MEASURING AND ENHANCING THE SOCIAL LICENSE TO OPERATE IN ROAD INFRASTRUCTURE PROJECTS IN THE NETHERLANDS

A CASE STUDY OF THE SOUTHERN RING ROAD OF GRONINGEN

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Preface

Dear reader,

You are about to read my thesis for the master's program Environmental and Infrastructure Planning at the Faculty of Spatial Sciences at the University of Groningen. With this thesis, my student time will come to an end. It was a period in which I explored the field of Spatial Sciences and developed a lot, both academically and personally. I consider the lessons learned very valuable, and I will take them with me to the next chapter of my career.

I want to use this opportunity to thank a few people. First of all, I would like to thank my supervisor, Prof. Dr. Jos Arts, for his continued support, helpful feedback, and relentless efforts throughout the process. Then, I would like to thank the respondents for their time and effort by participating in the interviews, sending additional documents, and, to some, participating in the Focus Group Discussion. Lastly, I would like to thank my colleagues at Aanpak Ring Zuid for allowing me to study the project closely.

Enjoy reading.

Jelmer de Rijke

Abstract

The public can contest infrastructure projects, resulting in project delays and budget overruns. In extractive industries, the Social Licence to Operate (SLO) concept monitors and enhances social acceptance. The SLO is the ongoing level of social acceptance reached among all affected by a certain project. It consists of four levels: withdrawal, acceptance, approval, and co-ownership. These are divided by legitimacy, credibility, and institutionalised trust boundaries, which can be examined using several criteria. However, limited research exists on how the SLO can be applied to enhance infrastructure projects. Therefore, to research the potential of the SLO in road infrastructure projects, a comparative case study analysis between five road infrastructure projects in the Netherlands is done to research how the SLO can be operationalised with an extended focus on the Southern Ring Road project in Groningen. Society's potential to disrupt a project via withdrawal of the SLO depends on their ability to unite, the level of protest, and their ability to seek attention from the media and politicians. To reach social acceptance for society, project developers should explain the common good, gain confidence by acknowledging and addressing the nuisance, and showcase their ability to construct the project. Engaging with locals and including their interests can improve the image of a project and overcome potential problems at a later stage. It is concluded that the SLO framework is suitable for operationalisation to enhance road infrastructure projects, as it can help project developers generate additional value for society within their projects.

Keywords: Social Acceptance, Social Licence to Operate, Road Infrastructure Projects, Social Impact Assessment.

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List of abbreviations

SLO: Social Licence to Operate

NIMBY: Not In My Backyard

SAA: Schiphol – Amsterdam – Almere

BAHO: Badhoevedorp - Holendrecht

FGD: Focus Group Discussion

1. Introduction

1.1 Background

The success of infrastructure projects is often measured by the successful management of time and budget, not by examination of social and environmental results that have been achieved throughout the project (Flyvbjerg, 2017). The public benefits of significant infrastructure projects on long-term integrated policy goals are often expressed in social, economic, and environmental outcomes on a regional or metropolitan scale. However, on a local scale, projects often result in complex, unplanned, harmful, and unfair distribution of social impacts (Mottee et al., 2020). Social acceptance has often been a constraining factor in infrastructure projects, as the public can highly influence such projects (Wüstenhagen et al., 2007). Social conflict has often led to extensive cost overruns via delays and a loss of political support for the project in the past. Therefore, understanding the relationship between social and environmental risks and the project's success could enhance the sustainable outcomes of large-scale projects (Franks et al., 2014).

A classic example in the Netherlands is the road expansion project Amelisweerd between 1960 and 1980, portrayed in media and academic literature as a symbolic mismatch between government and stakeholder opposition. From the 1960s onwards, infrastructure projects became targets of public protests, as the negative impacts of car mobility, such as air pollution, increasing traffic accidents, and nuisance, were more often publicly debated (Van de Riet & Toussaint, 2014). More recently, plans to broaden the A27 near Utrecht further led to protests as locals tried to conserve the trees surrounding the A27 (NOS, 2021). Nevertheless, in 2022, the government took the publicly contested decision to broaden the A27. However, the government has granted both the province and the municipality of Utrecht the opportunity to develop an alternative plan to limit traffic congestion. Plans include strategies to reduce car traffic and increase public transport, putting the project to broaden the A27 on hold (NOS, 2023; De Utrechtse Internet Courant, 2023). Another example of stakeholder opposition is the development of the Blankenburgverbinding, a tunnel underneath the Maas connecting the A20 and the A15 near Rotterdam. The project also faced protests, as inhabitants surrounding Vlaardingen did not want the road to cross a nature reserve. Therefore, during the opening of the construction site, aeroplanes with protest slogans flew over (Oosterom, 2018).

Also, the Southern Ring Road in Groningen faced protests during several project stages. During the initial phase, the project was already regarded as controversial, as inhabitants argued that the project would result in a decrease in liveability and accessibility for some neighbourhoods, both during construction and the final situation of the project (Hamersma et al., 2016; Dagblad van het Noorden, 2022). In 2014, several local stakeholder groups initiated to take the project to court, aiming to permanently cancel the project (Hamersma et al., 2018). Furthermore, several protests against cutting trees were raised in Groningen before and during construction (Dagblad van het Noorden, 2023; DeGoedeZaak, 2024). Apart from that, concerns were raised about the financial costs of the project and potential nuisance during the project's construction (Het Financieel Dagblad, 2022; Oogtv, 2022; Groninger Internet Courant, 2023). Meanwhile, inhabitants did not feel like the government took their concerns seriously. They suggested more severe protest actions like road blockings were needed. However, due to the potential of raising the financial costs even further, locals have decided not to proceed with their protests (Dagblad van het Noorden, 2022). These examples show that road infrastructure projects are prone to social conflict in the form of protests.

Franks et al. (2014) explained how stakeholder discontent, via, for example, protests, can translate into increased business costs in several sectors. According to them, extensive project costs caused by social conflict are most likely to arise due to delays by postponement of political decisions. The additional cost most often overlooked in case of project delay is the cost of staff, which, according to Franks et

al. (2014), can result in 5% up to 15 % additional project costs. During project implementation, protests typically arise if there is a perceived lack of proper acknowledgement of social and environmental impacts. Furthermore, when affected groups feel excluded from the decision-making process with limited influence on the project outcomes, they are more likely to engage in protests against projects (Hanna et al., 2016b). In several cases, communities have opposed projects, withholding consent for implementation and operation. Therefore, besides having a *legal* licence to develop, several authors argue that projects must have and maintain a *Social* Licence to Operate (SLO) (Hanna et al., 2016b). The SLO is the ongoing level of social acceptance reached among all affected by a certain project (Dare et al., 2014; Moffat & Zhang, 2014; Melé & Armengou, 2016; Jijelava & Vanclay, 2017). The concept of the SLO is often debated in literature and business and management contexts. However, much discussion remains about the concept's operationalisation and applicability to various contexts (Jijelava & Vanclay, 2017; Jijelava & Vanclay, 2018).

Road infrastructure projects, such as tunnels or roads close to urban areas, can also lead to a negative public perception of a project, especially in densely populated areas with contradicting concerns and interests of locals (Azege et al., 2021; Van de Riet & Toussaint, 2014). In democracies, the public can raise their concerns and interests towards projects (Mottee, 2022). To account for these social concerns, planning practices have shifted from top-down approaches to collaborative and bottom-up modes that engage locals in planning practices (Homsy et al., 2019). However, project developers are often predominantly focused on achieving the project objectives instead of facilitating collaboration among different societal stakeholders and managing local social impacts (Mottee, 2022). By incorporating the SLO in their thinking and practices, project developers can achieve public approval for their activities and generate additional value for their projects, for example, via improved reputation, cost savings and productivity, and improved risk management. Besides that, it helps to minimise harm to local communities (Jijelava & Vanclay, 2018). Therefore, the SLO concept has the potential to be applied to infrastructure projects.

1.2 Social Licence to Operate and its Societal Relevance

The SLO refers to the (lack of) public consent for a development (Maillé et al., 2023). Project developers can use the SLO to understand whether society considers their practices legitimate. In case of potential disapproval by societal parties, their development could be harmed (Demuijnck & Fasterling, 2016). It originates from mining and extractive industries in which Indigenous People were directly and indirectly impacted by mining and extractive industries (Boutilier & Thomson, 2011). The obligation of projects to engage with impacted communities is acknowledged within the international law of the United Nations Declaration on the Rights of Indigenous People. Therefore, projects must endorse these international laws, even if they are not backed by national laws (Hanna & Vanclay, 2013). The SLO is primarily used for activities performed by private companies; however, it could also be applied to governmental activities (Veenker & Vanclay, 2021).

Besides society's potential to contest and compromise project objectives, the SLO can be used to engage with, and gain acceptance from, local stakeholders within infrastructure projects (Morshed et al., 2021). Besides that, the SLO could be considered an opportunity to get acquainted with yet-unknown issues (Melé & Armengou, 2016). For example, protests can be considered a warning sign to a project developer of losing the SLO. With different strategies, companies or governments could manage these issues via a meaningful dialogue before the escalation of protests, causing even more significant problems (Hanna et al., 2016b; Vanclay & Hanna, 2019). As protests have an increasing potential in the digital era via different forms of media, protests will become more prevalent in the future (Hanna et al., 2016b; Earl & Kimport, 2011). As the SLO continuously monitors the level of social acceptance among all stakeholders, the concept can be useful in overcoming public contests about road infrastructure projects.

1.3 Academic Relevance

As a response to calls for greater community involvement, the SLO concept is used as a policy instrument (Meesters & Behagel, 2017). The SLO should not be regarded as a single licence granted by society but as a continuum of several licences achieved over different levels of society (Dare et al., 2014). The SLO seems to be closely related to legitimacy. Legitimacy is based on normative ethical theory, meaning legitimacy is universal and applies to all persons and organisations. However, the SLO may only respond to the specific interests of groups of society directly impacted by a project, for example, the phenomenon that is referred to as NIMBY (Not In MY Backyard). Local stakeholders often regard the project objectives as legitimate. However, they disapprove of the developments needed to acquire these goals within their own local environment (Melé & Armengou, 2016). Besides that, the SLO is one-directional; it is an evaluation of a project by society. Legitimacy is multi-directional; it is not only society's evaluation of a project, but it can also be a project developer's evaluation of its stakeholders (Gehman et al., 2017).

Social acceptability is a primary concern within development projects that are often contested by society. The SLO is considered helpful by project developers and scholars to avoid disturbances caused by society that could harm the project. However, difficulties remain in defining and measuring social acceptance (Parsons et al., 2014; Bergeron et al., 2015). Different models, like Boutilier & Thomson (2011), Bergeron et al. (2015), Morshed et al. (2021), Melé & Armengou (2016), and Jijelava (2019) offer insight and understanding into the conceptualisation and operationalisation of the SLO in different contexts (Maillé et al., 2023).

The SLO originates from the mining industry, which has resulted in different frameworks to operationalise the SLO within these contexts (Jijelava & Vanclay, 2017). The concept of the SLO has the potential to be applied to infrastructure projects. However, limited research exists on the operationalisation of the SLO in infrastructure projects (Morshed et al., 2021). Other than that, in the context of the mining industry, private businesses should obtain and maintain a Social Licence. Morrison (2014) and Veenker & Vanclay (2021) argued that, besides private businesses, governmental organisations need a social licence over different levels of society to initiate and continue their projects. Again, limited research exists on projects in which governmental organisations had to obtain and maintain an SLO to continue their project. Furthermore, infrastructure project developers can create additional value for their projects via the SLO concept (Jijeleva & Vanclay, 2018

1.4 Research Aim and Research Questions

As explained, infrastructure projects can benefit from the SLO, but there is limited research into the operationalisation of the SLO in this context. Therefore, this research aims to develop a framework to operationalise the SLO within the context of road infrastructure projects and identify strategies to maintain and enhance the SLO to benefit the project. Based on this objective, the following research question is formulated:

How can the Social Licence to Operate be operationalised and enhanced in road infrastructure projects like the Southern Ring Road project in Groningen?

The following sub-questions are formulated to structure this research and answer the main research question.

