaches between the Netherlands and Belgium, and (2) 'Other,' a category encompassing miscellaneous but relevant themes. An overview of the features mentioned and coded can be seen in table 4.3. The numbers between brackets states how often these codes or categories were mentioned in unique quotes. The codes in the two new categories are listed in table 4.4.

Moreover, to gain a deeper understanding of the value placed on cross-border connections by the participants, their perspectives were specifically solicited. Significantly, the interviews revealed three critical tensions and one process observation, each meriting individual attention:

Tension #1: *National and Regional Imbalance in Decision-Making – This tension scrutinizes the disparities between national and regional influences in the decision-making processes, highlighting the complexities in governance across different administrative levels.*

Tension #2: *Formal and Informal Routes to Decision-Making and Flexibility – This area explores the dichotomy between formal governance structures and the informal, often more flexible, pathways that influence decision-making processes.*

Tension #3: *Conflicting Interests/Bridging the Gap – This tension addresses the challenge of reconciling divergent interests, focusing on strategies to bridge gaps between various stakeholders.*

Process Observation: *Mixing of Governance Styles – This observation critically examines the current usage and combination of different governance styles in cross-border projects. It delves into the intricacies of how these varied approaches are blended and the subsequent governance failures that may arise*

Each of these tensions is followed by a conclusive summary, distilling key findings and pertinent recommendations. The process observation provides additional insights into the dynamics of governance in practice.

Table 4.2. Overview of participants, including function/ organistion, involved case and country of origin

	Function	Case	Origin
Participant 1	vTv lobby group	IJzeren Rijn (Hamont-Weert)	BE
Participant 2	vTv lobby group	IJzeren Rijn (Hamont-Weert)	NL
Participant 3	Rover Limburg	IJzeren Rijn (Hamont-Weert)	NL
Participant 4	Infraspeed	HSL	NL
Participant 5	Rover National	HSL/IJzeren Rijn (Hamont-Weert	NL
Participant 6	Province of Limburg	IJzeren Rijn (Hamont-Weert)	NL
Participant 7	Municipality of Weert	IJzeren Rijn (Hamont-Weert)	NL
Participant 8	Prorail	HSL	NL
Participant 9	BAM groep	HSL	NL
Participant 10	Ministry of Infrastructure & Water, The Netherlands	HSL	NL
Participant 11	Federal Government of Belgium	IJzeren Rijn (Hamont-Weert)	BE
Participant 12	Federal Government of Belgium/NMBS	IJzeren Rijn (Hamont-Weert)	BE

Table 4.3. (continues on next page) Overview of governance features and their occurence in the interviews with participants.

Governance Features	Hierarchical	Network	Market
Vision & Strategy [39]			
Roles of government [3]	Government delivers societal services [0]	Government is partner in a network society [3]	Government rules society [0]
Strategy styles [4]	Learning style; chaos style; coping with unpredictability [1]	Planning and design style; power style; compliance to rules and control [3]	Power style; getting competitive advantage [0]
Orientation of organisation [8]	Top-down formal [5]	Horizontal, formal [4]	Bottom-up, suspicious [0]
How actors are perceived [26]	Subjects [5]	Partners [18]	Clients [4]
Selection of actors [2]	Controlled by written rules [0]	Free, ruled by trust [2]	Free, ruled by price [0]
Institutions & Instruments [90]			
Institutional logic [34]	Line organisation, centralised [18]	Soft structure [6]	Decentralised, semi-autonomous units [12]
Typical policy instruments [5]	Law-making, control mechanisms, penalties [5]	Networks, stakeholder engagement [0]	Incentives, awards [1]
Unit of decision-making [9]	Public authority [9]	Group [0]	Individual [0]
Transaction types [5]	Unilateral [3]	Multilateral [1]	Bi- and multilateral [2]
Degree of flexibility [9]	Low to medium flexibility [5]	Medium flexibility [2]	High flexibility [2]
Commitment among parties [5]	Low/pulbic private partnerships [2]	Medium to high/multi-stakeholder partnerships [0]	Medium to high public private partnerships [3]
Communication styles [7]	Communication about policy [2]	Communication for policy [5]	Communication as policy [0]
Roles of knowledge [11]	Expertise for effectiveness of ruling [4]	Knowledge as a shared good [7]	Knowledge for competitive advantage [2]
Approaches to impact assessment [15]	Evidence based policy making [1]	Inclusive assessment of policy options [4]	Cost-benefit anlaysis [12]

Table 4.3. (continued) Overview of governance features and their occurence in the interviews with participants.

Governance Features	Hierarchical	Network	Market
Processes & People [39]			
Public sector reform approach [11]	Top-down [3]	Inclusive [4]	Outsourced expertise [5]
Relation types [4]	Dependent [0]	Interdependent [4]	Independent [0]
Roles of public managers [11]	Clerks and Martyrs [3]	Explorers producing public value [1]	Efficiency and market maximizers[0]
Leadership styles [8]	Command and Control [2]	Coaching and supporting [3]	Delegating, enabling [3]
Degree of empower-ment inside organisations [11]	Low [3]	Empowered lower officials [9]	Empowered senior managers [0]
Conflict resolution types [5]	Classical negotiation, power-based (win-lose) [1]	Mutual gians approach (win-win) [4]	Classical negotiation, comp-etition based (win-lose) [0]
Problems & Solutions [26]			
Typical governan-ce failures [15]	Ineffectiveness; red tape [8]	Never-ending talks, no decision, undemocratic [5]	Economic inefficiency, market failures [2]
Role of public procurement [7]	To establish stable relations with suppliers [0]	To stimulate innovation partnerships [3]	To stimulate competition among suppliers; create new markets [4]
Typical output and outcome [5]	Laws, regulations, control, procedures [0]	Expert networks, consensus, voluntary agreements [1]	Services, products, contracts, outsourcing [4]

Table 4.4. Additional categories and codes and their occurence in the interviews with participants

Politics Netherlands & Belgium [25]
Communication problems [1]
Conflicting interests [11]
Differences in organisation of government [10]
Different laws [2]
Processes not synchornised [2]

Other [40]
Active approach [13]
Border regions are left behind [3]
Responsibilities/ complexity [6]
Thinking in Silos [9]
Value of Cross-border connections [10]

4.4.2 The value of cross-border connections

Before diving into the detailed analysis of the three tensions and the process observation, it is essential to consider the foundational views of our interviewees regarding the value of cross-border connections. At the onset of each interview, participants were explicitly asked about their perspectives on this topic. Their responses serve as a critical backdrop, providing context and depth to the subsequent analysis of the tensions and process observations. This initial inquiry into their opinions not only sets the tone for the interviews but also offers valuable insights into the underlying attitudes and beliefs that may influence their perspectives on the more complex issues discussed later.

The value of cross-border connections in the realm of rail infrastructure is a multifaceted consideration, influenced by political, environmental, and economic factors. Participant 4 highlights the significance of cross-border connections by pointing out that Belgium, especially in the Weert-Hamont region, has advanced concerns about traffic and climate. However, Participant 4 also adds a nuanced perspective, indicating that while political rhetoric may acknowledge the importance of public transport, it often ranks low in priority during government formations.

In the context of the Hamont-Weert case, cross-border connections become crucial for strategic regional development. Participant 5 emphasises the strategic significance of connecting South Netherlands to Antwerp, Düsseldorf, Aachen, and Liege through HSL links, underlining the philosophy that frequent access to HSL networks is more feasible than establishing a dedicated HSL in Limburg. Participant 6 echoes this sentiment, emphasizing the practicality of cross-border connections for daily commuting and regional development, acknowledging that people naturally cross borders for various reasons, be it for education, work, or recreation.

However, not all participants universally advocate for every cross-border rail connection. Participant 7 raises a critical question about the general applicability of cross-border travel, suggesting that it's essential to evaluate the necessity of each cross-border connection individually. This sentiment is further echoed by Participant 8, who stresses the importance of more sustainable transportation without necessarily endorsing every cross-border train route.

The recognition of cross-border connections as a means of promoting sustainability and reducing air travel is evident in Participant 10's perspective. They highlight the role of rail infrastructure in facilitating the transition to more sustainable modes of transportation. Additionally, Participant 11 acknowledges the historical underinvestment in cross-border rail connections and the need to address this deficit, particularly between Belgium and the Netherlands.

The importance of thinking beyond short-distance connections is underscored by Participant 11, who emphasizes the significance of international rail connections like Weert-Antwerp rather than limited cross-border routes like Hamont-Weert. This perspective aligns with the idea that such connections open gateways not just to neighbouring countries but also to more distant destinations.

In summary, the value of cross-border rail connections is viewed through a lens that considers regional development, environmental sustainability, and practical commuting needs. While participants generally recognise their importance, there is a nuanced evaluation of each connection's necessity and strategic significance.

4.4.3 Tension #1 National and Regional Imbalance in Decision-Making

Within the intricate web of institutional dynamics in the transportation sector, a fundamental tension surfaces, centering around the imbalance between national infrastructure decision-making and regional service provision. This asymmetry is particularly pronounced on the Dutch side, creating a mismatch in the overall transportation landscape. The discourse reveals a nuanced perspective as participants grapple with the consequences of this national-regional divide, focusing notably on the case of Hamont-Weert, which serves as a poignant illustration of the challenges arising from this misalignment.

4.4.3.1 National & Regional Decision-Making

At the national level, decision-making about infrastructure unfolds, reflecting a centralized approach that sets the overarching framework for transportation networks. However, on the regional/provincial level, services are provided, and this is where the tension comes to the forefront. Participant 3 captures this disjuncture, noting a current development at the ministry of Education that wants to decrease the funds for the free Student OV. The student OV is for many public transport operators a basic income. If this disappears it will become a problem, especially for less frequent services. *"The central government should give more direction but instead the minister answers with the statement: 'No it has all been decentralised', 'I have nothing to do with it'."* (Participant 3). Ending by stating that this is something they encounter a lot as a passenger organisation. Participant 3's quote encapsulates the frustration stemming from the perceived disconnect between national decisions and regional service realities. The decentralisation of railway services is something that only happened in the Netherlands and isn't the case in Belgium as there is still one national rail operator providing all services throughout Belgium (Participant 10 & Participant 11).

The Dutch side stands out in this regard, with participants highlighting the challenges posed by this national-regional mismatch. The imbalance is particularly evident in the case of Hamont-Weert, where Participant 6, currently working for the Province of Limburg, notes, that this case is just one of many. Previous connections to for instance Aachen, Germany and Dusseldorf also showed this imbalance. During conversations with the National Government. The national government kept stating that short cross-border connections is more something for the provinces and not part of their portfolio. As a response the Province argued that intercity services is something for the national government and that they would work towards a frequent connection to Aachen. That meant that they had to set out a concession that included the availability of cross-border trains. What came up during the process of giving out these concessions was the need for new infrastructure to support a more frequent service. Participant 6 says the following about the new infrastructure:

> *"So a piece of track needs to be added there. Well, we as Limburg have freed up tens of millions of euros to be able to widen that track. Just for the record, track is not owned by the province of Limburg, it is owned by the state. Anyway, otherwise these decisions would not have been taken."* (Participant 6)

This shows even though it's not the Hamont-Weert case, that infrastructure and provided services are dependent on one another. However, the decision-making happens on two different scale levels. Participant 6's quote highlights the tension as national-level decision-making complicates regional service provision, leading to challenges in executing cross-border transportation initiatives.