1. *How can the concept of Social Licence to Operate be defined in the context of road infrastructure projects?*
2. *What level of the Social Licence to Operate has been reached within the selected infrastructure projects?*

3. *What are the success factors, barriers, and conditions of the Social Licence to Operate within road infrastructure projects?*
4. *What are strategies to maintain and enhance the Social Licence to Operate, and which can be used in the case of the Southern Ring Road in Groningen?*

2. Theoretical Framework

This Chapter defines the Social Licence to Operate in the context of road infrastructure projects. Therefore, the first sub-question is answered. This is done via a literature review of relevant literature relating to the SLO and social acceptance.

2.1 Three types of social acceptance

Scholars like Bice et al. (2017), Wüstenhagen et al. (2007), and Morrison (2014) have developed a social acceptance model, including three types of acceptance: socio-political, community, and market acceptance (Maillé et al., 2023). "Socio-political acceptance is social acceptance on the broadest, most general level" (Wüstenhagen et al., 2007; p 2684). These consist of acceptance by authorities via legal permits (Morrison, 2014). Market and economic acceptance are based on the ability of businesses and shareholders to accept and adapt to the new situation (Wüstenhagen et al., 2007; Morrison, 2014). Social acceptance is based on the acceptance of local society and all stakeholders, and it should be regarded as essential to meet their expectations (Wüstenhagen et al., 2007; Morrison, 2014; Bice et al., 2017). Although political and market acceptance are different forms, the nature of government–market–societal relations should be understood to comprehend to what extent the community accepts development projects (Bice et al., 2017). Therefore, the discourses between the government and society and between the market and society are essential to consider (Bice et al., 2017). However, this research focuses on the right corner of Figure 1, the community acceptance.

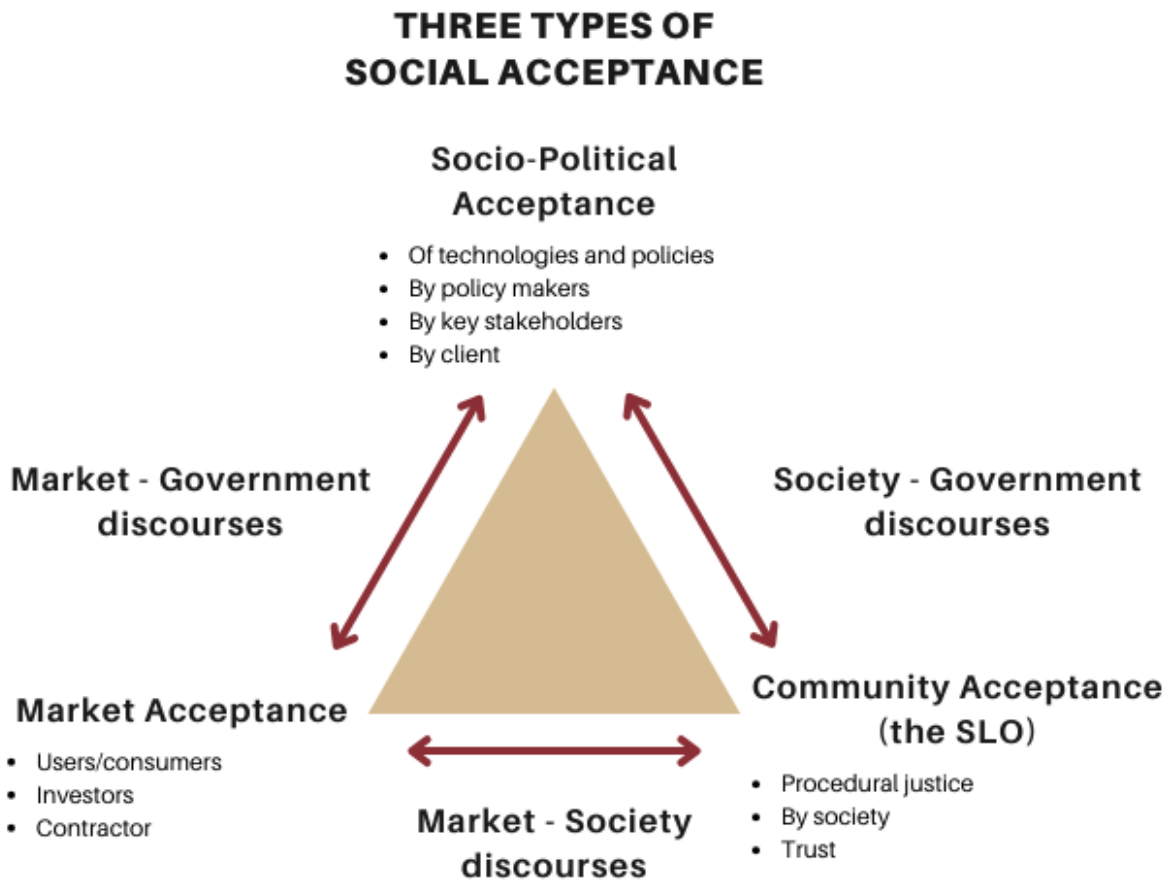

Figure 1: Three types of Social Acceptance based on Wüstenhagen et al., (2007) edited by Author (2024)

Different research on social acceptance in diverse contexts and, more specifically, the SLO has resulted in several frameworks. The frameworks mainly studied in this research are listed in Table 1. It presents the different scholars, the context of their research, the concept studied, and their main findings. Boutilier and Thomson (2011) pioneered SLO research, so their study is often used as a base for understanding the SLO (Morshed et al., 2021). Therefore, this is also done in this research. Bergeron et al. (2015) provided an analytical and quantitative description of the SLO. Different variables are combined to result in a social risk index based on the primary sources of conflict. Both research is based on cases in the extractive industries. However, this research is focused on road infrastructure projects.

The SLO cannot be directly applied to different contexts (Jijeleva, 2019). Besides, extractive industries and road infrastructure projects are not directly comparable. For example, the mining and extractive industries often have led to direct economic revenue, increasing perceived economic legitimacy and social acceptance of a project (Balza et al., 2023). Meanwhile, the success of transportation infrastructure projects could be measured by meeting society's expectations. However, society's expectations of transportation infrastructure projects concerning socioeconomic development are subjective and divergent, limiting its effect on society's perceived economic legitimacy (Li et al., 2012). The publications by Morshed et al. (2021), Melé & Armengou (2016), and Jijelava (2019) pioneered in SLO research within infrastructure projects. Therefore, these are used to understand the SLO within infrastructure projects.

Scholars	**Context studied**	**Concept used**	**Main findings**
Boutilier & Thomson (2011)	Mining industry	SLO	Levels of social acceptance are determined by four factors: economic legitimacy, socio-political legitimacy, interactional, and institutionalised trust.
Bergeron et al. (2015)	Extractive and mining industry	Social acceptability	An index based on an analytical description of three main determinants of conflict: the company responsible for the project, the affected local societies, and the project within its natural environment.
Morshed et al. (2021)	Infrastructure project	SLO	Five pillars determine SLO: socio-political legitimacy, procedural fairness, economic legitimacy, interactional trust, and institutional trust.
Melé & Armengou (2016)	Infrastructure project	Moral Legitimacy and SLO	Four criteria to evaluate moral legitimacy and the SLO: the intended objectives, morality of the means, ethical evaluation of the situation, and foreseeable consequences associated with the project.
Jijelava (2019)	Infrastructure project	SLO	Three determinants of the SLO: legitimacy, credibility, and trust.

Table 1: Literature used to conceptualise the SLO in this research

2.2 The Origins of The Social Licence to Operate

Boutilier and Thomson (2011) pioneered SLO research, and they defined the concept of SLO as society's position towards the legitimacy of a project developer's local social impact within a project. They developed a qualitative SLO model, including *four acceptance levels*, indicating society's position towards a project (Morshed et al., 2021). The level of the SLO is determined by *four factors*: economic legitimacy, socio-political legitimacy, interactional trust, and institutionalised trust (Boutilier & Thomson, 2011). The lowest level is withdrawal, in which the project developers risk losing the SLO, which results in potential political risks. If the legitimacy boundary is reached, the level of social acceptance can be established. By gaining credibility, the level of social approval can be reached. If trust is gained over an extended period, the SLO can rise to the highest level: psychological identification with a project (Boutilier & Thomson, 2011). The different levels and the boundaries between the levels of the SLO of the model by Boutilier and Thomson (2011) can be found in Figure 2.

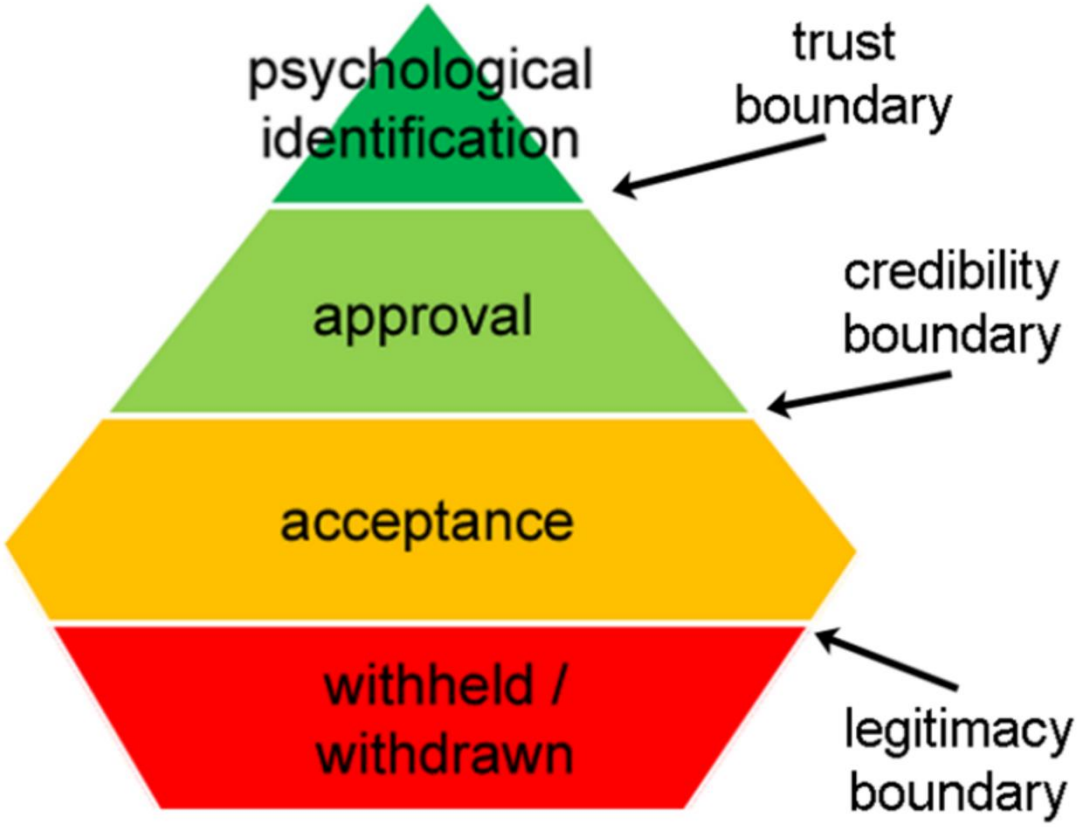

Figure 2: Different levels of the SLO (Boutilier & Thomson, 2011)

2.3 Three main determinants of conflict

Bergeron et al. (2015) developed a *quantitative index* to determine the risk of conflict between development activities and local society. The index involved an interdisciplinary team of researchers (Yates et al., 2016). The index is based on an analytical description of *three main determinants of conflict in a project*: the company responsible for the project, the affected local societies, and the project within its natural environment. Various stakeholders can objectively evaluate the three determinants (Bergeron et al., 2015). The index can be considered a predictive tool to increase awareness of potential sources of conflict. This allows project developers to adapt the projects in collaboration with several stakeholders and increase the SLO (Yates et al., 2016).

2.4 The Social Licence to Operate in Infrastructure Projects

Morshed et al. (2021) studied the SLO in an infrastructure project in Khulna, Bangladesh. Within projects in Bangladesh, the model developed by Boutilier and Thomson (2011) is most often referred to in the context of the SLO and, therefore, has been used in this case (Morshed et al., 2021). In line with Boutilier and Thomson (2011), several statements were selected as a basis to measure the SLO. However, besides the four indicators determined by Boutilier & Thomson (2011), research by Morshed et al. (2021) resulted in *five indicators of the SLO*. Adding to the *four factors* introduced by Boutilier & Thomson (2011), the category of procedural fairness has been added by Morshed et al. (2021).

Melé and Armengou (2016) studied moral legitimacy and the SLO in a controversial and highly contested transport infrastructure project in Barcelona. They identified and applied *four moral criteria of a project*. A project developer can use these criteria to reflect upon their goals and actions within a project:

1. *Contribution to the common good:* The project's impact on the common good, encompassing socio-cultural, organisational, and economic aspects, is crucial. Project goals should align with promoting aspects such as human dignity, human rights, safety, and justice. Therefore, decision-makers should choose alternatives that do not conflict with the common good and promote overall well-being.
2. *Morality of means and procedures:* Ethical acceptability of the means and procedures in place is essential, emphasising the ethical morale of "doing no harm" and "promoting good." This involves ensuring that project organisation, technology, and equipment contribute positively to the common good.
3. *Analysis of stakeholder concerns and needs:* The importance of understanding and evaluating stakeholder concerns, needs, and potential emotions is highlighted. Besides that, the ability of a stakeholder to withdraw the SLO should be understood. Negotiation and cooperation with stakeholders, considering justice and the common good, are integral to ethical decision-making.
4. *Ethical evaluation of consequences:* An ethical evaluation of potential consequences associated with the project is emphasised. This includes ensuring a fair approach by minimising potential damage or risks while balancing negative consequences with benefits (Melé & Armengou, 2016).

As explained by the three types of licences by Bice et al. (2017), Wüstenhagen et al. (2007), and Morrison (2014), the nature of the government-market-community relationship should be understood to comprehend the SLO within this context. Therefore, it should be noted that in Bangladesh and Barcelona, political acceptance and market acceptance differ, and in both cases, these types of acceptance influence the SLO.

2.5 Examining the Social Licence to Operate in Road Infrastructure Projects

The SLO is dependent on the local community. As every community is different, a contextualised framework does not exist to the extent of a one-size-fits-all approach of the SLO (Jijelava & Vanclay, 2018). However, elaborating on the SLO framework, reviewing its key concepts, and applying it to different contexts will improve its operationalisation and applicability (Jijelava, 2019). Jijelava (2019) studied the key concepts provided by Boutilier and Thomson (2011) to increase our understanding of an operationalised framework. According to Jijelava (2019), the SLO in infrastructure projects consists of three key concepts: legitimacy of a project, credibility provided by the local community, and trust in project developers making decisions for the benefit of society. These key concepts touch upon *the three main determinants of conflict* identified by Bergeron et al. (2015).

2.5.1 Legitimacy of an infrastructure project

The *legitimacy boundary* is the lowest boundary of the SLO. If this boundary is not met, the project's SLO is revoked by society, potentially causing political risk (Boutilier & Thomson, 2011). The legitimacy of a project comes in *three forms*: legal, economic, and social. Legal legitimacy is a perception of whether the regulatory processes and procedures have been appropriately followed and whether the decision-making is fair (Jijelava, 2019). Economic legitimacy is the perception of whether the project's benefits to the community and compensation to affected individuals are fair. Benefits relate to contributions by project developers to a community, which can be provided in various forms, such as jobs for locals, increased business opportunities, social investment programs, improved shared infrastructure, and capacity of development programs (Vanclay et al., 2015). Social legitimacy relates to locally affected communities. First, the project procedures should align with ethical means and procedures (Melé & Armengou, 2016; Morshed et al., 2021). For example, affected communities should have access to all relevant information about the project. Secondly, a project developer must make a strong case that the project's benefits outweigh the potential harm to the affected community and the greater public. Therefore, the project objectives should contribute to the common good and limit adverse social impacts (Jijelava & Vanclay, 2018; Melé & Armengou, 2016). The three forms of legitimacy are in line with the *three types of acceptance* presented by Bice et al. (2017), Wüstenhagen et al. (2007), and Morrison (2014). According to Jijelava & Vanclay (2018), to examine if the legitimacy boundary is met, the following questions should be asked:

- Did project developers successfully convince society of the importance of the project?
- Did the project developers convince the affected community and the greater public that the benefits outweigh the disadvantages?
- Are the project objectives contributing to the common good while limiting adverse social impact?
- Would an alternative be a better option? Does local society agree with the project developers in this case?
- Did the decision-makers apply fair, ethical procedures throughout different stages of the project? For example, have they been adequately informed and engaged in the project?

2.5.2 Credibility according to local community

To reach the next level of the SLO in the model of Boutilier & Thomson (2011), the level of approval by society and the *credibility boundary* should be met (Boutilier & Thomson, 2011). A project developer achieves credibility by consistently providing the community with accurate, transparent, and credible information while delivering all commitments promised to society. To build credibility in local society, locals must believe the developers have high competence and a commitment to social performance (Jijelava & Vanclay, 2017). According to Jijelava & Vanclay (2017, p1078-1079), “Social performance comprises the effective identification and addressing of all social, environmental, health and human

rights issues at all stages in the project lifecycle; designing and implementing mitigation and monitoring programs; the provision of real ongoing social benefits to the community; company compliance with at least the minimum international social and environmental standards; a commitment to and evidence of openness, transparency, and good governance; implementation of effective community engagement mechanisms; and undertaking any resettlement and livelihood restoration programs (if applicable) in a fair and effective way." Effective community engagement, including an analysis of stakeholders' concerns and needs, is essential and relates to all aspects of credibility, especially to society's perception of the societal and technical competency of the project developer (Dare et al., 2014; Melé & Armengou, 2016). To examine a project's credibility, according to Jijelava & Vanclay (2018), the following questions should be asked:

- Did the developer demonstrate engagement in all aspects of social performance?
- Did the developer demonstrate their understanding of the local context?
- Did the developer show an understanding of past experiences of local society?

2.5.3 Trust of a Community

Suppose trust is gained over a more extended period. In that case, the *trust boundary* and the highest level of social acceptance are reached, resulting in co-ownership or psychological identification with a project (Boutilier & Thomson, 2011). Trust consists of two levels: interactional trust and institutional trust. Interactional trust relates to the perception that the project developers listen, actively respond, engage in dialogue, keep promises, and treat the community respectfully. Interactional trust is a transitional phase, and if established over an extended period, it leads to institutionalised trust. If institutionalised trust is established, project developers and local society will consider each other partners, respect each other, and share common objectives (Koivurova et al., 2015). Such levels of trust can be demonstrated by the project doing things *with* society, other than the project doing things *for* society. In the case of psychological identification, society wants to be involved in the project, regard the project's objectives as shared interests, and psychologically identify themselves with the project (Jijelava & Vanclay, 2017). To examine if the trust boundary is reached for a group of stakeholders, Jijelava & Vanclay (2018) suggested the following questions:

- Does society regard themselves as partners in the project?
- Did society get the opportunity to participate in the project's decision-making process?
- Is the communication towards society proactive instead of reactive to potential problems?
- Is society willing to do things *with* the project?

All these aspects should be established over an extended period and tailored to the specific needs of different societal stakeholders, as the SLO is a continuum of licences achieved across all levels of society throughout all project stages (Dare et al., 2014).

2.6 The ladder of protest

In case the legitimacy boundary of the SLO is not met, the lowest level of withdrawal will be met. This results in groups of local society not accepting the project's development (Boutilier & Thomson, 2011). Society can express their withdrawal of the SLO of a project via different forms of protests to put pressure on political authorities and business organisations, as they do not recognise the feasibility of fair participation via the institutional channels in place (Castells, 2015; Hanna et al., 2016b; Vanclay & Hanna, 2019). These protests attempt to resolve ongoing conflict and affect power relations (Hanna et al., 2016a). Hanna et al. (2016b; p219) define social protest as follows: "We define social protest as strategic forms of action designed to influence decision making, either directly or by influencing public opinion via the use of the media and the internet." Decision-making can be any form of implementing a planned intervention at any level (Hanna et al., 2016b).

Forms of protests generally follow publicly accepted norms. However, the set of forms of protest change over time and across different socio-cultural and political contexts. Different forms of protest have different performative qualities, which can be enhanced by the media (Hanna et al., 2016b). To reach broader audiences and increase the effectiveness of the protests, mobilisation of people, building solidarity for the protest cause, and improvisation and innovation in the form and performance of protest events are crucial (Taylor & Van Dyke, 2004). Hanna et al. (2016b) identified a ladder of protest with different forms and purposes, expanding in severity. Protests should not be regarded as a single event in time but as ongoing processes of social protests involving multiple stakeholders. These protests tend to escalate from non-disruptive and conventional forms to disruptive and unconventional forms, especially in cases where society's claims are not addressed within the project (Hanna, 2016b). Therefore, if the SLO is withdrawn within an infrastructure project, both project developers and politicians should be aware of any protests, as protests can escalate into disruptive forms of protests, causing potential problems to the successful completion of the project.

2.7 Criticism of the Social Licence to Operate

The key concepts of SLO and the applicability of the SLO framework have been criticised by various authors (Meesters & Behagel, 2017; Newell, 2005; Meesters et al., 2021; Parsons et al., 2014; Owen & Kemp, 2013; Richert et al., 2015). The criticism can be summarised as follows:

1. It can be unclear which stakeholders are in the position to grant the SLO, as there is no generally accepted definition of *who and what* constitutes local stakeholders (Meesters & Behagel, 2017).
2. Certain groups of society are more likely to be left out of regulatory processes while being likely victims of the results of irresponsible project activities (Newell, 2005). Local stakeholders and vocal groups will likely become involved in the project, while non-residents often get ignored (Meesters et al., 2021; Parsons et al., 2014).
3. The authority to revoke the SLO is ambiguous. The industry regards the SLO as delicate and easily withdrawn by local stakeholders in the event of dissatisfaction or unforeseen adverse effects (Meesters & Behagel, 2017). Controversially, the procedures for revoking an SLO during projects remain unclear or inaccessible (Owen & Kemp, 2013).
4. The criteria for granting an SLO lack clarity and are intangible. Whether they are established through participatory processes, a well-defined agreement, or another type of procedure is rarely made explicit (Meesters & Behagel, 2017).
5. The SLO is criticised for focusing on achieving economic benefits for communities. While addressing the economic gains for local communities is crucial, the measures to counteract environmental damage and mitigate negative social impacts that could enhance the legitimacy of the SLO are frequently disregarded (Richert et al., 2015). Meesters and Behagel (2017) call for more attention to the engagement with local society, explicitly focussing on the recognition of harm, with the current frameworks of the SLO being too vague to account for these risks.

Several authors like Freeman (2010), Boutilier (2014), Gunster & Neubauer (2019), Syn (2014), Dumbrell et al. (2020), and Boutilier (2021) responded to the criticism. The first and second points of criticism, raised by Meesters & Behagel (2017), Newell (2005), Meesters et al. (2021), and Parsons 2014), can be managed by defining *who and what* constitutes local stakeholders via the development of a *stakeholder network* (Boutilier, 2021). The concept of a stakeholder network originates from the theory of strategic management based on Freeman (2010). This approach offers three benefits: Firstly, it eliminates the need to factor in geographic considerations when determining *who* holds the authority to withdraw a social licence and disregards the singular perspective of who represents a community. Secondly, stakeholder network analysis simplifies the empirical assessment of *the relative influence of stakeholders* within the network. Thirdly, it establishes a conceptual framework that easily accommodates varying levels of social licence granted by diverse stakeholders (Boutilier, 2014; Boutilier, 2021). Furthermore, Boutilier (2021) argued the categorisation of different grantors and grantees per sector, political, market, and community (as in Wüstenhagen et al., 2007; Morrison, 2014; Bice et al., 2017), which helps understand the relationships between different stakeholders and *their opportunity to revoke* a social licence. For example, suppose the community revokes its social licence but does not feel the project developers recognise their withdrawal. In that case, the community can be backed up by a legal licence provided by the government, as the government is a representation of society. The community often seeks the government's attention via the media to increase awareness of their concerns, as has been done in several cases in Canada (Boutilier, 2014).

The third and fourth points of criticism are contested by Boutilier (2014) and Gunster & Neubauer (2019). According to Boutilier (2014), in case the model of Boutilier & Thomson (2011) is considered, four levels of the SLO, separated by three boundaries, can be identified. According to Gunster & Neubauer (2019, p711), the goal of the model of Boutilier & Thomson (2011) is as follows: “The principal goal of social licence research is to identify, test and refine the efficacy of various factors in moving communities through these successive stages; the aim is not simply to facilitate the acceptance of particular projects, but to cultivate a much deeper and stronger perception of shared interests, values and norms of governance.” Therefore, by monitoring the SLO levels among different stakeholders, project developers should understand when the legitimacy boundary is at risk of being denied, which will result in the SLO being revoked by local society. Therefore, project developers can overcome the potential of the SLO becoming delicate and easily withdrawn (Boutilier, 2014).