The regional initiatives, such as those undertaken by provinces like Limburg also happen elsewhere, such as Gelderland. However, it requires immense funds of the province which is something they are not able to sustain. In Gelderland they were only able to invest in their local rail infrastructure due to selling a cable company (Participant 6) When asking about the possibilities to shift funds for railway infrastructure from a national level to a provincial level participant 3 states the following:

> *"Nationally, there is investment in infrastructure. And if you transfer that to the province, money has to be made available for it via the provincial fund. And if you decentralise this sort of thing, also in other areas, then too little money actually goes to the municipalities or the province. And that's a tricky point... you see that 20% is being cut."*
> *(Participant 3)*

While regional entities may invest in specific rail lines, their efforts are constrained by the overarching national framework. Participant 3 and 6's quotes emphasizes the challenges faced by regions in navigating their initiatives within the broader national landscape.

4.4.3.2 Lock-ins

The challenges arising from the interplay between regional and national levels of decision-making in the context of rail infrastructure are underscored by Participant 3 and Participant 6's observations. The complexity of regional initiatives within the broader national framework is evident, with both sides recognizing the ultimate authority held by the national ministry in deciding to invest or support projects (Participant 1) The disbalance between infrastructure and services, highlighted by Participant 12, adds another layer to this tension, as the national ministry often holds sway over crucial decisions related to cross-border projects.

The potential consequences of this disbalance are discussed in the context of lock-ins by Hetemi et al. (2017), who argue that such imbalances can lead to lock-ins both at the decision-making and project execution levels. This theoretical framework aligns with the practical observations made by participants regarding the Hamont-Weert case. Participant 5 underlines the national ownership of rail infrastructure decisions, with I&W holding the reins, while regional entities can only contribute to the process in terms of providing a network of stakeholders.

In the case of HSL the difference between infrastructure and train services was also highlighted by Participant 8, working at the National infrastructure company ProRail. In this case the participant replied on the comment that the HSL was a success. *"Yes, the HSL-South was a project, but then you don't have a connection. It is always good to distinguish between who is going to drive."* As explained during the documentary analysis it took some years between project delivery and starting the new train services. This difference is also recognized by Participant 4 working for Infraspeed the maintenance company for the HSL. Participant 4 states that when the HSL was finally ready to be used it took a long time for the right train to arrive. In 2012 the Fyra trains started running between Amsterdam and Brussel but they were quickly put out of service due to many technical errors. Participant 4 continues with stating that as a result slower trains were introduced while the new high speed trains were ordered and built. It took over 10 years for the new trains to enter service and to fully make use of the capacity of the HSL.

4.4.3.3 Public Authority

Interestingly, during the interviews, the governance feature 'unit of decision-making' only surfaced in the hierarchical governance form of 'public authority,' with no mention of other decision-making units such as groups (network) or individual (market). This points to a notable concentration of decision-making power within public authorities, contributing to the challenges observed in the regional-national interplay. In essence, the tensions arising from this imbalance between national and regional decision-making structures underscore the complexities that can lead to protracted timelines or even the abandonment of cross-border infrastructure projects.

4.4.3.4 Conclusion

In conclusion, the tension between national infrastructure decision-making and regional service provision, as illustrated by the disparities highlighted in the Dutch context, reveals significant challenges for cross-border infrastructure projects. The imbalance between centralized national decision-making and the decentralized nature of regional services, exemplified in the Hamont-Weert case and experiences with Aachen and Dusseldorf, underscores the need for a more cohesive and collaborative framework.

The frustrations expressed by participants, such as those in response to the disconnection between national decisions and regional service realities, highlight the complexities involved in navigating this imbalance. The challenges in funding allocation at the provincial level further emphasize the limitations faced by regions in realizing their initiatives within the broader national landscape. The concentration of decision-making power within public authorities contributes to protracted timelines and potential project abandonment, as evidenced by theoretical perspectives on lock-ins.

As future projects with a similar scope are contemplated, it is imperative to address this imbalance by establishing a more harmonized national-provincial framework. Efforts should focus on enhancing collaboration, streamlining funding mechanisms, and fostering a cohesive approach that considers the nuances of both national infrastructure goals and regional service provision. Only through such concerted efforts can the challenges inherent in the regional-national interplay be effectively navigated, paving the way for more seamless and successful cross-border infrastructure initiatives.

4.4.4 Tension #2 Formal and informal routes to decision making and flexibility

Navigating the formal and informal routes to decision-making in the Netherlands and Belgium poses distinct challenges and opportunities for lobby groups operating in both countries.

4.4.4.1 Formal and Informal landscapes

In the formal landscape of the Netherlands, decision-making follows a structured hierarchy, progressing from the local to the provincial level before reaching the national stage. As elucidated by lobby group vTv stating that the Netherlands is characterized as a notably formal country (Participant 2). The group managed to secure a robust lobby for the opening of the Hamont-Weert passenger railway also attracting the attention of the Province of Limburg (Participant 1). Furthermore, they use formal channels such as submitting a petition to the Tweede Kamer, the Dutch national parliament, at the end of 2022. This also came up during the documentary analysis where a post on twitter by political party BBB was dedicated to this petition (BBB BoerBurgerBeweging, 2022). This demonstrates the efficacy of their efforts within this formal framework.

Conversely, in Belgium, the lines between decision-makers and representatives are described as more accessible and informal (Participant 2). The synergy between local and national governance is emphasized, with regional representatives often holding positions in the national parliament. This interconnectedness fosters a more informal atmosphere, where individuals from the region are willing to advocate for projects directly within the national parliament (Participant 1). The informal dynamics within Belgian governance present a unique landscape for lobby groups, where personal relationships and direct engagement can play a pivotal role in influencing decisions. The lobby group, operating in both formal and informal spheres, must adeptly navigate these distinct landscapes to effectively advocate for cross-border projects in Belgium and the Netherlands.

The perspective from local governments, exemplified by municipality of Weert participant 7 and Province of Limburg participant 6, sheds light on the nuanced interplay between formal and informal decision-making processes and government structures. Participant 7 articulates the need for a nuanced understanding of the organizational layers in each country, emphasizing the potential for miscommunication when assumptions are made about how the other country's administrative structure operates. This insight underscores the need for transparent dialogue between nations to avoid misunderstandings.

Moreover, participant 7's perspective further underscores the importance of focusing on localised issues and stakeholders. By emphasizing the significance of considering Weert, Hamont, and the vital stakeholder VTV. Participant 7 highlights the value of grounding decision-making processes in the immediate context. This approach aligns with the principles of grassroots involvement and citizen initiatives. The emphasis on recognizing the importance of the community and its needs, as conveyed by participant 6, reflects a commitment to a participatory approach and the recognition of the central role of local stakeholders.

In addition, participant 7's underscores the viewpoint that cross-border initiatives must be rooted in civic engagement and align with public values. By characterizing the effort as a "burgerinitiatief" (citizen initiative), participant 7 emphasizes the participatory nature of the decision-making process. This sentiment is echoed in the assertion that, as government representatives, they must position themselves in the broader governmental structure while continuously prioritizing the public interest and values. The commitment to balancing local needs with broader governance structures encapsulates the intricate dance between formal and informal aspects of decision-making processes within the local government perspective. Participant 7 values the network governance approach in this case focusing on empowering lower officials and citizen groups (Meuleman, 2019).

Furthermore, participant 6's collaboration with various stakeholders, including those in Belgium, exemplifies a commitment to inclusivity and cross-border collaboration. The engagement with Rebel Group, that created the last report looking into the most viable options for opening the cross-border connection (Rebel Group, 2023), highlights the proactive efforts to involve diverse perspectives in decision-making. Becoming part of the conversation for local groups and governments when this report was developed was easy as the National government explicitly asked Rebel group to involve a diverse group of stakeholders, both in the Netherland and Belgium (Participant 1, Participant 6, Participant 11). This practice leans towards network governance where you see other stakeholders as partner to come the final decision. This approach not only acknowledges the importance of local input but also recognizes the necessity of considering the broader regional and international context in cross-border projects.

The cross-border decision-making landscape presents a striking difference between Belgium and the Netherlands when it comes to the involvement of stakeholders. In Belgium, there is a notable observation that the initiatives primarily originates from the federal level said participants 10 and 11 from the NMBS and Federal Government of Belgium. The centralization of initiative at the federal level in Belgium contrasts with the Dutch context, where stakeholders play a more prominent role. The disparity is underscored by the experiences shared in the same interview, where it is noted that stakeholders in the Netherlands, for instance Dutch passenger organisation Rover, are granted a more substantial voice in official debates, whereas in Belgium, entities like TreinTrambus, Belgian passenger organisation, do not receive equivalent prominence (Participant 11).

Additionally, the divergence is highlighted by the contrast in the approach to presenting studies and engaging stakeholders. In Belgium, formalized platforms for project discussions are less common. On top of this, the agencies used to do studies are usually governmental agencies such as Infrabel or NMBS. Whereas the Netherlands often makes use of external stakeholders (Participant 11), therefore outsourcing expertise, which is a market governance approach (Meuleman, 2019). Participant 12 from the Netherlands, working in the Ministry of Infrastructure and Water, emphasizes the Dutch practice of broad consultation with stakeholders. This further underscores the divergence in the extent and formality of stakeholder involvement between the two countries.

Examining the different perspectives, it becomes evident that the cross-border governance structure

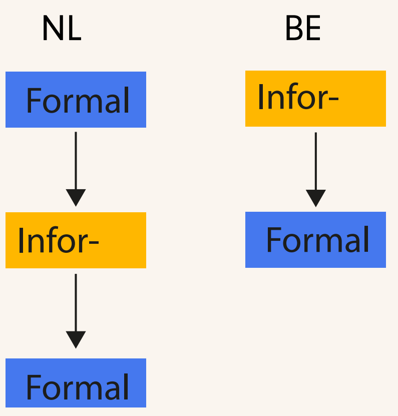


Figure 4.11. Shifts between Formal and Informal Decision-Making Processes in The Netherlands and Belgium

involves a nuanced interplay between formal and informal relationships among governments and external stakeholders (fig. 4.10). Belgium appears to embrace a network-type governance model characterized by informal channels, facilitating effective communication between representatives and higher officials. This approach, marked by flexibility and a reduced bureaucratic burden, contrasts with the hierarchical decision-making process evident in Belgium, where public authority tends to overlook certain stakeholders, contributing to a less participatory approach (Meuleman, 2019). In contrast, the Netherlands follows a different trajectory. The initiation of a project is marked by a protracted journey through various governmental layers – local, provincial, and national – reflecting a predominantly hierarchical structure. However, once the project gains momentum, a shift occurs. The participation of local groups becomes more pronounced, empowering local officials and recognizing stakeholders as genuine partners, resembling a network governance paradigm.

4.4.4.2 Governance failures

However, the different governance structures at play add another layer of complexity to these challenges, with typical governance failures exacerbating the existing tensions. During the interviews, various governance failures were identified, and a predominant category emerged, namely, hierarchical governance failures (8).

The most frequently mentioned issues were characterized by inefficiencies and bureaucratic obstacles also know as 'red tape'. This 'red tape' is characterised by Meuleman (2019) as Hierarchical governance failures. Participant 5, for instance, shed light on these challenges, expressing the view that projects tend to progress more smoothly and cost-effectively when certain companies [company is named by participant] are not directly involved, as they seem to trouble the process of making a decision. Other participants (1, 2 & 6) also mentioned this as some companies or organisation are very inflexible and therefore can slow down the process. In addition to these first-hand accounts, the weaknesses inherent in hierarchical governance, as articulated by Meuleman (2019), were evident—manifesting as excessive bureaucracy, challenges in handling complexity and uncertainty, and a tendency to sideline important stakeholders, among other issues. The identified governance failures underscore the need for reforms within hierarchical governance structures to alleviate red tape and enhance overall effectiveness.