The last point of criticism is debated by Syn (2014), Gunster & Neubauer (2019), and Dumbrell et al. (2020). According to them, the social licence represents the democratic assertion of power traditionally ignored by the government and market. If the licence provided by the government and market fails to identify potential social and environmental harm, the SLO can critically reflect social and environmental risks (Gunster & Neubauer, 2019; Dumbrell et al., 2020). The vagueness of the SLO should be considered as an advantage. By diverging understandings of the SLO by different communities, the SLO will not become a “checkbox” for project developers. A local community's specific needs and demands need more attention than general ideas of what ought to be legitimate (Syn, 2014).

Several authors have debated the SLO concept's relevance and applicability. Criticism of the SLO is focussed on its intangible and delicate nature, as it is unclear who and how the SLO can potentially be revoked. The criticism is debated by developing a stakeholder network and continuously monitoring society’s position towards a project. Thus, the SLO represents the specific needs and demands of the community. Therefore, the concept of the SLO remains relevant in publicly contested projects, like road infrastructure projects.

2.8 Conceptual Model

In the literature review, the operationalisation of the SLO in road infrastructure projects and how it can be examined are discussed. The conceptual model in Figure 3 shows the operationalisation of the SLO in road infrastructure projects. The author developed it based on the theoretical framework. The model is mainly based on research by Boutilier & Thomson (2011) and Jijelava (2019), with additions in the context of infrastructure projects from Morshed et al. (2021) and Melé & Armengou (2016). Besides that, the three types of acceptance, as explained by Bice et al. (2017), Morrison (2014), and Wüstenhagen et al. (2007), have been included in the model.

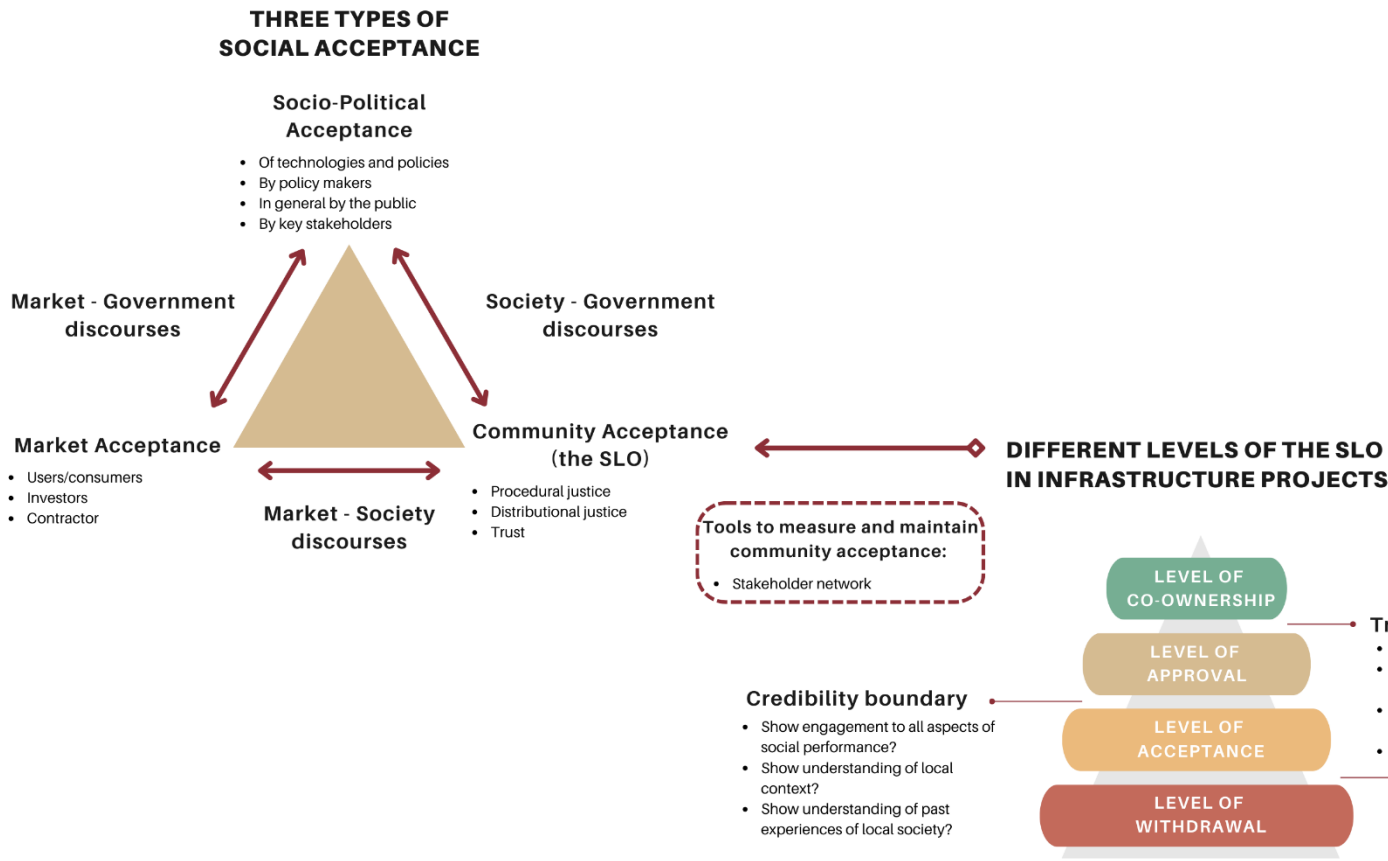

Figure 3: Conceptual model of the SLO in infrastructure projects developed by Author (2024)

3. Methodology

This chapter discusses the methodology applied throughout this research and addresses the overall research design, case selection, data collection methods, analysis approach, and ethical considerations.

3.1 Research Design

This is qualitative research using triangulation via the integration of multiple research methods. The triangulation consists of a literature review, a document and media analysis, and semi-structured interviews with professionals about their experiences. The findings from these methods have been validated via a Focus Group Discussion. All research methods contributed to a deeper understanding of the SLO in infrastructure projects. The triangulation strengthens the research findings and results in a more valid, reliable, and diverse construction of reality (Ammenwerth et al., 2003; Kaman & Othman, 2016; Bans-Akutey & Tiimub, 2021). Reliability and validity are crucial aspects of research, and they are closely related. Reliability concerns the accuracy and the consistency to which variables are measured. Internal validity concerns the legitimacy of the research, whereas external validity relates to the generalizability of the research methods and results. A lack of either reliability or validity can be a constraining factor in research (Van Thiel, 2015).

The goal of this research is to have a broader understanding of the SLO within road infrastructure projects in the Netherlands and to develop an understanding of *"how"* the SLO can be operationalised and *"how"* and *"why"* it can enhance infrastructure projects. Besides that, we want to have a deeper understanding of strategies to enhance the SLO, which (could) have been used in the specific case of the Southern Ring Road in Groningen. Therefore, a qualitative study approach was performed using a case study and a case comparison. Case study research is "an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context is not clearly evident" (Yin, 2009, p. 18). A case study is considered relevant in understanding "*how"* and *"why"* things happen, allowing research of contextual realities and understanding differences between what was planned and what occurred (Anderson & Arsenault, 2005; Kaman & Othman, 2016). Moreover, a single case study and a case comparison are legitimate research strategies that can contribute to theory development (George, 2019).

Four sub-questions have been defined to provide the research with structure. Together, they will answer the main research question: "*How can the Social Licence to Operate be operationalised and enhanced in road infrastructure projects like the Southern Ring Road project in Groningen?"* As described in 3.3.1, a literature review has been done to answer the first sub-question. Besides that, the literature review forms the basis for the code tree (see Appendix 3) used for the document analysis, the media analysis, preparing the interview guide, and the analysis of the interview transcripts. A document and media analysis, as described in 3.3.2, and semi-structured interviews with experts of four road infrastructure projects in the Netherlands (as described in 3.3.3) have been conducted to answer the second sub-question. After that, the third and the fourth sub-questions were answered by validating the interview findings via a Focus Group Discussion, as described in 3.3.4. A schematic overview of the research design can be found in Figure 4.

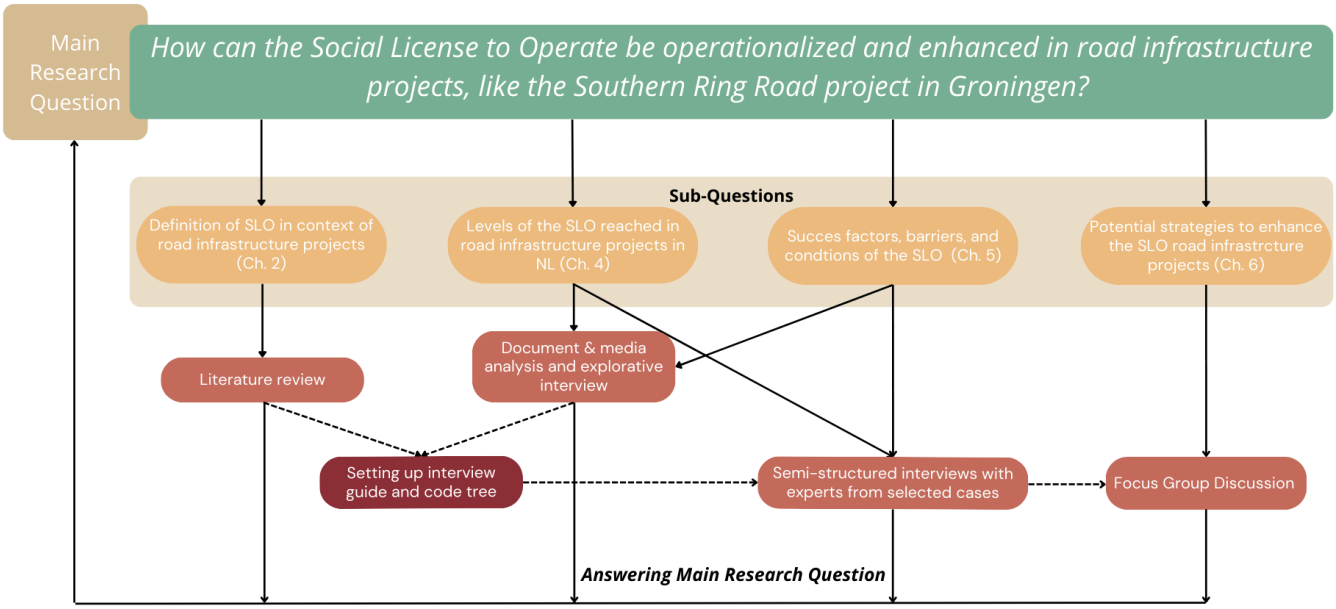

Figure 4: Overview of used research methods in relation to the different Sub-Questions developed by Author (2024)

3.2 Case Selection

As discussed in Chapter 1, the concept of the SLO originates from extractive industries, but it has the potential to be applied to infrastructure projects. However, more research is needed on the operationalisation of the SLO in infrastructure projects (Morshed et al., 2021). Therefore, five cases of road infrastructure projects in the Netherlands have been selected, and they have formed the basis of our understanding of *"how"* the SLO can be operationalised within infrastructure projects. The Southern Ring Road project in Groningen provides a deeper understanding of potential strategies to enhance the SLO. The reasons why these cases have been selected for comparison are explained below. The locations of the four cases in the Randstad can be seen in Figure 5. The Author created the map using ArcGIS Pro software. The data used was retrieved via Rijkswaterstaat.

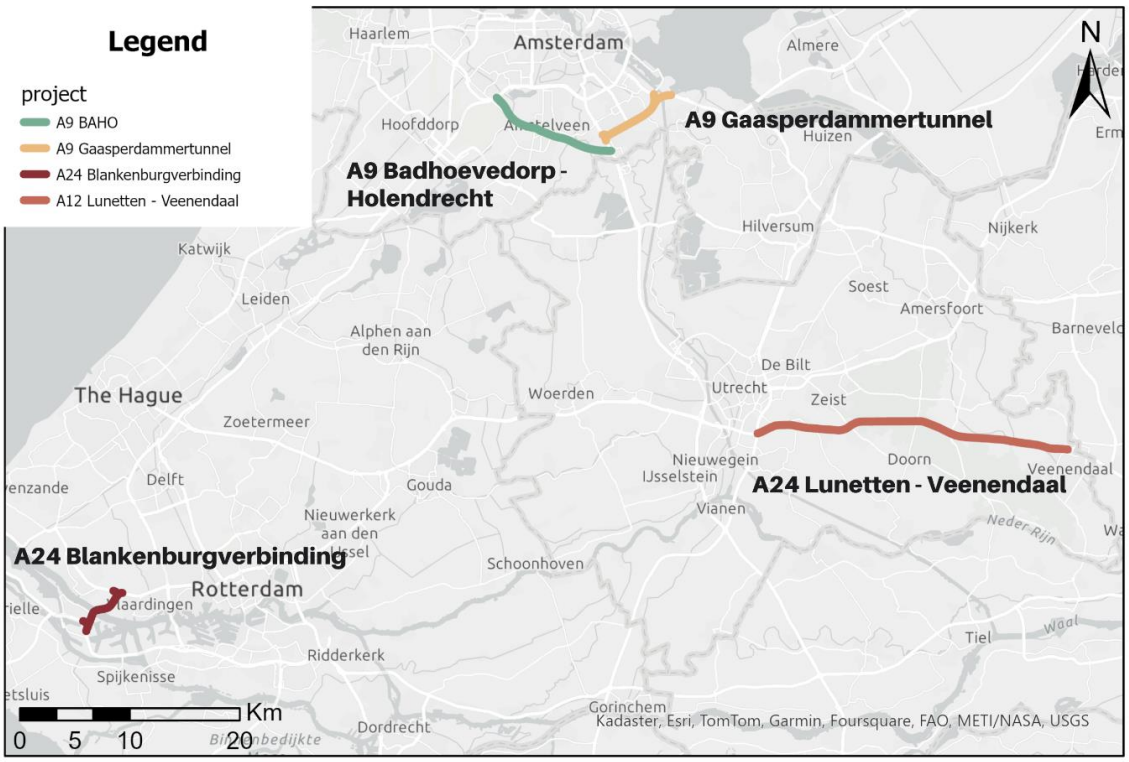

Figure 5: Overview of the selected cases located in the Randstad, developed by Author (2024)

The *Southern Ring Road of Groningen* is the biggest infrastructure project in the Northern Netherlands currently being constructed (Aanpak Ring Zuid, 2024). The project is close to relatively densely populated areas. Consequently, the project is regarded as controversial, including protests from local citizens (Hamersma et al., 2016). Therefore, the SLO is potentially in danger of being revoked by society, possibly compromising the project's objectives. The construction started in 2017 and will last until approximately June 2025. The length of the project is about 12 kilometres. Furthermore, the project includes several tunnel elements, making construction increasingly complex (Aanpak Ring Zuid, 2024). To compare the Southern Ring Road project, four road infrastructure projects in the Netherlands have been chosen based on the proximity to densely populated areas, the moment of realisation, the scale of the project, and whether or not tunnel elements will be constructed within the project.

The *Blankenburgverbinding* entails the construction of the A24, connecting the A20 near Vlaardingen to the A15 near Rozenburg. The project is close to regions of economic importance, like the Mainport and Greenport near Rotterdam, and several residential areas like Vlaardingen, Maassluis, and Rozenburg (Rijkswaterstaat, 2013b). Besides, the project has been socially contested (Oosterom, 2018). Construction started in 2018 and is planned to be finished in 2024. The length of the project is, just like the Southern Ring Road project, approximately 12 Kilometres and includes the development of various tunnel elements, among which an aqueduct underneath the Maas (Rijkswaterstaat, 2013b; Rijkswaterstaat, 2024a). The project is especially interesting to include in the research because of the involvement of various stakeholders via several participation opportunities in the early stage of the project (Rijkswaterstaat, 2011a).

The *A9 Gaasperdammerweg* is part of the Schiphol - Amsterdam - Almere (SAA) program. The program is the most extensive infrastructure program in the Netherlands, and it entails five infrastructure projects to improve the accessibility and the liveability of northern Randstad (Rijkwaterstaat, 2017). Within the SAA, a so-called “bumper strategy” is applied. The program aims to improve its image and mitigate potential damage in case less positive things happen or must be communicated (Rijkswaterstaat, 2019). The A9 Gaasperdammerweg entails widening the A9, including constructing a three-kilometre-long tunnel, resulting in the longest tunnel over land in the Netherlands. The length of the entire project is about seven kilometres, and it is located southeast of Amsterdam and, therefore, in a densely populated area. The project's construction started in 2015 and was completed in 2020 (Rijkswaterstaat, 2016; Rijkswaterstaat, 2024b).

The *A9 Badhoevedorp - Holendrecht* (or A9 BAHO) is also part of the SAA program. It is the last project of the SAA program to be completed. Thereby, the project developers have been able to implement the lessons learned from other projects within the program (Rijkswaterstaat, 2017). An efficient focus of a program results in stronger relationships between projects within the program, thereby enhancing inter-project learning, which makes the SAA program suitable for inter-project learning (De Groot et al., 2023). As the Gaasperdammerweg is also part of the SAA program and this research, it is interesting to get insight into the effects of the inter-project lessons learned on the SLO. Furthermore, a study was done during the realisation phase of the Gaasperdammerweg to get insight into how infrastructure can add value to the local community during the realisation phase (Rijkswaterstaat, 2020a). Besides that, some employees of the Gaasperdammerweg, including R5, are also involved in developing the A9 BAHO. The project also includes constructing multiple tunnel elements near Amstelveen, a densely populated area (Rijkswaterstaat, 2019).

The project A12 Lunetten - Veenendaal entailed widening the A12 between Utrecht and Veenendaal to increase the capacity and improve the junctions along the highway. The route is 30 kilometres near several towns and villages (Rijkswaterstaat, 2013d). What makes the project particularly interesting to this research is the ambitious goals concerning stakeholders' satisfaction, fast completion, and

satisfaction of car users. Within the project, the goal was to find the optimum between these three ambitions, referred to as the ambition triangle (Rijkswaterstaat, 2013a). Therefore, stakeholders' satisfaction has been thoroughly measured throughout the project via a survey among local stakeholders. This final survey to reflect on the project was spread among 200 locals, of which 143 filled it out, creating insight into the (dis)satisfaction of locals (RMI, 2011). These ambitions have been reflected to take lessons to future projects (Rijkswaterstaat, 2013c).

3.3 Data Collection

3.3.1 Literature Review

The first step of this research has been the literature review, which forms the study's theoretical basis. The first step in searching for literature is identifying the key concepts, as suggested by Healey & Healey (2010), which were “Social Licence to Operate”, “Social Acceptance”, and “Social Impact Assessment” in the context of infrastructure projects. As these concepts cover comparable definitions within different contexts, Table 1 in Chapter 2 has been developed to identify the following: the scholars and year of research, the concept used, the specific context studied, and their main findings. The selection of articles in this research is based on recent publications, the relevance of the context studied, and the number of citations of an article. The search engines used were SmartCat, Google Scholar, and Scopus. The reference list of the studied literature is used to find new relevant literature, a research method referred to as snowballing. Besides that, reversed snowballing is used via citation tracking to find more recently published articles (Secor, 2010). The literature review is discussed in Chapter 2, including a conceptual model of the SLO in infrastructure projects, as can be found in Figure 3.

3.3.2 Document & Media Analysis

Document analysis is an appropriate method when performing qualitative case study research. Relevant institutional and policy documents will be analysed with a document analysis to understand the case and its context. To establish the credibility of the research, document analysis is often used as a triangulation method, together with other qualitative research methods (Bowen, 2009). Therefore, document analysis was also used as a case-specific issue for the interviews in this research. The documents have been acquired from experts in different projects. The Author has approached them to send all documents related to stakeholder management, social impact assessment, and (strategic) communication strategies. An overview of the analysed documents can be found in Table 2.

Name of document	**Source**	**Case**
Aanpak Communicatie A9 Gaasperdammerweg	Rijkswaterstaat (2015)	A9 Gaasperdammerweg
Bijdrage OM opleverdossier	Rijkswaterstaat (2013a)	A12 Lunetten – Veenendaal
Buurbouw Plan van Aanpak A9 BAHO	Rijkswaterstaat (2020a)	A9 BAHO
Clusterplan Omgevingsmanagement NWO 2011	Rijkswaterstaat (2011a)	A24 Blankenburgverbinding
Clusterplan Team Omgeving	Rijkswaterstaat (2023)	A24 Blankenburgverbinding
Communicatieaanpak A9 BAHO	Rijkswaterstaat (2019)	A9 BAHO
Communicatieplan project NWO	Rijkswaterstaat (2013b)	A24 Blankenburgverbinding
DBFM stakeholdersbijeenkomst case A12LuVe	Rijkswaterstaat (2014)	A12 Lunetten – Veenendaal

Evaluatie Omgevingsmanagement A12 LuVe	Rijkswaterstaat (2013c)	A12 Lunetten – Veenendaal
Memo excelleren op omgeving	Rijkswaterstaat (2020b)	Southern Ring Road Groningen
Plan van aanpak Omgevingsmanagement A9BAHO	Rijkswaterstaat (2022)	A9 BAHO
Plan van aanpak omgevingsmanagement en communicatie	Aanpak Ring Zuid (2011)	Southern Ring Road Groningen
Project A12 Utrecht Lunetten-Veenendaal voltooid	Rijkswaterstaat (2013d)	A12 Lunetten – Veenendaal
Project A7/N7 Zuidelijke Ringweg Groningen, fase 2	Aanpak Ring Zuid (2016)	Southern Ring Road Groningen
Projectplan A9 Gaasperdammerweg	Rijkswaterstaat (2016)	A9 Gaasperdammerweg
Projectplan A9BAHO	Rijkswaterstaat (2017)	A9 BAHO
Rapportage Digitaal KlantenPanel A12LuVe	RMI (2011)	A12 Lunetten – Veenendaal
Uitvraag communicatiecampagne Aanpak Ring Zuid Combinatie Herepoort	Aanpak Ring Zuid (2019)	Southern Ring Road Groningen
Werkwijzer aanleg	Rijkswaterstaat (2011b)	Standards Rijkswaterstaat

Table 2: Overview of documents analysed

As explained by Boutilier (2014), stakeholders often seek attention from the media to express their concerns. Therefore, a media analysis has been done to get insight into whether the acceptance of local stakeholders has changed over time during different stages of the project. This can help to understand the effects of strategies to influence the SLO, as explained by the experts from the various projects. Before and during the interview, all interviewees were asked to send any articles from the media relevant to social acceptance in the context of their project. In addition, the Author has searched for articles in the media related to social acceptance of the selected cases.

3.3.3 Semi-structured Interviews

Semi-structured interviews allow the researcher to understand the topic and offer insight into underlying reasons that cannot be observed via quantitative research strategies (Clifford et al., 2016). To increase the reliability of the research, multiple interviews with different respondents and fields of expertise are essential. This helps to overcome the danger of potential deviations in the results due to different opinions, knowledge, and qualities (Van Thiel, 2015). To increase the validity of the research, interviews with sixteen experts from different road infrastructure projects were conducted using an interview guide. Semi-structured interviews ensure the data is collected and increase the study's validity (DiCocco-Bloom & Crabtree, 2006; Clifford et al., 2016). The questions are based on the literature review and the document analysis. The interview guide can be found in Appendix 1.

The interviewees selected are mostly environmental managers and advisors, as they are primarily concerned with issues raised by local society. Experts with different expertise have been interviewed to gain in-depth knowledge of the Southern Ring Road project. A contract manager involved in two of the selected cases has been interviewed to understand how the relationship between the client and the contractor can affect the SLO. Two project controllers, one from the Southern Ring Road and one from the Gaasperdammerweg, have been interviewed to get insight into the effects of society's concerns and the project's risks. Lastly, a cluster manager has been interviewed to comprehend the effects of issues raised by society on the local construction sites, including the construction workers. The function, the project, the organisation, the interview date, and the interviewees' corresponding code can be found in Table 3.