The opposite of bureaucracy is a network governance approach. The failures that usually occur with this approach were also mentioned (5) all be it less than hierarchical governance failures (8). Participants recognised these failures as never-ending talks and indecisiveness as they are also categorised by Meuleman (2019). Participant 3 underscores this, by explaining that by stating, *"Only the minister has to say: we can start the project. No, due to the fall of the cabinet it is now demissionary and can't address any controversial topics."* Participant 3 continues by saying that he doesn't understand why the project is controversial and is frustrated by the fact that the decision is pushed again. Furthermore, the participant notes that this happens often in these types of project, especially outside of the Randstad. The indecisiveness is also backed up by parliamentary letters released in October 2023, stating that the decision will be made by the new cabinet (Actualiteiten Internationaal Spoor Zuid, 2023)

Lastly only two participants market governance failures such as economic inefficiency were mentioned. These were both participants from passenger organisation Rover (Participant 3 & 5), highlighting the fact that decentralization and market economics for passenger services sometimes results in border regions seeing a decrease in available services.

4.4.4.3 Formal and informal decision-making during the construction and maintenance phase

When talking to the private parties involved such as BAM group and Infraspeed they noticed difficulties during both the building and maintenance phase of the HSL. For Hamont-Weert no participants mentioned these phases as it still a study rather than a project.

In the construction phase, the challenges arising from a hierarchical and formal approach mandated by the Dutch government were evident. Participant 9 from BAM group expressed the difficulties from a formal and hierarchical approach mandated by the Dutch government and the project bureau HSL-Zuid, both situated within the Ministry of Infrastructure and Waterstaat. The line organization described by the participants, characteristic of hierarchical governance (Meuleman, 2019), led to inefficiencies, bureaucratic hurdles, and challenges in communication. As demonstrated by the interviewee from BAM group, the need to navigate through various levels of authority, including interactions with Belgian counterparts, underscored the inflexibility and formal nature of the decision-making process. On the other hand participant 4 and 9 both highlight the success of the contracts that were given out for the HSL. The contracts were Design & Construct as already explained during the documentary analysis (Reconstructie HSL-Zuid: Besluitvorming uitvergroot, 2004). This type of contract is set up from a market governance perspective only providing guidelines and having the different contractors come up with the solutions and design (Participant 4&9)

Transitioning to the maintenance phase, a formal and rigid reporting protocol involving ProRail was observed. As noted by the Participant 4 from Infraspeed when discussing the "out of service" procedure of the HSL , "when we started, it was the idea of... That's very formal. So, ProRail has to tell us, there is a malfunction. Then it's documented date, time..." (Participant 4). This formality aligns with the hierarchical governance structure, emphasizing control and strict reporting procedures (Meuleman, 2019). Eventually they let go of the formalities in favour of a more informal approach facilitating a dialogue to quickly fix the problems, this shows that a more network governance approach was favoured for this particular case.

4.4.4.4 Conclusion

In conclusion, effective governance in cross-border projects necessitates a nuanced approach, recognizing the distinct formal and informal landscapes in countries such as the Netherlands and Belgium. In the Netherlands, a structured hierarchy prevails, emphasizing the importance of formal channels for lobbying. Contrastingly, Belgium exhibits a more informal dynamic, underscoring the value of personal relationships in decision-making.

The interplay between formal and informal aspects is crucial, with local government perspectives emphasizing the need for contextual understanding and transparent communication to avoid miscommunication. Inclusivity and cross-border collaboration, exemplified by diverse stakeholder engagement, are vital for well-rounded decision-making.

While when it comes to getting the project on the agenda of the government, Belgium leans towards a more network type of governance model, the Netherlands initially follows a hierarchical structure but shifts towards greater stakeholder involvement as projects progress. Identified governance failures, especially hierarchical inefficiencies, signal the need for reforms to enhance overall effectiveness.

Challenges in construction and maintenance phases highlight the impact of governance structures on project outcomes. Recognizing the adaptability required in decision-making, balancing local and broader perspectives, and fostering inclusivity are key principles for successful cross-border governance. Ultimately, a comprehensive understanding of both formal and informal routes to decision-making is imperative for navigating the complexities of cross-border projects.

4.4.5 Tension #3 Conflicting interests/ bridging the gap

Besides the differences in governance styles, many participants also mentioned other factors that influence the decision-making processes to facilitate cross-border connections. These other factors were mainly related to the difference of the Dutch and Belgian political systems, conflicting interests and 'thinking in silos'.

4.4.5.1 Political differences

The participants highlighted significant differences between the Dutch and Belgian political systems. One participant noted the complexity arising from the distinct political systems, stating, "And it is also difficult because the two systems are different politically" (Participant 1). Another participant pointed to the intricacies of Belgium's subnational structure, where a portion is federal and another is regional, posing challenges for both Belgians and Dutch to comprehend. This participant expressed,

> *"This is due to the subterranean government structure in Belgium. Because there is a federal part and a regional part. And that is not very clear for Belgians. Let alone for the Dutch"* (Participant 3).

Moreover, cultural differences and negotiation challenges were highlighted, with one participant noting that Dutch officials often prefer collaboration with Germans over Belgians due to cultural disparities (Participant 3). The impact of the political structures on decision-making was acknowledged, with a new Dutch official emphasizing the importance of understanding how the governance layers are organized in another country (Participant 7). The varied roles, powers, cultures, and organizational structures between the two nations were evident in the participants' reflections, emphasizing the intricate dynamics of cross-border collaboration.

4.4.5.2 Pace of Change

Furthermore the constant change in the political landscape were also mentioned by the participants with some saying that this resulted in slower decision-making or even the cancelation of projects. Participant 12, working for the Dutch national government agreed with this stating that "in a general way it would help to have one clear strategy for a couple of years, instead of the current very adhoc approach".

Another difference between the political systems became clear when comparing the coalition agreements. In the Netherlands we are less likely to follow through with the plans that became part of the coalition agreement after elections. Which is why Hamont-weert for instance fell out of the agreement eventually that was made for Rutte III (Participant 7). The opposite seems to happen in Belgium states participant 11: "We Belgians are relatively pragmatic when it comes to this. You write something in the coalition agreement and that will loyally be executed by the administration and the ones after that. So, once there is a political concensus and it is written down in the coalition agreement it will happen.

The ever-changing composition of the national governments due to elections, occurring approximately every four years in the Netherlands (Kiesraad, 2016) and every five years in Belgium (Agentschap Binnenlands Bestuur, n.d.), introduces a dynamic element to the political landscape. This discrepancy in election cycles results in processes that are not synchronized (Participant 1&4), necessitating the frequent establishment of new relationships. The significance of building these relationships is underscored by participants like 7 and 12. However, the inherent challenge lies in the potential impact of elections and changes in government on cross-border infrastructure projects that are heavily influenced by political decision-making. The formation of new cabinets can lead to different policy decisions, introducing complexity into the process. The varying pace of change between the two countries therefore contributes to the intricacies of cross-border collaborations.

4.4.5.3 Conflicting interests
The diverging national interests between the Netherlands and Belgium contribute to the intricate dynamics surrounding cross-border projects (Participant 12). Two participants (3 & 5) both from passenger organisation Rover mention the role The IJzeren Rijn project could play in the decision-making process. For Belgium the reopening of Hamont-Weert could be a first step to fully establishing The IJzeren Rijn, which provides an alternative link between the Port of Antwerp and the Ruhr Area. This also came up during the documentary analysis. Therefore the participants note that the new route will impact the Netherlands differently than Belgium and Germany, also asking if this could be the reason that the Dutch Government hasn't made a decision yet. Participant 3 underscores the dilemma, expressing hope that the decision-makers in the Netherlands consider the interests of citizens in the cross-border region. Financial challenges and divergent visions on market regulation further complicate matters, emphasizing the intricacy faced on both sides of the border (Participant 3). The potential introduction of new train routes, such as those to Dordrecht or extending Antwerp-Roosendaal trains to Breda, is met with resistance due to conflicting views on market regulation, creating substantial hurdles (Participant 3). Historical issues, particularly regarding the HSL, have generated discontent between the Netherlands and Belgium, influencing subsequent projects negatively (Participant 6). The complexity intensifies when political interests, nationalistic sentiments, and varying perceptions of shared interests come into play, hindering collaboration and frustrating progress (Participants 9). Just as participant 6, participant 12 notes it is worthwhile to see the relation between different cross-border connections as it can also be used for positive means. Using the mutual gains method to come to decisions that are supported by both governments. This approach is often recognized within network governance.

4.4.5.4 Thinking in Silos
Besides previously mentioned hurdles, multiple participants noticed that some organisations or procedures lead to thinking in silos. Many organizations are structured with distinct silos, whether in the form of vertical divisions or horizontal functions. In an optimal scenario, these silos provide a pragmatic framework for organizational efficiency. However, in less favorable circumstances, they give rise to a silo mentality, fostering an environment where departments resist sharing knowledge or information. This impedes internal collaboration and hampers organizational learning, ultimately obstructing the attainment of high performance and long-term organizational sustainability. The challenge of the silo mentality has long been acknowledged as a tangible problem that demands attention and resolution (De Waal et al., 2019). Therefore multiple participants also seem to actively try to bridge the gap by sharing knowledge and aiming to do this in an interdisciplinary way (Participant 6 & 7)

4.4.5.5 Conclusion
Participants highlighted various factors influencing decision-making, extending beyond governance styles. First of all, the Dutch and Belgian political systems exhibit substantial disparities, including unique subnational structures, cultural nuances, and negotiation challenges. Understanding these differences is pivotal for effective cross-border collaboration. Participants emphasized the intricate dynamics arising from these political variations. The dynamic political landscape, coupled with distinct election cycles (four years in the Netherlands and five years in Belgium), poses challenges to synchronization. Frequent changes in government composition underscore the importance of relationship-building. However, these changes can also introduce complexities into cross-border infrastructure projects.

Secondly, divergent national interests between the Netherlands and Belgium contribute to intricate dynamics in cross-border projects. The IJzeren Rijn project serves as an example, highlighting the need to carefully consider how projects impact each country differently. Conflicts over market regulation and historical issues further complicate decision-making and collaboration.

Lastly, the existence of organizational silos, whether in vertical divisions or horizontal functions, proves to be a significant challenge. Silo mentality inhibits knowledge sharing and internal collaboration, impeding organizational learning and long-term sustainability. Participants actively sought to bridge this gap by promoting interdisciplinary knowledge sharing.

4.4.6 Process observation - Mixing governance styles

4.4.6.1 Hierarchical Governance meets Market governance
In both projects, a combination of different governance styles is apparent, notably mixing Hierarchical and Market governance approaches. This hybrid approach has been in play since the early 2000s, as described by Participant 9 from BAM group, a contractor involved in the construction of the HSL. The integration of market thinking is evident in the decision-making process, where cost-benefit analysis, a key feature of Market governance, plays a central role. This approach, observed in both the Dutch and Belgian contexts, has been emphasized by numerous participants as the primary tool for deciding on new connections. This is evident in the discussion surrounding Hamont-Weert, where financial considerations have played a significant role. The cost estimates have been subject to variations, creating uncertainty and leading to a negative assessment in the societal cost-benefit analysis (Participant 1). The fluctuating cost projections, ranging from 40 to 70 million euros, underscore the challenges in reaching a consensus and making decisions based on concrete financial data (Participant 2). The discussion about the economic viability of connections has been a recurring theme, reflecting the influence of market-oriented governance principles. This perspective is further echoed by Participant 5, who suggests that the Ministry of Infrastructure and Water Management is hesitant due to the perceived high costs and implies that a decision might have already been made if costs were not a significant concern.

4.4.6.2 A call for Network Governance
Amidst these challenges, there is a prevailing sentiment among participants that a broader perspective is needed, extending beyond immediate financial concerns. Some participants emphasize the potential benefits beyond the financial aspect, such as the reduction of CO_2 emissions (Participant7, Participant 1). Participant 7 explicitly speaks against a solely profit-driven mindset, highlighting the need to consider the project's broader impact beyond financial gains. This sentiment leans towards a network governance approach, being an inclusive assessment of policy options (Meuleman, 2019)

4.4.6.3 Governance transitions
Beyond the examples just provided, prior paragraphs have illuminated the use of diverse governance styles, shaping complex decision-making landscapes. In the Netherlands, this is exemplified by the sequential interplay of hierarchical governance, which initiates the project's journey to the decision table, followed by a network governance approach involving diverse stakeholders to elicit perspectives. However, the ultimate decision rests with the public authority, reverting to a hierarchical model. Notably, this decision-making process is heavily influenced by a market governance feature—cost-benefit analysis. In contrast, Belgium adopts a predominantly network governance approach leading to the decision table. However, once at the table, the process shifts towards a hierarchical model,

side-lining other stakeholders. Moreover, the role of cost-benefit analysis, a marker of market governance, is less influential in the Belgian context. This nuanced interplay underscores the multifaceted nature of governance in shaping decision-making environments.

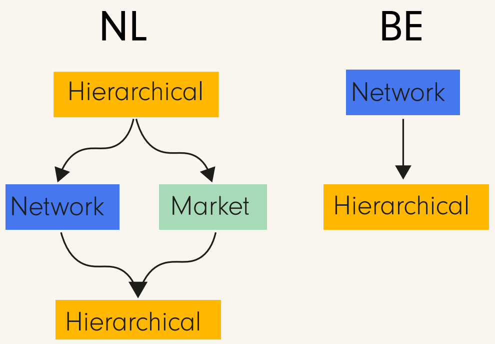


Figure 4.12. Shifts between different governance styles in The Netherlands and Belgium

4.4.6.2 Conclusion

In conclusion, the examination of both projects reveals a nuanced fusion of governance styles (fig 4.12). This dynamic is a common thread in both Dutch and Belgian contexts. As diverse governance styles intersect and sometimes clash, it becomes crucial to recognise these transitions and potential conflicts. In future projects, heightened awareness of the interplay between governance styles, particularly where transitions between styles occur, can enhance decision-making processes, fostering a more comprehensive and balanced approach that considers both financial considerations and broader societal impacts.

4.5 CONCLUSION

The cross-case analysis of the HSL and Hamont-Weert rail projects, enriched by an understanding of influences on governance, provides a profound insight into the practice and challenges of metagovernance. Metagovernance, as the governance of governance, involves orchestrating various governance styles — hierarchical, market, and network — to navigate complex, multifaceted scenarios. This analysis underscores the nuanced application of metagovernance, revealing how it is shaped by and responds to a range of influencing factors.

In the case of the HSL project, metagovernance is observed in the way different governance styles were necessitated and blended over time. The project, initially characterized by optimism and a strong hierarchical governance approach, evolved to incorporate market mechanisms in contract management. However, this transition was not without challenges. Public resistance and the complexities of bureaucratic processes highlighted the difficulties in aligning various governance styles with public sentiment and project goals.

The Hamont-Weert project, with its historical roots and cross-border nature, demanded a different approach. Here, metagovernance is evident in the coordination of multiple stakeholders across borders and the integration of network governance to manage complex legal and political negotiations. The project's journey showcased the need for adaptable governance structures that could respond to evolving circumstances and stakeholder dynamics.

Both projects demonstrate the importance of cultural understanding, policy integration, and public transport system frameworks in shaping governance approaches. The Netherlands' participatory democracy and market-oriented public transport system influenced the governance style of the HSL project. In contrast, Belgium's hierarchical governance approach and centralized public transport system played a significant role in the Hamont-Weert project.

The similarities in the two cases lie in their need to navigate complex stakeholder landscapes and align diverse interests. However, the differences are marked by their historical contexts, project goals, and the nature of stakeholder engagement. While the HSL project grappled with modern challenges of procurement and public acceptance within a single country, the Hamont-Weert project navigated cross-border complexities, legal disputes, and grassroots advocacy efforts.

The concept of metagovernance, while theoretically robust, faces critical examination in its practical application. Some scholars argue that metagovernance, as a term, might not represent a novel approach to governance, but rather a description of an ongoing process that naturally unfolds in complex governance scenarios. This critique is important to consider in the context of the HSL and Hamont-Weert rail projects.

Firstly, the difficulty with the term 'metagovernance' lies in its broad and encompassing nature. It attempts to frame the governance of governance itself, an inherently complex and multi-dimensional task. In practice, this broadness can lead to ambiguities and challenges in clearly delineating what constitutes metagovernance actions versus regular governance processes.

Furthermore, some scholars view metagovernance more as a tactic for discussing necessary governance approaches rather than as a distinct, new form of governance. In this view, metagovernance is about becoming aware of and articulating the different existing governance styles at play, rather than initiating a fundamentally new way of governing. This perspective suggests that metagovernance might be more about the analysis and understanding of governance dynamics, rather than about the creation of a new governance paradigm.

In the case studies of HSL and Hamont-Weert, while metagovernance approaches were identified, one could argue that these were not so much about initiating new governance styles as they were about recognizing and navigating the existing complex governance landscapes. The blending of hierarchical, market, and network governance, seen in both projects, can be interpreted as an organic response to the challenges at hand, rather than a deliberate strategy emanating from a metagovernance framework.

This critique leads to a significant consideration: metagovernance, in theory, is well-founded and offers a comprehensive framework for understanding governance complexities. However, in practice, its application may not always be perceived as a new or distinct approach to governance. Instead, it might represent a process of recognising, articulating, and navigating the multitude of governance styles and dynamics already in existence.

In conclusion, these cases provide valuable insights into the application of metagovernance. They highlight the need for a flexible, context-aware approach that effectively combines different governance styles, acknowledging the influences of governmental structures, cultural dimensions, policy integration, and public transport systems. While metagovernance provides a valuable theoretical lens to understand and analyse governance in complex scenarios, its practical application might be seen more as an exercise in awareness and adaptation to existing governance realities, rather than as a groundbreaking shift in governance practice.

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DISCUSSION & CONCLUSION

Content

Border station with employees, Reusel around 1910.
Photo: Unknown, Collection RHce, nr. 5416

5.1 DISCUSSION

5.1.1 Introduction
This chapter synthesises the results of the thesis on metagovernance in cross-border rail projects, comparing these findings with existing scholarly work. It focuses on the relevance of this research, the insights it provides into metagovernance, and how it aligns with or diverges from previous studies.

5.1.2 Relevance of Research
The importance of this research lies in its contribution to the field of governance, particularly in the context of sustainable transportation and international collaboration. As global connectivity becomes increasingly crucial, understanding the dynamics and effectiveness of metagovernance in cross-border rail infrastructure projects is paramount. The significance of this research reaches far beyond the specific focus on cross-border rail connections. In the global landscape where transportation networks are progressively interwoven, the findings of this study hold broader implications. Metagovernance, often cited as essential for the success of sustainability projects, emerges as a crucial factor in the interplay of governance styles uncovered in this thesis. The identified mix of governance styles underscores the inherent complexity of decision-making in cross-border infrastructure. As emphasized in the thesis introduction, this complexity has direct implications for societal challenges in cross-border regions, particularly the connectivity deficiencies. Recognizing the existing mix of governance styles and the potential role of metagovernance becomes imperative for addressing and mitigating these societal problems. The adaptability of metagovernance strategies, as demonstrated in this study, speaks to their applicability across diverse infrastructure projects, contributing to collaborative and well-informed decision-making on an international scale.

5.1.3 Discussion of Results and Comparison with Previous Research
5.1.3.1 Conceptual Contribution
In addressing the skepticism regarding metagovernance as merely a neologism (Bailey & Wood, 2017), this thesis demonstrates its practical application and utility, particularly in understanding governance dynamics.
Bailey and Wood (2017) highlight the value of metagovernance in elucidating the subtle means by which asymmetric relations are embedded within networks, and between networks in different regions, as well as between central government and regional networks. This thesis, through its in-depth interviews, has similarly observed asymmetric relationships, especially in the context of central and regional imbalances in decision-making processes. It underscores how metagovernance provides a framework for understanding and navigating these complexities, thereby validating its significance beyond mere academic terminology.

5.1.3.2 Strategic and Collaborative Competences
Sørensen and Torfing (2009) argue for the development of strategic and collaborative competences in public metagovernors. This thesis echoes this perspective, showing the necessity for metagovernors to possess these competences to manage complex networks and achieve desired outcomes effectively. Including understanding the complex contexts of cross-border mobility projects both in a historical and political manner.

5.1.3.3 Interplay of Governance Styles
The thesis reaffirms the assertion by scholars like Meuleman (2019) and Sørensen and Torfing (2009) regarding the importance of integrating various governance styles. In line with Meuleman's observations, the thesis illustrates how the combination of hierarchical, market, and network governance can address the complexities inherent in large-scale infrastructure projects.
Historical Context and Decision-Making
The thesis also echoes Jessop's (2016) views on the importance of historical context in shaping governance practices. In the case of the HSL and Hamont-Weert projects, the historical dependencies played a pivotal role in informing current decision-making strategies.

5.1.3.4 New Insights and Clashes with Previous Research
The thesis contributes novel perspectives to the field of metagovernance, particularly in the context of cross-border rail projects. It highlights the dynamic interplay between different governance styles within specific historical and cultural contexts. These insights extend the theoretical framework of metagovernance by providing a practical application in cross-border infrastructure, demonstrating how metagovernance is adapted in real-world scenarios.

However, the research also presents findings that clash with some established perspectives in metagovernance literature. While scholars like Jessop (2016) discuss metagovernance in a broad sense, the thesis provides a grounded analysis that contradicts the notion of metagovernance as a universally applicable model. It reveals the challenges of applying metagovernance in specific contexts, such as cross-border mobility projects.

5.1.4 Ethical Considerations
5.1.4.1 Ethics in Metagovernance
The thesis touches upon the ethical dimensions of metagovernance, particularly in balancing diverse and often conflicting stakeholder interests. The imperative to ensure fairness, inclusivity, and sustainability in decision-making processes is critical, aligning with the ethical governance principles advocated by scholars like Ansell and Gash (2008).

5.1.4.2 Research Ethics
Moreover, the ethical considerations are magnified by the easily traceable nature of interview participants, stemming from the limited pool of individuals involved in these specialized projects. Some participants expressed concerns about potential repercussions on their professional lives, leading to certain responses being omitted from the analysis to safeguard their anonymity.

5.1.5 Limitations
One notable limitation of this study is the scarcity of Belgian participants, contributing to an asymmetry in the insights obtained from the Dutch and Belgian perspectives. Additionally, the temporal gap since the HSL project limits the availability of participants involved in its planning phase. This constraint emphasizes the need for a balanced representation of voices and highlights the challenge of capturing firsthand experiences from historical projects.
Furthermore, some participants faced constraints in sharing all pertinent information due to concerns about potential identification and accountability. Additionally, the focus on Belgium and the Netherlands, while providing valuable insights, limits the generalizability of findings to a broader international context. Future research should aim to diversify the study by including projects from different countries to offer a more comprehensive understanding of how governance styles are employed in various contexts.

5.1.6 Recommendations for Future Research
To address these limitations, future research should strive for a more balanced representation of participants, especially from Belgium, ensuring diverse perspectives. Additionally, exploring more recent cross-border rail projects would provide insights into the evolving dynamics of metagovernance. Investigating the application of metagovernance in other countries and comparing the outcomes could further enrich the understanding of its effectiveness in different contexts.