Interview	**Code**	**Function**	**Project**	**Organisation**	**Date**
Explorative interview*	R1	Environmental advisor	Southern Ring Road Groningen	Aanpak Ring Zuid	09-04-2024
Interview 1	R2	Environmental manager	Blankenburgverbinding	Rijkswaterstaat	15-04-2024
Interview 2	R3	Environmental advisor	Blankenburgverbinding	Rijkswaterstaat	15-04-2024
Interview 3	R4	Environmental advisor	A9 Badhoevedorp - Holendrecht	Rijkswaterstaat	22-04-2024
Interview 4	R5 FGD1	Environmental manager	A9 Badhoevedorp – Holendrecht & A9 Gaasperdammerweg	Rijkswaterstaat	22-04-2024
Interview 5	R6	Environmental advisor	Southern Ring Road Groningen	Aanpak Ring Zuid	29-04-2024
Interview 6	R7 FGD2	Environmental manager	Southern Ring Road Groningen	Aanpak Ring Zuid	02-05-2024
Interview 7	R8	Environmental advisor	Southern Ring Road Groningen	Aanpak Ring Zuid	06-05-2024
Interview 8	R9	Environmental manager	Southern Ring Road Groningen	Combinatie Herepoort	08-05-2024

Interview 9	R10	Environmental advisor	Southern Ring Road Groningen	Combinatie Herepoort	14-05-2024
Interview 10	R11	Contract manager	Southern Ring Road Groningen & Blankenburgverbinding	Aanpak Ring Zuid	15-05-2024
Interview 11	R12 FGD3	Communication manager	Southern Ring Road Groningen	Aanpak Ring Zuid	15-05-2024
Interview 12	R13 FGD4	Environmental manager	Lunetten - Veenendaal	Rijkswaterstaat	16-05-2024
Interview 13	R14	Clustermanager	Southern Ring Road Groningen	Aanpak Ring Zuid	27-05-2024
Interview 14	R15	Project manager	Southern Ring Road Groningen	Aanpak Ring Zuid	27-05-2024
Interview 15	R16	Project manager	A9 Gaasperdammerweg	Rijkswaterstaat	30-05-2024

Table 3: Overview of all interviewees, including corresponding code

3.3.4 Focus Group Discussion

Syn (2014) explains that the SLO consists of diverging understandings by different communities. The specific interests of a local community need more attention than general ideas of what ought to be legitimate. Therefore, experiences and lessons learned within different local communities cannot be copy pasted directly onto different communities within different contexts. Thus, to validate and increase understanding, a Focus Group Discussion has discussed the success factors, barriers, and conditions. Besides, the discussion formed the basis for the recommendations for strategies to maintain and enhance the SLO in road infrastructure projects. A focus Group Discussion is a suitable research method to discuss and assess concerns and issues with purposely selected participants (Escalada & Heong, 2014). The supervisor of this thesis chaired the discussion. The respondents who participated in the discussion can be found in Table 3. The code FGDX is used as a reference. The that was used during the FGD can be found in Appendix 4.

3.4 Data Analysis

An extensive analysis of the interview results is fundamental to the research as it is essential to produce valid and reliable results and conclusions (Green et al., 2007). The interviews have been recorded via the Dictaphone application on an iPhone. The audio recordings have been transcribed into a written transcript, making the data suitable for further analysis (Knott et al., 2022). The application Goodtape was used to transcription the interviews. Coding is a suitable method for analysing qualitative data to analyse themes within the data (Knott et al., 2022). The transcripts were coded via a deductive code

tree based on the literature review, the document, and the media analysis, which can be found in Appendix 3. The interviews have been analysed using a deductive code tree, which can be found in the Appendix. Besides that, some codes emerged during the interviews and were considered valuable. Therefore, these are also included in the code tree in Appendix 3.

3.5 Ethical Considerations

When research includes human participants, researchers should thoroughly follow a high standard of ethical considerations through all stages of the interview process. Therefore, the researcher should guarantee that the data collected is anonymous and strictly confidential (Alshenqeeti, 2014). Before conducting the interviews, a consent form was shared with the interviewees. The consent form included an explanation of the aim of the research and a brief explanation of how the obtained data will be processed. The consent form can be found in Appendix 2. At the start of every interview, the researcher asked the interviewee if they agreed with the recorded interview and their function, as described in the interview, being mentioned in the research. Before and after the interview, the interviewee was thanked for their time and contribution to the research. Afterwards, the transcripts were sent to interviewees to check for potential inaccuracies. Besides, the interviewees were asked if they wanted to revise an answer given. Furthermore, the researcher sent the interviewees the quotes used in the thesis. This was done to overcome potential translation errors, as the transcripts were in Dutch. Besides, this was done as a double-check for the correctness of the quotes. After the transcripts were finalised and stored, the audio recordings were deleted.

An ethical consideration worth mentioning in this study is the researcher's position toward the studied cases (Merriam et al., 2001). This so-called ‘positionality’ is relevant for this study, as the researcher was employed at the project organisation “Aanpak Ring Zuid”, which acts as the client of the Southern Ring Road project. Besides that, the researcher did an internship at Rijkswaterstaat, the agency responsible for the other infrastructure projects within the research. Doing an internship allowed the researcher to study relevant documents that would generally remain confidential. Besides that, the internship and the employment at Rijkswaterstaat diminished the boundaries for finding professionals to interview. However, this might have compromised the researcher's position and neutrality towards the topics. To marginalise the positionality of the researcher, diverse sources, including a total of 16 interviews with diverse experts, have been studied. Besides that, the preliminary results were discussed during the Focus Group Discussion to validate and enrich the recommendations.

4. Levels of the SLO reached within the selected infrastructure projects

In Chapter 4, the second sub-question is answered. All selected cases have been researched to what extent they reach the legitimacy, credibility, and trust boundaries. Therefore, the level of the SLO reached in the projects is examined. Furthermore, 4.6 provides general findings identified within all selected cases. This is done via document and media analysis and semi-structured interviews. The interviewees have been referred to via the codes, as mentioned in Table 3.

4.1 A24 Blankenburgverbinding

4.1.1 Legitimacy of the Blankenburgverbinding

The goal of the Blankenburgverbinding is to connect both the southern shore and the northern shore of the Maas River in the Rotterdam region, directly connecting the regions Westland and Voorne-Putten by a few minutes by car (Rijkswaterstaat, 2020b). On a broader scale, the connection between both shores is needed to improve the accessibility of the economic region of Rotterdam. Since 2020, the existing Benelux tunnel has often been congested, limiting the accessibility and the potential of the significant economic regions of the port of Rotterdam and the Horticultural Centre Westland (Rijkswaterstaat, 2013b). Especially during any potential calamities at any other corridor, the Blankenburgverbinding will be an essential alternative (Rijkswaterstaat, 2013b; R2).

According to interviewees R2 and R3, both the wider public and the local community understood that the existing corridors of the Maas were not sufficient anymore and new alternatives were needed. The public understood the importance of the economic regions and saw the potential benefits of developing the Blankenburgverbinding. This can be derived from the statement of R2: "*We have had pervasive participation with administrative stakeholders to explain why it is important to realise this project. They understand the main goal, to unburden the Benelux corridor, which got busier and more congested, and therefore, something needed to happen.*" However, initially, differences could be identified on a local scale. According to R2, at the southern shore, the neighbourhood of Rozenburgh is dependent on the port of Rotterdam, making the local community dependent on the A15. Therefore, locals were very much in favour of the project. As can be concluded by a quote by R2: "*It is quite often the case that something happens at the Botlektunnel. In that case, these people cannot go anywhere. The economic link of the entire region is congested. Therefore, they understand the importance of an extra connection to the northern shore.*"

As stated by R2 and R3, at the northern shore, both local society and the municipality did not want the connection at this location in the first place. R2 stated: *"The northern shore felt like, fine, such a project, but why should it be in front of my door."* R3 explained that a societal cost and benefit study (MKB) was done, after which both the region and the municipality of Vlaardingen started to understand that the current location was suitable for the project. The sentiment changed to acceptance of the project being developed at this location. At the same time, locals argued that the road should be implemented in the best manner possible to benefit local society. This is illustrated by R3: *"They (Vlaardingen) did not want the new connection to be developed. However, they have become more realistic and tried to make the best of the situation to the benefit of their city and the inhabitants."*

According to Rijkswaterstaat (2011a) and Rijkswaterstaat (2013b), the method of strategic environmental management applied during the project is referred to as mutual gains, in which the interests of all relevant stakeholders should be analysed and considered to be included in the project objectives. The core values during the project included:

- Maintain public project support via open dialogue with all relevant stakeholders.
- Sincere care for the interests and input of stakeholders.

- The level of participation will be determined for all stakeholders, with them being at least informed and engaged throughout every stage of the project.
- All decisions will be thoroughly explained, including considerations of all advantages and disadvantages

These core values align with the statements of R3, who explained which groups of stakeholders were engaged in different phases of the project and why and how they were engaged. Professional stakeholders (including municipalities and semi-governments), societal stakeholders (like nature protection organisations), and local stakeholders have been offered different opportunities for participation via various forms of engagement. Their interests and doubts have been considered and merged into a preferred decision. The interests of some stakeholders, like nature protection activists, could not be aligned with the project's objectives. However, the application of fair, ethical procedures can be illustrated by a quote from R3: *"A compliment we got is: I do not agree with the intervention nor the project, but I think how you informed and involved us went well."* Therefore the legitimacy boundary, and thereby the level of acceptance, is reached for most stakeholders.

4.1.2 Credibility of the Blankenburgverbinding

According to Rijkswaterstaat (2023), realising the Blankenburgverbinding should add to the regional quality. Focus points are safe, finished on time, within budget, and aligned with desired quality standards. This can only be established by stakeholders' and local society's satisfaction. Therefore, the project team has collaborated with several regional parties to improve local quality. Differences can be identified during several project stages and how these local qualities have been realised.

R3 explained that during the participation process in the planning phase, local stakeholders suggested that local quality could be added by lowering the road and the development decks above. The project developers have implemented these suggestions. After the design phase, an opportunity occurred to add spatial quality. Therefore, the design has been adjusted in the design phase, which, according to R3, is unique. Thus, stakeholders' willingness to collaborate to modify the design shows a good relationship. Within the realisation phase, several local stakeholders were involved to benefit from the project. Several quality programs were set up with stakeholders to add local quality (Rijkswaterstaat, 2023). According to R3: *"It is important to your accountability to show how local entrepreneurs, education, recreation, and tourism, can profit during the realisation phase, but also after."*

R2 and R3 explained that several measures have been implemented to understand the local context. They argue that these should be identified via conversations with locals to understand their interests and why this is their interest. R3 has been cited: *"Their values and concerns have been drawn up in reports and shared. This is to show that something said has gotten attention and is used to develop a plan."* Furthermore, R2 has also been involved in a different project near the Blankenburgverbinding, the A4 Delft-Schiedam. Therefore, according to R2, several experiences of the past have been used to benefit the project. As stated by R2: *"Vlaardingen was in the previous project very distant. We have been more active, which has led to them benefiting even more from the project. We have communicated more actively, transparently, and honestly with the stakeholders compared to the previous project."*

Therefore, it can be concluded that the credibility boundary and the level of approval have been reached for most stakeholders. However, as explained in 4.1.1, although treated fairly, some stakeholders disagreed with the project being developed. For example, the interests of nature reserve activists could not be aligned with the project objectives. Therefore, it should be noted that the level of approval has not been reached for those stakeholders.

4.1.3 Institutionalised Trust of the Blankenburgverbinding

As explained in Chapter 2, the boundary of institutionalised trust can only be reached if the credibility boundary is established over a more extended period. Although a more extended period is a subjective term, it should be noted that, at least for some stakeholders, the credibility boundary has not been reached for this more extended period. For example, the inhabitants of Vlaardingen did not agree with the project's development at this location. Therefore, the institutionalised trust boundary could not yet be reached for most of these locals.

Both experts R2 and R3 agreed that it differs per group of stakeholders if they work *with* or *for* the project. This mostly depends on the project's phase and the stakeholder's role in the project. During the planning phase, there is a more significant opportunity for participation, meaning project developers can work with society. However, the level of potential participation is reduced after the project progresses. R2 explained: *"It is different in the initial phase, then they (society) have a voice in how the road will be designed. In that case, you work with them. However, during the realisation phase, you work for them."* R2 and R3 stated that only some professional stakeholders consider themselves partners within the project. R3 explained that an intensive inner circle of governments and NGOs is willing to collaborate with the project. R2 would consider these stakeholders partners. R2 explained: *"Recently, I gave, together with the municipality of Vlaardingen, a presentation to the mayor and alderman about the opening permit that's coming. Together, we have made and given the presentation. Therefore, we work together."*

Therefore, it can be concluded that only some professional stakeholders consider themselves partners in the project. Although some stakeholders, like the municipality of Vlaardingen, were initially critical of the project, they became willing to collaborate after gaining legitimacy and credibility. Besides that, multiple local professional stakeholders, like municipalities and waterboards, have collaborated in LEM (Local Economy and Society). Therefore, for these professional stakeholders, the highest level of psychological identification was reached within the project.