5.1.7 Conclusion
In conclusion, this thesis reaffirms the value of metagovernance in governance literature and practice, responding to earlier criticisms and expanding on the ideas proposed by key scholars in the field. It demonstrates the practical applicability of metagovernance concepts in real-world scenarios, particularly in the complex realm of cross-border infrastructure projects. Future research in this area can build on these findings, exploring the application of metagovernance in different settings and contributing further to our understanding of complex governance challenges.

5.2 CONCLUSION

5.2.1 Introduction

This thesis on metagovernance in sustainable mobility transitions in a cross-border context has unraveled the complexities of governance styles and their interplay in an international context. The research holds particular relevance in its insightful exploration of metagovernance within the realm of sustainable mobility transitions, highlighting the challenges and opportunities in cross-border transportation projects. Besides that, it challenges the current understanding of the metagovernance concept.

5.2.2 Methodology

Employing a diverse methodological approach, including documentary analysis, social media analysis interviews, and case studies on the HSL and Hamont-Weert projects, this research provides a multifaceted view of governance dynamics in cross-border transportation initiatives.

5.2.3 Results

In summarising the research results on metagovernance in the HSL and Hamont-Weert rail projects, the analysis revealed key insights:

Governance, in the context of sustainable mobility transitions, encompasses the diverse set of structures, processes, and interactions that shape decision-making in cross-border regions. The theoretical framework laid the foundation for understanding hierarchical, network, and market governance styles. However, the richness of the empirical data revealed a nuanced reality—a mix of these styles already in play. It becomes evident that metagovernance, the higher-order governance of governance, is inherently present, guiding the interactions among stakeholders. The mix of governance styles is not inherently problematic; rather, it is the awareness of this mix that becomes crucial.
The HSL project illustrated a shift from an initial hierarchical approach to incorporating market mechanisms, a transition that was necessary but fraught with challenges such as public resistance and bureaucratic complexities. This highlighted the difficulties in aligning governance styles with both public sentiment and the goals of the project.

In contrast, the Hamont-Weert project, rooted in history and spanning across national borders, demanded a different approach. It involved coordinating diverse stakeholders across these borders and integrating network governance to navigate complex legal and political negotiations. This project underscored the need for governance structures that are adaptable and responsive to evolving stakeholder dynamics and circumstances.

Stakeholders' perceptions of the current distribution of governance styles provide a crucial vantage point for understanding the dynamics at play. The empirical findings underscored that stakeholders are not only aware of the mix of governance styles but also that their perspectives on these styles often diverge. For instance, the Dutch and Belgian contexts showcase distinct approaches, with the Netherlands demonstrating a sequential interplay of hierarchical and network governance, while Belgium leans towards a more hierarchical-oriented model.

The significance of this perception lies in its impact on decision-making processes. Understanding how stakeholders view governance styles is integral to comprehending their expectations, frustrations, and aspirations. The varied perspectives also illuminate potential areas of conflict and misalignment, emphasizing the need for a shared understanding among stakeholders. Metagovernance, in this context, should not only guide the interaction of governance styles but also facilitate a shared mental model among stakeholders to navigate the complexity of decision-making in cross-border regions. As stakeholders navigate through hierarchical, network, and market governance, they must recognize the transitions and potential clashes that may arise. A heightened awareness fosters more functional decision-making processes, ensuring that the strengths of each governance style are leveraged while mitigating their respective weaknesses. Metagovernance, in this sense, becomes a conscious effort to understand, acknowledge, and optimize the interplay of governance styles.

Both projects underscored the significance of cultural understanding, policy integration, and the influence of public transport systems in shaping governance approaches. The Dutch context, characterized by participatory democracy and a market-oriented public transport system, influenced the governance style of the HSL project. Conversely, Belgium's hierarchical governance approach and centralized public transport system were influential in the Hamont-Weert project. Despite their distinct challenges, both projects shared the necessity of navigating complex stakeholder landscapes and harmonizing diverse interests. The analysis leads to the conclusion that the term 'metagovernance' might be too broad and encompassing, suggesting it should be more aptly viewed as a process of recognising and adapting to existing governance dynamics, rather than a fundamentally new approach to governance.

5.2.4 Policy Recommendations

These results of the research lead the (policy) recommendations that help to overcome current barriers or help better identify governance obstacles in the future.

1. **Leverage Historical Insights for Informed Decision-Making**
   Utilize documentary analyses, as demonstrated in Case 1 (HSL) and Case 2 (Hamont-Weert/IJzeren Rijn), to inform and guide stakeholders through the complexities of ongoing projects. Recognize the value of historical context in shaping perspectives, identifying opportunities, and understanding barriers inherent to cross-border connections.

2. **Embrace Media Analysis for Public Perception and Engagement**
   Acknowledge the significance of media analysis, focusing on the formative years and planning stages of infrastructure projects, to understand the dynamic interplay between the government, citizens, and evolving public perceptions. Extend this awareness to include ongoing public interactions, ensuring a holistic understanding of cross-border projects' evolving attitudes.

3. **Address National and Regional Imbalances**
   Recognize the tension between national infrastructure decision-making and regional service provision, as observed in the Dutch context. Establish a harmonized national-provincial framework, emphasizing collaboration, streamlining funding mechanisms, and fostering a cohesive approach that considers both national infrastructure goals and regional service provision for more successful cross-border initiatives.

4. **Navigate Formal and Informal Decision-Making Dynamics**
   Implement a nuanced approach to governance that recognizes distinct formal and informal landscapes in countries such as the Netherlands and Belgium. Blend hierarchical and network governance styles, understanding their adaptability in different project phases. Address identified governance failures, especially hierarchical inefficiencies, through targeted reforms to enhance overall effectiveness.

Address National and Regional Imbalances

Navigate Formal and Informal Decision-Making Dynamics through reforms

Heightened awareness of Mixing Governance Styles

5. **Consider Conflicting Interests and Bridging the Gap**
   Account for disparities in political systems, national interests, and organizational silos between countries involved in cross-border projects. Understand and navigate the intricate dynamics arising from political variations, divergent national interests, and organizational silos. Foster interdisciplinary knowledge sharing to bridge gaps and promote collaboration.

6. **Heightened Awareness of Mixing Governance Styles**
   Acknowledge the nuanced fusion of governance styles observed in cross-border projects. Recognize transitions and potential conflicts between governance styles, emphasizing the need for heightened awareness in decision-making processes. Promote a comprehensive and balanced approach that considers both financial considerations and broader societal impacts.

Given all the findings in this thesis we can finally provide an answer to the main research question:

To what extent can metagovernance activate stakeholders to facilitate sustainable mobility transitions in a cross-border context?

This thesis has shown that metagovernance can indeed be a facilitative tool, albeit its effectiveness varies based on the specific context and the interplay of governance styles. It acts as a framework for understanding and navigating the complexities inherent in cross-border projects, highlighting the importance of adaptability, cultural awareness, and strategic competence in governance.

Metagovernance's true value lies in its ability to articulate and navigate through different governance styles, adapting to various challenges and opportunities. While it may not always represent a novel approach, it serves as a critical analytical tool for understanding the dynamics of governance in complex infrastructure projects.

Metagovernance, as a guiding force, should contribute to the development of collaborative frameworks that transcend national borders. The challenges identified in this research, such as disparities in political systems, divergent national interests, and organizational silos, call for a cohesive and inclusive approach. Efforts should be directed towards enhancing cross-border collaboration, synchronizing decision-making processes, and fostering interdisciplinary knowledge sharing. In essence, metagovernance becomes a catalyst for creating a harmonized and cooperative environment, aligning diverse stakeholders towards the common goal of sustainable mobility transitions.

In conclusion, this thesis contributes to a deeper understanding of metagovernance, offering valuable insights and strategic directions for managing sustainable mobility transitions in cross-border contexts. The findings underscore the necessity of a flexible, context-sensitive approach in governance, paving the way for more effective and collaborative decision-making in future infrastructure projects.

06 |

REFLECTION

Content

Border crossing in Reusel, 1915
Photo: P. van Hoppe, Collection RHce,
nr. 251779

6.1 The Process

This thesis was not only a scholarly exploration but a delicate balance between intellectual curiosity and pragmatic challenges. Concurrently completing my urbanism master's thesis added an additional layer of complexity. Navigating the dual responsibilities required careful consideration to ensure a seamless transition between related yet distinct topics. The initial challenge lay in defining the scope of the research and aligning it with the concluding phase of the urbanism project.

The complexity further deepened with the intricacies of governance and metagovernance. Crafting a comprehensive definition of governance involved synthesising diverse academic viewpoints. The enigmatic nature of metagovernance, which inspired this exploration, posed a challenge in itself. As the research unfolded, it became apparent that metagovernance might not signify a clear transition but rather a nuanced recognition of the ongoing fusion of governance styles—an insight derived from the observations made during interviews. An observation I was suprised by as I expected to find very distinct forms of governance frameworks.

The participant acquisition process brought its own set of challenges, notably in the cases of the HSL and finding Belgian stakeholders. The temporal gap from the HSL project and the limited responsiveness of Belgian participants necessitated adaptive strategies, resulting in a more modest representation of Belgian perspectives. The initial plan to develop a game for constructing a metagovernance framework had to be discarded, aligning with the evolving focus on cultivating awareness of existing governance styles and their natural convergence into some form of metagovernance.

The data analysis also involved grappling with a substantial volume of interview data. Structuring and making sense of this wealth of information proved to be a challenge. The vast array of opinions expressed by participants, coupled with the documentary and social media analyses, provided a rich variety of perspectives. It was fascinating to witness diverse viewpoints on the same events, revealing the intricate layers of decision-making and the impact of these key events on both cases. The triangulation of data sources proved instrumental in gaining a holistic understanding of the major decision points and events that shaped the trajectories of both HSL-Zuid and the IJzeren Rijn (Hamont-Weert).

In retrospect, the research process was not only an academic exploration but a continuous negotiation between academic and real-world challenges. It unfolded as a dynamic and iterative journey, marked by evolving an focus and adjusting strategies to address emerging complexities.

6.2 Methodology

The long timeframes of the cases necessitated the strategic use of documentary analysis, unraveling the intricate role of politics and public opinion. The semi-open interview format gave participant a chance to share diverse observations beyond the confines of governance-related aspects. Employing the 50 features of governance as a coding framework proved beneficial, although certain statements resisted easy categorisation within the three governance styles. Due to this fact, several new codes in two additional coding categories were added. The comparative approach of this research, while unveiling rich insights, underscored the substantial differences between the projects in terms of scope and purpose. The HSL case being an international railway link for long distance travel between major urban areas and Hamont-Weert being a more regional line. Meaning that conclusions drawn from the comparison should be considered within their context.

6.3 Academic and Social Value

From a social relevance point of view, the research underscores the challenges faced by border regions in establishing sustainable connections with neighboring countries, emphasizing the potential impact of the recommendations on these regions. The insights acquired can redirect attention to these areas, facilitating streamlined decision-making processes and fostering improved connectivity. By elevating these regions to a level of connectedness that aligns with their potential, the research advocates for a more equitable and integrated approach to cross-border mobility.

When looking at its academic relevance, this research extends its contributions to disciplines like urban design by demystifying the complex concept of governance. By offering a nuanced understanding of governance styles and unraveling their complex dynamics, this study provides a foundational resource for more precise definitions of governance. This contribution extends beyond the academic realm and holds practical implications for disciplines engaged in strategic planning projects where governance plays a pivotal role. The insights garnered can serve as valuable guidance, aiding these disciplines in navigating the complexities of governance and making informed decisions in their projects.

Moreover, the study builds on Meuleman's (2019) framework of governance features by revealing their manifestation in everyday practices. While validating the relevance of these features, the research goes beyond by acknowledging the presence of conflicting interests and contextual influences. The recognition of these additional factors highlights the multifaceted nature of governance styles, enriching the understanding of their application in diverse scenarios.

The revelation that metagovernance is already in practice contributes significantly to the academic discourse on governance. The term "metagovernance" can be elusive and challenging to comprehend, often leading to debates about its necessity and practicality. However, the research brings forth the insight that, consciously or not, metagovernance is already embedded in governance practices. This realisation challenges preconceived notions and raises questions about whether the pursuit of metagovernance should be seen as a conscious effort to make governance more complex. The findings suggest that, rather than striving for a theoretical ideal, acknowledging and understanding the existing governance approaches can be more pragmatic and beneficial in addressing the complexities of real-world governance scenarios.

6.4 Transferability

The output of this thesis holds value for other projects and serves as a guide for future research endeavors. It stands as a tool to identify failures in current governance structures, fostering awareness among stakeholders about the transitions between governance styles in their processes. The findings are transferable, offering insights applicable beyond the specific projects under scrutiny. However, there is a need for more discussions with diverse participants, exploration of additional projects in different countries, and a broader investigation into governance styles. By doing this a deeper understanding and refinement of the insights gained in this study can be reached. The path forward involves a continuous exploration of the intricacies of governance in diverse contexts.

6.5 Personal Growth

Doing this thesis has been transformative on a personal level, manifesting in a spectrum of acquired skills and refined perspectives. A main point of growth lies in the ability to conduct interviews. The evolution of interviewing skills is not only a technical advancement but also the ability to navigate the delicate dance of conversation. The experience has made me recognise the importance of flexibility. Instead of adhering strictly to predetermined questions, I've learned to create an open space for participants. This approach allows the conversation to organically develop, empowering participants to guide it towards topics they find more comfortable or significant. This newfound adaptability has proven very valuable, enriching the depth and authenticity of the insights gathered during interviews.

Furthermore, the process has given me a profound appreciation for the intricacies of governance. From the initial challenge of comprehending the multifaceted term into a nuanced understanding to being critical about newly introduced ideas such as metagovernance. Unraveling the layers of governance and metagovernance taught me to stay curious and verify new ways of thinking for yourself.

Beyond the intellectual growth, this journey has been an exercise in resilience and adaptability. The need to navigate challenges in participant acquisition, especially given how long ago the HSL project took place and the difficulties of getting in touch with Belgian stakeholders, has honed problem-solving skills. It has underscored the importance of resourcefulness in these type of research projects, emphasizing the need for creative approaches to overcome logistical barriers and to keep going and explore new ways to get in touch with possible participants.

Embarking on this research journey marked a significant milestone as it was my first time doing a study where the outcomes could have tangible consequences on the professional lives of the participants. This presented a unique set of challenges and ethical considerations that demanded delicate maneuvering. Navigating the terrain of what to include and what to omit became not only an academic exercise but also a moral imperative. Striking a balance between transparency and safeguarding the identities of participants was a nuanced task, and this challenge, though demanding, was very educational.

This experience has been an invaluable lesson in ethical research practices, emphasizing the need for sensitivity and discretion when the ramifications of the study extend beyond academic discourse. As I reflect on this aspect of the journey, it becomes apparent that such considerations will likely become a recurring theme in anyone's professional career. The realization that research outcomes can have a profound impact on the lives and careers of those involved underscores the ethical responsibilities that accompany the pursuit of knowledge. This awareness will undoubtedly shape my approach to research in the future, but also makes me eager to continue this path.

07 | REFERENCES

Border crossing in the middle of the small town of Galder in Noord-Brabant.
Photo: Rolf van den Broek

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A | APPENDIX

Content

Trams crossing the border establishing a connection between Turnhout and Eindhoven in 1897
Photo: Unknown, Collection RHce, nr. 0132275

A1 DMP

0. ADMINISTRATIVE QUESTIONS

1. Name of data management support staff consulted during the preparation of this plan.

Diana Popa

2. Date of consultation with support staff.

2023-06-05

I.

3. **ata:**

Type of data	File format(s)	How will data be collected (for re-used data: source and terms of use)?	Purpose of processing	Storage location	Who will have access to the data
Perceived & preferred Governance styles	.mp3 file	interview, voice recording	To understand the current governance context and preferred future	SURFdrive	Researcher
Occupation, Experience, country of origin	.csv file	interview, voice recording	To ensure an equal distribution of participants	SURFdrive	Researcher
Anonymized Transcript of interviews	.docx file	Interview, voice recording	Getting the interview ready for coding and analysing	SURFdrive	Researcher
Summary of interviews	.docx file	Interview transcript	To verify and validate the gathered data with participants	SURFdrive	Researcher and Participants
Coding & analysis of interviews	Atlas.ti	Interview transcript	To analyse the data gathered during the interview and cross-reference these with the 50 features of governance	SURFdrive	Researcher
Images of interactive workshop	.jpeg file	Pictures taken during workshop	To show the products created during the workshop	SURFdrive	Researcher
Recordings of interactive workshop for co-creation of governance frameworks	.mp3 file	Voice recording of workshop	To be able to transcribe or summarize the workshop correctly	SURFdrive	Researcher
Anonymised transcript/summary of workshop for co-creation of governance frameworks	.docx file	voice recording	Being able to analyse the discussion and outcome that can give insights on the co-creation process of governance frameworks	SURFdrive	Researcher

4. How much data storage will you require during the project lifetime?

- < 250 GB

II. DOCUMENTATION AND DATA QUALITY

5. What documentation will accompany data?

- Data will be deposited in a data repository at the end of the project (see section V) and data discoverability and re-usability will be ensured by adhering to the repository's metadata standards
- README file or other documentation explaining how data is organised
- Methodology of data collection

III. STORAGE AND BACKUP DURING RESEARCH PROCESS

6. Where will the data (and code, if applicable) be stored and backed-up during the project lifetime?

- SURFdrive

IV. LEGAL AND ETHICAL REQUIREMENTS, CODES OF CONDUCT

7. Does your research involve human subjects or 3rd party datasets collected from human participants?

- Yes

8A. Will you work with personal data? (information about an identified or identifiable natural person)

If you are not sure which option to select, first ask your Faculty Data Steward for advice. You can also check with the privacy website . If you would like to contact the privacy team: privacy-tud@tudelft.nl, please bring your DMP.

- Yes

The research will focus on just one case study that could be used to identify the participants.

8B. Will you work with any other types of confidential or classified data or code as listed below? (tick all that apply)

If you are not sure which option to select, ask your Faculty Data Steward for advice.

- No, I will not work with any confidential or classified data/code

9. How will ownership of the data and intellectual property rights to the data be managed?

For projects involving commercially-sensitive research or research involving third parties, seek advice of your Faculty Contract Manager when answering this question. If this is not the case, you can use the example below.

The datasets underlying the published papers will be **not** be publicly released following the TU Delft Research Data Framework Policy. During the active phase of research, the project leader from TU Delft will oversee the access rights to data (and other outputs), as well as any requests for access from external parties. The datasets will only be available after validation with the participants as the datasets can be traced back to the participants.

10. Which personal data will you process? Tick all that apply

- Data collected in Informed Consent form (names and email addresses)
- Signed consent forms
- Photographs, video materials, performance appraisals or student results
- Email addresses and/or other addresses for digital communication
- Names and addresses

11. Please list the categories of data subjects

Citizens, Representatives of Passenger associations, employees of governmental bodies (e.g. municipality, Province, Ministry), Public transport operators

12. Will you be sharing personal data with individuals/organisations outside of the EEA (European Economic Area)?

- No

15. What is the legal ground for personal data processing?

- Informed consent

16. Please describe the informed consent procedure you will follow:

All study participants will be asked for their written consent for taking part in the study and for data processing before the start of the interview and workshop

17. Where will you store the signed consent forms?

- Same storage solutions as explained in question 6

18. Does the processing of the personal data result in a high risk to the data subjects?

If the processing of the personal data results in a high risk to the data subjects, it is required to perform a Data Protection Impact Assessment (DPIA). **In order to determine if there is a high risk for the data subjects, please check if any of the options below that are applicable to the processing of the personal data during your research (check all that apply).**
If two or more of the options listed below apply, you will have to complete the DPIA**. Please get in touch with the privacy team: privacy-tud@tudelft.nl to receive support with DPIA.**
If you have any additional comments, please add them in the box below.

- Sensitive personal data

19. Did the privacy team advise you to perform a DPIA?

- No

22. What will happen with personal research data after the end of the research project?

- Personal research data will be destroyed after the end of the research project

V. DATA SHARING AND LONG-TERM PRESERVATION

27. Apart from personal data mentioned in question 22, will any other data be publicly shared?

- Not all non-personal data can be publicly shared - please explain below which data and why cannot be publicly shared

The interviews and workshops can be anonymized, however they will most likely still be able to trace back to the participants. This is due to the case study that is being used and a very small community or number of stakeholders that played a role in this case. Therefore it is not advisable to publicly share data as some information might be harmful of the participants. The pictures showing the products (not participants) of the workshop and a summary as well as the datasets that combine all the interviews can be made available publicly as these pose less risk for the participants

29. How will you share research data (and code), including the one mentioned in question 22?

- All anonymised or aggregated data, and/or all other non-personal data will be uploaded to 4TU.ResearchData with public access

30. How much of your data will be shared in a research data repository?

- < 100 GB

31. When will the data (or code) be shared?

- As soon as corresponding results (papers, theses, reports) are published

32. Under what licence will be the data/code released?

- CC BY-NC-SA

VI. DATA MANAGEMENT RESPONSIBILITIES AND RESOURCES

33. Is TU Delft the lead institution for this project?

- Yes, the only institution involved

34. If you leave TU Delft (or are unavailable), who is going to be responsible for the data resulting from this project?

Master thesis Mentor Paul W. Chan (P.W.C.Chan@tudelft.nl)

35. What resources (for example financial and time) will be dedicated to data management and ensuring that data will be FAIR (Findable, Accessible, Interoperable, Re-usable)?

4TU.ResearchData is able to archive 1TB of data per researcher per year free of charge for all TU Delft researchers. We do not expect to exceed this and therefore there are no additional costs of long term preservation.

A2 INTERVIEW PROTOCOL

Introduction
This interview protocol is written as part of the "Crossing Borders Sustainably" thesis. It acts as a guideline for the interviews that will help gain insights on different governance styles used in cross-border public transport projects. Interviews will be done with participants of both positive and negative cases.

Main research question
To what extend can metagovernance activate stakeholders to facilitate sustainable mobility transitions in cross-border regions?

Sub-Questions
1. How can governance be conceptualised in relation to sustainable mobility transitions?
   a. Who are the stakeholders involved in a sustainable mobility transition?
   b. What are the cultural and traditional factors that influence governance in the context of sustainable mobility transitions in the Netherlands and Belgium?
   c. What institutions influence governance in the context of sustainable mobility transitions in the Netherlands and Belgium?
2.How do stakeholders perceive the current distribution of governance styles?
   a. How do governance styles influence stakeholders in their actions?
3. What changes in governance should be made for stakeholders to facilitate a sustainable mobility transition in cross-border regions?

Goal
The purpose of this interview is to provide new information on the ability of metagovernance to activate stakeholders that can help facilitate sustainable mobility transitions in cross-border regions. The research that these interviews are a part of will focus on 2 cases: The Hamont-Weert corridor (negative) and the High speed Rail link between Rotterdam and Antwerp (positive)

Method
Two contrasting cases will be used to find both positive and negative influences on the ability of different governance styles to activate stakeholders in order to facilitate new rail infrastructure connections across the border. Furthermore, interviews will be done with participants from both Belgium and the Netherlands for a more comprehensive understanding of the processes that took place during both projects.