4.2 A9 Gaasperdammerweg

4.2.1 Legitimacy of the Gaasperdammerweg

The Gaasperdammerweg is part of the Schiphol-Amsterdam-Almere (SAA) program, which aims to increase the accessibility and the liveability of the northern region of the Randstad. This is aimed to do so by increasing the connectivity between the regions (Rijkswaterstaat, 2017). These goals have been translated into location-specific criteria. To increase accessibility surrounding Amsterdam, the Gaasperdammerweg, a provincial road in southeast Amsterdam, has been widened to a 5-lane highway (Rijkswaterstaat, 2016). The highway was constructed with a tunnel to decrease noise and air pollution and improve liveability for local inhabitants. Furthermore, neighbourhoods in the southeast of Amsterdam got connected via the development of a park on top of the tunnel (Rijkswaterstaat, 2015). According to R5, explaining the project's objectives to local society was complex. As R5 stated: *"We started explaining the common good, including pictures of the desired result. However, by doing so, the shock of years of misery became even bigger. Therefore, you should be aware and acknowledge the misery that people face during construction."* Therefore, R5 learned in the project that people do not always want to hear the common good outweighs the adverse local impact: *"At the Gaasperdammerweg people have been like: I did not ask for this while experiencing years of nuisance, dust, and detours. You state it will become great, but I am not convinced yet."*

R5 and R16 explained an alternative project that has been discussed, which would have entailed the construction of a highway between Holendrecht and Muiderberg. However, this option was cancelled due to protests by famous people seeking attention from the media and politicians. They explain that the alternative, according to Rijkswaterstaat, might have been the optimal solution, especially for the

people living in the southeast of Amsterdam. As explained by R16: *"The other variant was highly contested by people living in Het Gooi. Therefore, we ended up in a discussion between celebrities and politicians. After all, it was decided to widen the existing A9. However, a tunnel has been constructed to comply with the local community, above which a park is developed."* However, R5 and R16 did not think the local society was convinced this route was the better solution.

According to Rijkswaterstaat (2019), the SAA uses a "bumper strategy" to improve its image and mitigate potential damage. Communication with stakeholders involves what, where, why, and how the project is realised. The following focus points within this strategy have been identified, which align with fair, ethical procedures, as explained in Chapter 2:

- Increased attention to liveability
- Manage nuisance expectations proactively
  - Increased and consistent use of communication strategies
- Transparent and proactive communication in case of potential setbacks
- Segmentation of groups of stakeholders who:
  - Know the scope of the A9 Gaasperdammerweg as part of the SAA
  - Know what to expect during the realisation phase via sensitive communication
  - Know where to find information
  - Create a support base and involvement among the stakeholders
- Embrace ambassadors of the project.

During the construction phase, locals did not believe the project developers when they explained that the project would contribute to the common good while limiting local social impact. Besides, some believed an alternative would have been a better option. R5 stated: "*During the realisation phase, we were in the red zone (withdrawal). We received many complaints, multiple during a single day. People could not deal with the nuisance anymore, to the extent of three potential cases of suicide."* Therefore, R5 was critical: *"On a neighbourhood level, we should have opened the discussion earlier. Inhabitants only realised what was about to happen after construction started."* Therefore, it can be concluded that the A9 Gaasperdammerweg does not meet several requirements to reach the legitimacy boundary and the level of acceptance in Figure 3.

4.2.2 Credibility of the A9 Gaasperdammerweg

During the project, a study was done on creating additional value for the local community during the realisation phase. The research concluded that "design thinking" can contribute to environmental management by offering locals a platform for ideas within the construction phase (Rijkswaterstaat, 2020a). R5 has also been involved at the A10 near Amsterdam within the SAA program. R5 explained the importance of understanding and using experiences in the local context. R5 enhanced this via the following example: *"In the southeast of Amsterdam, we did research including interviews: what is happening within the neighbourhood? It appeared that people were worried about equal opportunities, education, and labour chances. They did not worry about the widening of the A9."* R5 continued explaining how the client and contractor provided these locals with schooling and labour in construction.

The main contribution to increasing the liveability of the locals was the development of a park on top of the highway (Rijkswaterstaat, 2016). However, local society only recognised this to be a significant improvement after completing the tunnel and the park. This was explained by R16: *"After a while, several parts were finished. That is when people start to recognise the positive contribution of the project to local society. Therefore, we concluded via our satisfaction monitor that the satisfaction towards the project started to grow."*

Therefore, for most local inhabitants, the approval level was only reached after the project was finished. However, this level was not reached during all stages before that. As explained by R5, *"If you would ask locals nowadays, they would approve the project. Instead of a highway, they have a park in front of their door."*

4.2.3 Institutionalised Trust of the Gaasperdammerweg

As explained, the level of acceptance was not reached during the project's construction phase. Only after the tunnel and the park were realised did local stakeholders approve the project. Therefore, the credibility boundary has not been reached for an extended period. Thus, the level of psychological identification has not been reached. Local stakeholders would be willing to work with the project developers within this level. However, R5 and R16 explained that, besides some minor participation opportunities, they worked for local stakeholders instead of with them. R16 stated: *"For example, companies located near the project, you do not work for nor with them. They do not wish for the widening of the road, as they do not think it is in their interest."*

In line with the Blankenburgverbinding, R5 and R16 explained that a limited number of professional stakeholders have collaborated within the project. Therefore, these potentially regard themselves as partners in the project. The mentioned parties are the municipality of Amsterdam, ProRail, and the local public transport provider. The remaining stakeholders, and therefore the majority, have not felt like partners in the project, as they only had minor opportunities for participation. As stated by R5: *"To figure out how to explain the development of the tunnel and the park to the inhabitants in the southeast of Amsterdam, we worked with the municipality. In some minor cases, like participation in developing the rooftop of the Gaasperdammertunnel, you work with inhabitants. However, in most cases, you work for them."* Thus, only for a few professional stakeholders, the boundary of institutionalised trust and, therefore, the level of psychological identification has been reached.

4.3 A9 Badhoevedorp - Holendrecht

4.3.1 Legitimacy of the A9 Badhoevedorp - Holendrecht

Like the Gaasperdammerweg, the A9 Badhoevedorp - Holendrecht is part of the SAA. Within the project, the program objectives have been translated into improving the accessibility and liveability surrounding the A9 between the junctions of Badhoevedorp and Holendrecht. At this route, the accessibility will be improved by developing 2x4 lanes. To improve the liveability, measures like lowering the road near Amstelveen will be implemented (Rijkswaterstaat, 2017). According to R4, most people regard the accessibility of Schiphol and the economic interests of the region as necessary; therefore, they understand the importance of the project being developed.

As explained by R5 in 4.2.1, one of the lessons learned from the Gaasperdammerweg is that locals do not always wish to hear that the common good outweighs adverse local impacts. Therefore, the contributions to the common good were explained in the project. However, the emphasis has been on the nuisance people will experience during construction. This aligns with R4: *"You, as a local, experience the nuisance, but car drivers experience the benefits. This is your honest story: It is very unfortunate to you as an individual, but the common good is the reason we develop the project."* However, while being honest about the nuisance to society, the nuisance is minimised. R4, R5 and R16 explained how sheet piling at other projects has led to extreme nuisance. Partly because of that, at the A9 BAHO, the project developers adapted their method. As explained by R5: *"At BAHO, we have explained (to the locals) that we will drill all the poles instead of driving them into the ground. That saves over hundreds of thousands of hits on a pile."* R4 stated that additional regulations were needed: "*The municipality of Amsterdam had very few regulations on noise pollution. Therefore, we explained to the municipality of Amstelveen that they should develop additional regulations to prevent piling construction from happening 24/7."*

In the initial agreement, the municipality of Amstelveen agreed upon a financial contribution of 100 million euros. In return, a tunnel would be developed at the A9 near Amstelveen. However, the municipality decided to reduce its contribution, after which it was agreed to adapt the tunnel to a lowered road, including three decks (Rijkswaterstaat, 2017). The modification of the agreement, according to R4, led to disappointment among local stakeholders: "*The design was discussed, which resulted in several points of critique, which even reached the Council of States. However, the design was not adopted. We still get many people stating they think it is a shame the tunnel will not be constructed. Therefore, I do not think we meet everyone's interest."*

Thus, the A9 BAHO meets the requirements of the level of acceptance for the majority of the stakeholders, as the project builds upon the ethical procedures applied throughout the SAA program. Besides that, the nuisance was minimised by an alternative method of constructing sheets, thereby gaining the trust of locals. However, according to R4 and R5, some stakeholders' interests cannot align with the project objectives. However, this will not cause problems to the successful completion of the project. As described by R5: *"Some people believe the project is not beneficial for the environment, or whatsoever. However, using much energy to change these people's minds is not useful."*

4.3.2 Credibility of the A9 Badhoevedorp - Holendrecht

The A9 BAHO is the last project within the entire SAA program being realised. Therefore, the lessons learned within the other projects within the program can be applied to this project (Rijkswaterstaat, 2017). As explained in 4.2.2, a study was conducted to understand how the construction phase can lead to added value to local society. An important lesson is to offer locals a platform to present ideas during the realisation phase. This led to the platform Buurbouw, which can be utilised for different opportunities in the project. Different groups of stakeholders have been involved to understand their biggest concerns, ambitions, and interests, which have been translated into four different themes to understand the local context and increase social performance (Rijkswaterstaat, 2020a):

- Being a social enterprise that aims to maximise economic and educational opportunities.
- Providing a platform for sports and cultural activities.
- Improving greenery while using the wood sustainably.
- Attention to inclusivity via communication and events aimed to involve different cultures.

These goals are put into practice, as explained by various examples from both R4 and R5. Together, they touched upon all of these ambitions, which align with aspects of social performance. An example given by R4: *"During construction, we paid more attention to developments within local society. A great example of this is the Keizer Karel College, which is located close to the A9. Every year, we provided them with many interesting cases."*

R4 and R5 pointed out that they had shown their understanding of the local context. R4 enhanced this by giving a few examples of adaptations to benefit local society. R5 emphasised the importance of first getting acquainted with local interests before being able to show your understanding of the context. As explained by R5: *"The most important thing is to confirm locals interests, not assume them. To do so, we organised conversations on the street level and in small groups. Thereby, you hear what people want."* R4 and R5 have been involved in different SAA projects that are relatively close by. Therefore, they have been able to use their knowledge to show their understanding of past experiences of local society. R5 enhanced this: *"We provided locals with three designs of noise barriers, and they could choose their preferred option. In other projects, we made the mistake of choosing these for them, assuming they would be satisfied."*

Therefore, the credibility boundary and, therefore, the level of approval have been reached for the stakeholders, who benefited from the social performances. This is in line with a statement made by R5: *"Acceptance is reached to the biggest group. However, a smaller group reached approval, who recognised the project's improvements."*

4.3.3 Institutionalised trust of the A9 Badhoevedorp - Holendrecht

According to R4 and R5, most local stakeholders do not regard themselves as partners in the project; only an individual case has been mentioned by R5. Both experts explained that they have been working on behalf of local stakeholders to retrieve and implement their interests on their behalf. As can be derived from R4: *"You are often negotiating with three parties, client, contractor, and stakeholders. You try to understand the interests of both the contractor and stakeholders clearly. Therefore, I do not work with the stakeholders."* The municipality of Amstelveen has made a financial contribution to develop decks over the A9 (Rijkswaterstaat, 2017). This benefited their involvement. Therefore, they regarded themselves as partners in the entire project. As explained by R4: *"Concerning administrative stakeholders, the fact they (municipality of Amstelveen) made contributions to the project has led to them willing to think along with the project."* Thus, the highest level of acceptance and psychological identification has been reached for the municipality of Amstelveen.