Conceptual model

Interview Design
Sampling and Participant Selection
The aim of this research is to conduct 12-15 interviews with stakeholders representing a diverse range of perspectives and roles in sustainable mobility transitions within the cross-border regions of Belgium and the Netherlands. The selected stakeholder groups will include ministry representatives, provincial authorities, residents, passenger organizations, operators, infrastructure companies, and municipalities from both the Dutch and Belgian sides. To ensure comprehensive insights, participants will be selected using purposive sampling, which will guarantee equal representation from each stakeholder group. Snowballing can also be used after a first group of participants is selected.

Semi-structured
The interviews will be semi-structured to allow for flexibility and in-depth exploration of stakeholders' perceptions (Magaldi & Berler, 2020). The question will be written down beforehand to help steer the interviewee in the direction of the topic of this research. The questions can be adjusted during the interview but provide guidelines and leave room for follow up question that allow for a further exploration of the themes the interviewee talks about.

Probing
Probing in an interview refers to a technique used by the interviewer to gather more in-depth information from the interviewee. It involves asking follow-up questions or seeking clarification in response to the interviewee's initial responses. The primary purpose of probing is to delve deeper into a particular topic, gain a more comprehensive understanding of the interviewee's thoughts, feelings, or experiences, and to ensure that the interviewee provides detailed and relevant information. There are 7 different probing types of probing that could be useful during interviews (Edwards & Holland, 2013):

1. Silence: This involves staying quiet after the interviewee has finished answering a question, allowing them time to reflect. It can be challenging for interviewers but is effective when used sparingly.
2. Echo: The interviewer repeats the last point made by the interviewee, showing understanding and encouraging them to elaborate, especially when discussing a process or event.
3. Affirmation: Responding with "yes," "I see," or similar phrases during the interview affirms what the interviewee has said and encourages them, similar to nodding in agreement.
4. Encouragement: After an initial response, this probe encourages interviewees to provide more information through follow-up questions like "Why do you feel that way?" or "Can you tell me more about that?"
5. Long Question: These probes can be helpful at the start of interviews or for sensitive topics, offering a detailed introduction to the discussion.
6. Leading: While considered potentially biased, leading questions can be useful, as interviewees are capable of correcting or providing their perspective.
7. Baiting: Involves the interviewer acting as if they already know something, which can prompt interviewees to open up or correct any misunderstandings.

For the interviews in this research probing types (2) Echo, (3) Affirmation and (4) Encouragement are most useful.

Rapport
The advantages of establishing a positive connection between interviewers and respondents, with regards to encouraging their active involvement in research, have received widespread approval (Horsfall et al., 2021). However, rapport can have both positive and potentially negative effects on data quality. While it may encourage participation it might also lead to more socially desirable responses. The consistency of responses, however, does not appear to be significantly affected by the level of rapport. This underscores the importance of carefully considering the role of rapport in research interviews and being aware of its potential impact on data quality. For the interviews in this research the beginning of the session will start with some 'small' talk to ease into the real interview, this will not be recorded. During the interview paying attention to the interviewee and their answers is important, as it can help to establish a positive connection.

Checklist pre-interview

- o Research the Participant: Gather information about the participant, including their expertise, professional background, and specific areas of interest. Determine the domain or subject you are most interested in discussing with them.
- o Obtain Consent: Send the consent form via email in advance and ensure it's printed out for them to sign before the interview.
- o Utilise Backup Recording Tools: Employ alternative recording devices, such as using a laptop for recording in Word format and a smartphone with a dictation app.

Interview introduction procedure
1. Thank the interviewee for making time and their participation in the interview (small talk).
2. Ask consent for the audio recording of the interview
3. Ask to sign the consent form if not happened already signed by email (data will be anonimised)
4. Start recording on recording device
5. Start recording on secondary/back-up audio device
6. Introduce interview topic (refer to email)
7. Start interview (approx. 45 min)

Start interview

1. Personal introduction
- *Can you tell something about yourself, where do you work and what do you do?*

2. Zoom out
• What is your opinion on cross-border travel using public transport?
(Wat is uw mening over grensoverstijgende OV verbindingen?)
• How long have you worked in this domain?
(Hoe lang bent u al werkzaam in deze sector?)
• Have you seen any changes over time in the role of cross border travel using public transport?
(Heeft u enige veranderingen gezien in de rol van openbaar vervoer in grensverkeer?)
• What helps to increase mobility what helps to decrease?
(Wat versterkt volgens jullie mobiliteit en wat vermindert?)

3. Introduction and Context (Inleiding en Context)
• Can you provide an overview of your involvement or role in the HSL Zuid or Hamont-Weert corridor project?
(Kunt u een overzicht geven van uw betrokkenheid of rol in het project HSL Zuid of Hamont-Weert?)
• What motivated yur organization to participate in these cross-border rail corridor projects?
(Wat heeft uw organisatie gemotiveerd om deel te nemen aan deze grensoverschrijdende spoorwegprojecten?)
• Could you share your general observations and experiences of these projects?
(Kunt u uw algemene observaties en ervaringen delen van deze projecten?)

4. Decision-Making and Strategy (Besluitvorming en Strategie)
• How were decisions typically made within the project? Were there specific processes or methods in place?
(Hoe werden beslissingen doorgaans genomen binnen het project? Waren er specifieke processen of methoden?)
• Can you describe the overarching strategy employed in managing these cross-border rail corridor projects?
(Kunt u de algemene strategie beschrijven die is gebruikt bij het beheer van deze grensoverschrijdende spoorwegprojecten?)
• Were there any unique challenges or opportunities related to cross-border cooperation, and how were they addressed?
(Waren er unieke uitdagingen of kansen met betrekking tot grensoverschrijdende samenwerking, en hoe zijn deze aangepakt?)
• Wat is de wenselijke situatie nu en wat zijn de mogelijkheden?
• Who has the power, where is the authority?

5. Stakeholders and Collaboration (Stakeholders en Samenwerking)
• Who were the key stakeholders involved in the project, and what roles did they play?
(Wie waren de belangrijkste stakeholders die betrokken waren bij het project, en welke rollen speelden ze?)
• How did communication and collaboration occur among stakeholders from different regions or countries?
(Hoe vond communicatie en samenwerking plaats tussen stakeholders uit verschillende regio's of landen?)
• Can you provide examples of successful collaborative efforts or challenges in stakeholder engagement?
(Kunt u voorbeelden geven van succesvolle samenwerkingsinspanningen of uitdagingen bij stakeholderbetrokkenheid?)
• Can you share any insights into how actors were perceived or selected for participation in these projects?
(Kunt u inzichten delen over hoe actoren werden waargenomen of geselecteerd voor deelname aan deze projecten?)

6. Definitions
• Are you familiar with the term governance?
(Bent u bekent met de term governance)
• How would you define the term governance?
(Wat is volgens u de definitie van governance?)

7. Governance Features (Kenmerken van Bestuur)
• During the project, did you notice any specific governance principles, metaphors, or strategies that influenced decision-making?
(Heeft u tijdens het project specifieke bestuursprincipes, metaforen of strategieën opgemerkt die van invloed waren op de besluitvorming?)
• How would you describe the overall orientation of decision-making in these projects, such as top-down, bottom-up, or collaborative?
(Hoe zou u de algehele oriëntatie van de besluitvorming in deze projecten omschrijven, zoals top-down, bottom-up of samenwerkend?)

Wrap up
1. Stop recording
2. Thank interviewee for participation
3. Ask if interviewee has any additional questions or comments in regards to the interview and/or research.
4. Ask if interviewee want to stay in the loop of future developments of the research
5. Let participant know that summary of interview will be send for approval (<1 week, max. 2 A4)

Checklist Post-Interview
o Upload recording of interview
o Transcribe interview
o Summarise interview
o Send summary to participant

A3 INTERVIEW INVITE

Interview Cross-border Public Transport

Inleiding tot het onderzoek
Dit onderzoeksproject 'Crossing Borders Sustainably' richt zich op de governance van grensoverschrijdende spoorcorridorprojecten, waarbij specifiek wordt gekeken naar de casestudies van de HSL Zuid en de Hamont-Weert corridor. Deze twee casussen zijn zo gekozen dat ze zowel een afgeronde als een nog niet afgeronde casus omvatten.

Het doel van deze studie is om waardevolle inzichten te krijgen ervaringen en uitdagingen met betrekking tot strategie, samenwerking en besluitvormingsprocessen binnen deze complexe, grensoverschrijdende infrastructuurprojecten.

Wat kunt u verwachten?
Deelname aan het interview houdt in dat u uw ervaringen, observaties en inzichten met betrekking tot het project deelt. Het interview duurt ongeveer 45 minuten en kan zowel online als op locatie worden afgenomen. Een lijst met een samenvatting van de interviewvragen is te vinden in Appendix 1.

Vertrouwelijkheid en toestemming
Uw deelname is geheel vrijwillig en u hebt het recht om u op elk moment zonder gevolgen terug te trekken uit het interview. Het interview wordt met uw toestemming opgenomen en getranscribeerd. Voordat elk interview kan beginnen, moeten deelnemers een toestemmingsformulier ondertekenen, zie Appendix 2. Na de transcriptie wordt de opname verwijderd. De interviews worden gepseudonimiseerd.

Volgende stappen
Als u beschikbaar en bereid bent om deel te nemen, kunnen we een geschikte datum en tijd afspreken voor het interview. Het interview zal naar verwachting ongeveer 45 minuten duren en kan zowel in het Nederlands als in het Engels worden afgenomen. Afhankelijk van uw voorkeur vindt het interview persoonlijk of online (Zoom, Teams, etc.) plaats.

Contact Informatie
Als je vragen hebt, meer informatie wilt of je deelname wilt bevestigen, neem dan contact met me op.

Ik hoop van harte dat u overweegt deel te nemen aan dit onderzoek.

Dank u voor uw tijd en ik kijk uit naar de mogelijkheid om u te ontmoeten.

Met vriendelijke groet,

Thomas van Daalhuizen

Appendix 1

1. **Personal introduction**
- Can you tell something about yourself, where do you work and what do you do? (Kunt u zichzelf kort introduceren?)

2. **Zoom out**
- What is your opinion on cross-border travel using public transport? *(Wat is uw mening over grensoverstijgende OV verbindingen?)*
- How long have you worked in this domain? *(Hoe lang bent u al werkzaam in deze sector?)*

3. **Introduction and Context (Inleiding en Context)**
- Can you provide an overview of your involvement or role in the HSL Zuid or Hamont-Weert corridor project? *(Kunt u een overzicht geven van uw betrokkenheid of rol in het project HSL Zuid of Hamont-Weert?)*

4. **Decision-Making and Strategy (Besluitvorming en Strategie)**
- How were decisions typically made within the project? Were there specific processes or methods in place? *(Hoe werden beslissingen doorgaans genomen binnen het project? Waren er specifieke processen of methoden?)*
- Were there any unique challenges or opportunities related to cross-border cooperation, and how were they addressed? *(Waren er unieke uitdagingen of kansen met betrekking tot grensoverschrijdende samenwerking, en hoe zijn deze aangepakt?)*

5. **Stakeholders and Collaboration (Stakeholders en Samenwerking)**
- Who were the key stakeholders involved in the project, and what roles did they play? *(Wie waren de belangrijkste stakeholders die betrokken waren bij het project, en welke rollen speelden ze?)*
- How did communication and collaboration occur among stakeholders from different regions or countries? *(Hoe vond communicatie en samenwerking plaats tussen stakeholders uit verschillende regio's of landen?)*
- Can you provide examples of successful collaborative efforts or challenges in stakeholder engagement? *(Kunt u voorbeelden geven van succesvolle samenwerkingsinspanningen of uitdagingen bij stakeholderbetrokkenheid?)*

6. **Governance Features (Kenmerken van Bestuur)**
- How would you describe the overall orientation of decision-making in these projects, such as top-down, bottom-up, or collaborative? *(Hoe zou u de algehele oriëntatie van de besluitvorming in deze projecten omschrijven, zoals top-down, bottom-up of samenwerkend?)*

Appendix 2

Toestemmingsformulier

U bent uitgenodigd om deel te nemen aan een onderzoek getiteld 'Crossing Borders Sustainably'. Dit onderzoek wordt uitgevoerd door Thomas van Daalhuizen van de TU Delft, Faculteit Bouwkunde en Gebouwde Omgeving.

Het doel van dit onderzoek is om waardevolle inzichten te verkrijgen in de praktijken, ervaringen en uitdagingen met betrekking tot strategie, samenwerking en besluitvormingsprocessen binnen deze complexe, grensoverschrijdende infrastructuurprojecten, en zal ongeveer 45 minuten in beslag nemen. De gegevens van het interview in de vorm van spraakopnames zullen worden gebruikt om het interview te transcriberen, waardoor codering mogelijk wordt. Meerdere interviews zullen worden vergeleken om te zien of er overeenkomsten of verschillen zijn. We vragen je om je ervaringen, observaties en inzichten met betrekking tot de HSL-Zuid of de Hamont-Weert corridor te delen, met de nadruk op de bovengenoemde aspecten.

Zoals bij elke (online) activiteit is het risico van een data-inbreuk altijd mogelijk. Uw antwoorden in dit onderzoek zullen naar ons beste vermogen vertrouwelijk blijven. We zullen eventuele risico's minimaliseren door geen persoonlijke gegevens op te nemen in de transcriptie en deze te pseudonimiseren. De opnames van de interviews worden verwijderd nadat de transcripties zijn voltooid.

Uw deelname aan dit onderzoek is geheel vrijwillig en u kunt zich op elk moment terugtrekken. Het staat u vrij om vragen te stellen.

PLEASE TICK THE APPROPRIATE BOXES	Yes	No
A: ALGEMENE OVEREENSTEMMING - ONDERZOEKSDOELEN, TAKEN VAN DE DEELNEMERS EN VRIJWILLIGE DEELNAME		
1. Ik heb de studie-informatie gedateerd 29/09/2023 gelezen en begrepen, of deze is mij voorgelezen. Ik heb vragen kunnen stellen over het onderzoek en mijn vragen zijn naar tevredenheid beantwoord.	☐	☐
2. Ik geef vrijwillig toestemming om deel te nemen aan dit onderzoek en begrijp dat ik kan weigeren om vragen te beantwoorden en dat ik me op elk moment, zonder opgaaf van reden, uit het onderzoek kan terugtrekken.	☐	☐
3. Ik begrijp dat deelname aan het onderzoek inhoudt: - *deelname aan een interview waarvan een audio-opname wordt gemaakt* - *de transcriptie van de audio-opname, waarna de opname wordt gewist*	☐	☐
B: MOGELIJKE RISICO'S VAN DEELNAME (WAARONDER GEGEVENSBESCHERMING)		
4. Ik begrijp dat deelname aan het onderzoek ook inhoudt dat specifieke persoonlijk identificeerbare informatie (PII) [*nationaliteit*] en bijbehorende persoonlijk identificeerbare onderzoeksgegevens (PIRD) [*functieomschrijving en organisatie*] worden verzameld, waarbij het potentiële risico wordt aangegeven.	☐	☐
5. Ik begrijp dat de volgende stappen zullen worden genomen om de dreiging van een datalek te minimaliseren en mijn identiteit te beschermen in het geval van een dergelijke inbreuk: - *Gegevens worden gepseudonimiseerd,* - *Audio-opnames worden na transcriptie verwijderd* - *Gegevens worden veilig opgeslagen en zijn alleen toegankelijk voor het onderzoeksteam.*	☐	☐
6. Ik begrijp dat over mij verzamelde persoonlijke informatie die mij kan identificeren, zoals [*mijn naam en bedrijf*], niet buiten het onderzoeksteam zal worden gedeeld.	☐	☐
7. Ik begrijp dat de door mij verstrekte (identificeerbare) persoonlijke gegevens aan het einde van het onderzoek (naar verwachting medio februari) worden vernietigd.	☐	☐
C: PUBLICATIE, VERSPREIDING EN TOEPASSING VAN HET ONDERZOEK		
8. Ik begrijp dat na het onderzoek de niet-geïdentificeerde informatie die ik heb verstrekt zal worden gebruikt voor een scriptierapport en de ontwikkeling van een workshop voor gezamenlijke besluitvorming.	☐	☐
9. Ik ga ermee akkoord dat mijn antwoorden, meningen of andere input anoniem geciteerd kunnen worden in onderzoeksresultaten.	☐	☐
D: (LANGDURIGE) OPSLAG, TOEGANG EN HERGEBRUIK VAN GEGEVENS		
10. Ik geef toestemming dat de geanonimiseerde transcripties die ik aanlever gearchiveerd worden in de repository van de TU Delft, zodat ze gebruikt kunnen worden voor toekomstig onderzoek en leren.	☐	☐

Ondertekenden

______________________	________________	_______
Naam van deelnemer	Handtekening	Datum

Ik, als onderzoeker, heb het informatieblad nauwkeurig verstrekt aan de potentiële deelnemer n heb er naar mijn beste vermogen voor gezorgd dat de deelnemer begrijpt waarmee hij/zij ·ijwillig instemt.

______________________	________________	_______
Naam van onderzoeker	Handtekening	Datum

Contactgegevens voor meer informatie

Thomas van Daalhuizen
+31 (0)6 48 34 28 61
t.j.vandaalhuizen@student.tudelft.nl
thomasvandaalhuizen@hotmail.nl

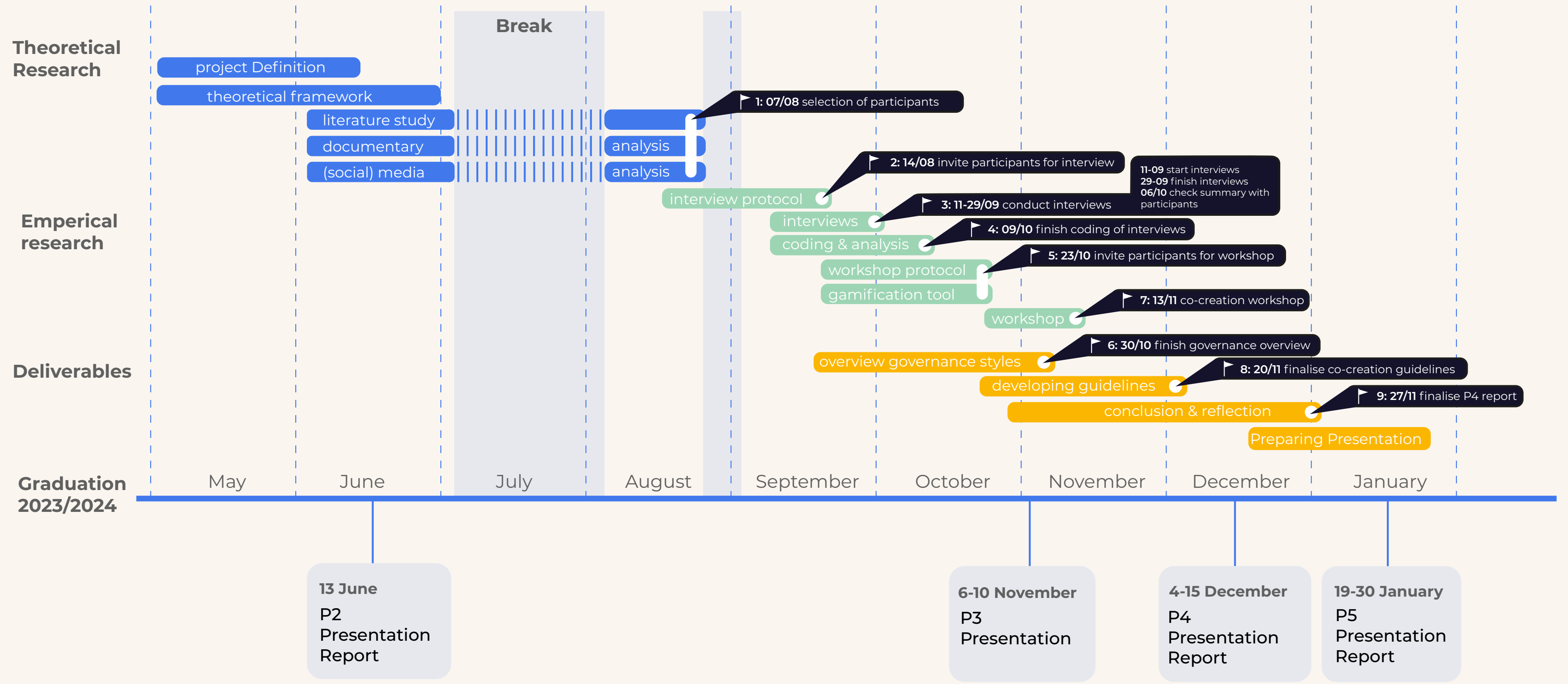
A4 RESEARCH PLAN

The research plan consists of different activities that have been explained in the methodology. An overview of the timeline and milestones can be seen in figure 5.1.

Milestones

1. **07/08** Participant selection
2. **14/08** Interview protocol and sending invites to participants
    a. *04/09 Check protocol*
3. **11/09 – 29/09** Interviews
    a. *11/09 Start interviews*
    b. *29/09 Finish interviews*
    c. *06/10 Check interviews summaries with participants*
4. **09/10** Finish Coding & Analysis interview transcripts
5. **30/10** Overview perceived and needed governance styles based on interview analysis
6. **27/11** Finalise P4 report (conclusions, reflection and recommendations.

Figure 5.1 Research planning including methods and milestones



CROSSING BORDERS SUSTAINABLY

Using Metagovernance to Activate Stakeholders to Facilitate Sustainable Mobility Transitions in a Cross-Border Context

THOMAS VAN DAALHUIZEN

There is a need to broaden discussions on sustainable mobility beyond the prevalent focus on electric cars, particularly considering the challenges faced by border regions and marginalized groups that rely on public and soft transport. This study aims to fill this gap by examining the intricate dynamics of cross-border mobility transitions in Belgium and the Netherlands, with a specific focus on activating stakeholders and facilitating sustainable mobility transitions through the application of meta-governance.

Utilising a multifaceted research methodology, including an extensive literature review, in-depth case studies of HSL-Zuid and IJzeren Rijn, stakeholder interviews, this research navigates the complex landscape of meta-governance in cross-border regions.

The study reveals three pivotal tensions that disrupt current decision-making processes for cross-border connections: (1) National and Regional Imbalance in Decision-Making, (2) Formal and Informal Routes to Decision-Making and Flexibility, (3) Conflicting Interests. These tensions intricately impact governance styles, creating challenges and inefficiencies.

To address the identified issues, the research proposes actionable recommendations. Emphasising the need to harmonise national-regional governance frameworks, work on nuanced approaches to formal and informal routes, considerate divergent national interests, and heightened awareness of governance style interplay. Moreover, the research also highlights that metagovernance is already ingrained in current practices. The key lies in raising awareness of its presence among stakeholders, enabling a more informed and seamless navigation of the cross-border governance landscape. Metagovernance's true value lies in its ability to articulate and navigate through different governance styles, adapting to various challenges and opportunities. While it may not always represent a novel approach, it serves as a critical analytical tool for understanding the dynamics of governance in complex infrastructure projects.

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