4.4 A12 Lunetten - Veenendaal

4.4.1 Legitimacy of the A12 Lunetten – Veenendaal

The project's central goal was to increase the capacity of the A12 by widening the road between Utrecht and Veenendaal. Besides that, several junctions and the liveability had to be improved (Rijkswaterstaat, 2013d). A stakeholder satisfaction survey was used to review locals' perceived satisfaction and nuisance. Over 34% of the locals indicated that the adverse social impact was less than expected. Additionally, 43% of the respondents indicated that the impacts were as expected. 86% were satisfied with the information provided regarding all forms of nuisance (RMI, 2011). According to R13, the project had been halted for a few years, which increased society's awareness of the necessity of the project being developed. As R13 stated: *"The project was halted for a long time, resulting in an increase in traffic, traffic jams, and noise pollution. Thus, the relevance and necessity became clearer to people. Besides, they were convinced the project would improve liveability. Therefore, we were lucky back then."*

Locals indicated in the survey that they valued the engagement within the project. They especially appreciated Rijkswaterstaat not appearing as the party that knows everything. Making local parties feel like they are being taken seriously. Therefore, confidence and transparency are critical success factors within the project (Rijkswaterstaat, 2013a). Also, the local stakeholders indicated that the project developers have acted as good neighbours (Rijkswaterstaat, 2013c). Besides that, the stakeholder satisfaction survey showed that 40% of the respondents were impressed by the fast completion of the project, while the social impacts experienced were limited. Furthermore, the respondents understood that the project contributed to the common good (RMI, 2011). R13 explained their role as mediator: "*We put stakeholders representing different interests at the table. Therefore, we did not have to explain all their different interests ourselves. They began to understand themselves."*

Therefore, the legitimacy boundary, and thereby the level of acceptance, has been reached for most stakeholders. Rijkswaterstaat and R13 reflected that the SLO was withdrawn by nature activists whose objectives could not be aligned. Other than that, on an individual level, they experienced problems with locals losing their land because of the project. In hindsight, they acknowledged that these locals should have been contacted earlier to overcome protests during the project's realisation (Rijkswaterstaat, 2013c; R13).

4.4.2 Credibility of the A12 Lunetten - Veenendaal

During the project's planning phase, the environmental management was based on the strategy of the mutual gains approach, which is based on sincere attention, understanding, and respect towards other stakeholders and their interests. It is about striving for the best result for all parties involved (Rijkswaterstaat, 2013c). A clear example of an understanding of local interests during construction is given by R13 and Rijkswaterstaat (2013c). It is explained that a local company was hosting a sales event during which sheets were planned to be drilled, causing a nuisance to the visitors. Therefore, the company has taken legal action to cancel these construction activities during the event. Via meaningful dialogue, the interest of the company could be acknowledged. Therefore, the client and the contractor have found a solution: to change the construction hours to 3 to 9 PM. The local inhabitants were financially compensated for additional nuisance provided by the three parties (Rijkswaterstaat, 2013c; R13). Therefore, they have demonstrated their understanding of the local context. R13 provided additional practical examples in which they applied aspects of social performance, like organising a football tournament and excursions.

R13 explained that the A12 Lunetten - Veenendaal development has been considered a new quality standard by society and the municipality for developing other local infrastructure projects. R13 stated: *"The municipality has set new standards during the redevelopment of the station Driebergen-Zeist. They told the contractors they wanted the project to be developed like the A12 Lunetten - Veenendaal. Therefore, it became a new norm within society."* However, R13 explained that the project did not explicitly include past experiences of local society. After the A12 Lunetten - Veenendaal, R13 has been involved in other road infrastructure projects, during which experiences of local society have been included. Therefore, R13 critically reflected and stated: *"This could have been a good addition, but we did not include these past experiences."*

Therefore, the A12 Lunetten - Veenendaal meets most criteria related to the credibility boundary. Thus, it can be concluded that the project reached the credibility boundary and, thus, the level of approval for the majority of the stakeholders. This is also reflected in the stakeholder satisfaction survey, as respondents rated the project with an average of 7.8 (RMI, 2011). Improvements could have been made by including past experiences of local society in the project.

4.4.3 Institutionalised trust of the A12 Lunetten - Veenendaal

The goal of communication and environmental management was to increase collaboration between stakeholders. This will not only improve the support of the project but also increase the quality of the project for all stakeholders (Rijkswaterstaat, 2014). R13 stressed this: "*Conversations were held together, especially with municipalities, the province, and focus groups. They were able to make some decisions. For example, which facade stone should be applied to the project?"* However, R13 also explained that they have worked for the locals: *"Our role was to bring the interest of external parties into the project, to ensure the contractor understands their interest. Therefore, we work on behalf of society."*

R13 indicated that, like in the other cases, the professional stakeholders, such as the municipalities and ProRail, acted as partners within the project. They were advocates of the project and were willing to participate and fix problems integrally, even if they were initially not included in the project's scope. R13 explained that a chairman of a neighbourhood association was involved in the decision-making process. Therefore, this local gained much trust in the project developers and the government. Therefore, he became an ambassador of the project. R13 explained: *"He had much confidence in the government and the project, which he propagated to local society."* Therefore, the level of psychological identification has been reached for some professional stakeholders and among an individual case.

4.5 Southern Ring Road of Groningen

4.5.1 Legitimacy of the Southern Ring Road of Groningen

The Southern Ring Road is a vital network link for local, regional, and national traffic. Car users experienced delays on the A28 and the A7, especially on the junctions. At these junctions, much traffic had to cross each other, causing high risks of accidents. Besides that, local inhabitants experienced much nuisance due to cut-through traffic. Therefore, between 1992 and 2009, research has been done on how to improve the Southern Ring Road. According to Aanpak Ring Zuid (2016), the central goals of the project have been formulated as follows:

- Improve the flow of traffic on the Southern Ring Road.
- Improve the safety of traffic.
- Improve car mobility in the regional economic centres.
- Increase the liveability around the Southern Ring Road of Groningen.
- Improve the spatial quality of Groningen.

According to the experts, most stakeholders agreed that the old Southern Ring Road was insufficient. Its capacity was considered insufficient, and too many accidents were happening. Besides that, the old road formed a border and divided the city, as it was constructed above the ground level. However, not all stakeholders were convinced that the new ring road had to be constructed at the former location. The action group Groningen Verdient Beter has been actively trying to relocate the ring road south of the city. As is explained by R15: *"There is Groningen Verdient Beter, which is a movement consisting of active inhabitants, who argued the road is located on the wrong location. Besides that, they questioned the safety and the air quality of the new plans."* R9 and R10 were employed by the contractor and struggled with stakeholders convinced an alternative would be the better option. R9 stated: *"Many people were against the project being developed in Groningen. They were convinced that the road should be allocated around Groningen. We, as the contractor, suffered from this."*

These discussions were mainly in the early construction phase, during which the project had several setbacks. Back in 2018, the construction of the Helperzoomtunnel failed, a planned five-week road closure got cancelled at the very last moment, several roads had to be closed because of melting asphalt, and the finalisation of the entire project got delayed by three years. These setbacks led to significant financial problems (Aanpak Ring Zuid, 2019). Besides, according to Rijkswaterstaat (2020b) regarding environmental management, many things went wrong:

- There was insufficient insight into detailed construction planning.
- Communication within the environmental teams (and therefore towards society) was too late.
- Information gathered by the environmental team is insufficient or incorrect.
- During the realisation process, too little attention was paid to societal aspects.

R7, R9, R10, R14, and R15 were involved in the project during this period. They all acknowledged that the project faced enormous challenges, including criticism from various parties. As R14 stated: *"After the Helperzoomtunnel could not be constructed, we were on the NOS journal, which was not positive at all. This got people questioning: What are these people doing? Do we have enough confidence in Aanpak Ring Zuid and Combinatie Herepoort?"* R14 continued: *"So this damaged the confidence, which caused a fuss among politicians and the media."* Therefore, it can be concluded that in this period, the boundary of legitimacy was not met for most stakeholders, which means the SLO was withdrawn.

To overcome further escalation of the project, committee Hertogh was appointed by the client and the contractor. They investigated how to get the project back on track. One of their key findings was to invest in stakeholders' support, confidence, and acceptance (Aanpak Ring Zuid, 2019). They summarised their advice into three main points (Rijkswaterstaat, 2020b):

1. Society should be included from the start during all project phases.
2. Societal sensitivity should be a core competence.
3. The entire project should be reliable.

According to the experts involved in the project during this period, much effort had to be made to gain society's confidence, which aligned with Hertogh's findings. As explained by R14: *"The committee Hertogh told us to remain dedicated, including a capable team at Herepoort and Aanpak Ring Zuid, to work disciplined. To show society we are capable of realising the project and thereby make the city more attractive."* R12 got involved in the project during this period and explained that they had to deal with many setbacks, which had their take on society. R12 stated: *"With the completion of the temporary Julianaplein, we were lucky to show society our ability to build something great within only 13 weeks. If, in that period, we had not been able to show people our achievements, then things would not have ended well. Therefore, it is key to show progress."* In the remainder of the project, showing progress to local society via festivities became a key strategy to build a good relationship with society. Local entrepreneurs were included and profited during these festivities as compensation for any losses during the project.

Besides gaining trust, many other efforts have been made to gain the project's legitimacy. The experts explained all the different ways of informing and engaging the public about the project and investing in a long-term relationship. Therefore, after the society regained confidence in the successful completion of the project, the legitimacy boundary was reached for the majority of society. As explained by R6: *"I think we have done a good job, as there is not much more you could have done. We invested in building a relationship, especially in the long term."* However, some stakeholders remained convinced that the road should have been constructed south of Groningen. For those, the legitimacy boundary was not reached.

4.5.2 Credibility of the Southern Ring Road of Groningen

The initial strategy was to incorporate the interests of as many local stakeholders as possible. Thereby creating benefits for local society and limiting the perceived local impacts (Aanpak Ring Zuid, 2011). However, committee Hertogh concluded that not enough was done until 2019 (Rijkswaterstaat, 2020b). R12 critically reflected on this period: *"I would have liked to do more of these (social performances). This was a tough period, during which we faced internal challenges, making it difficult to make agreements among ourselves. Corona did not help either, but we were on the edge of disaster."*

As explained in 4.5.1, several efforts must be made to improve the project's image. One explained by Rijkswaterstaat (2020b) is increasing the project developers' reliability and societal sensitivity. Uniform agreements among the entire project should accomplish this. Concrete measures put into practice were an information centre for dealing with concerns during construction, unified compensation for potential damage caused by construction, and unified regulations to compensate for potential nuisance. This is in line with the measurements explained by the experts, for example, R15: "*During the planned closure of part of the southern ring road for six weeks during the summer of 2019, we opened our information centre during construction hours, as we caused nuisance by noise and vibrations. Our team would be available to measure the nuisance and take care of the complaints directly. This was very helpful in directly helping citizens and making the complaints factual, based on measurements."*

The experts at the Southern Ring Road explained that sheet drilling is very sensitive within the city of Groningen, as locals suffered earthquake damage caused by extractive industries. R10 explained incidents the project developers have faced concerning sheet drilling: *"There has been a lot going on regarding mining damage, which the NAM poorly handled. Therefore, we were 3-0 behind before a single sheet was in place. People had loads of distrust towards us."* Therefore, a measurement was taken to initiate a new strategy to compensate for potential damage, as explained by R7: *"We performed additional baseline measurement to comfort locals that their concerns were taken seriously. Besides, we decided to compensate for all damages with a maximum of 10.000 euros, which could be related to our activities."*

R7 was involved in the redevelopment of the eastern ring road in Groningen, of which experiences could be used in the project's initial phase. As R7 stated: *"I learned to research the interests of locals and show them others have different interests. Therefore, we cannot honour them all. However, you should show them you are trying to incorporate these interests into your project. This will generate support for your project."* R7 explained that locals at the eastern ring road wished for additional noise barriers. Therefore, both projects could realise additional noise barriers. An additional measure taken is to benefit the people living at the Vondellaan, as explained by R8: *"We expect more traffic at the Vondellaan. We could not construct any noise barriers. Therefore, we have improved the isolation of the houses and provided them with double glass."*

To conclude, after the advice of the committee Hertogh was put into practice, more efforts were made to increase social performance and to show understanding of the local context and the past experiences of local society. Initially, these had to be made to compensate for losses of confidence. Only after locals realised the benefits of completing the project the level of approval was reached for the majority of the stakeholders. As can be derived from R14: *"It is great to experience how you can grow within a project. Coming from much resistance at the beginning, to most people being impressed during the final part of construction."*

4.5.3 Institutionalised Trust of the Southern Ring Road

As explained before, the boundary of institutionalised trust can only be reached after a more extended period of approval of the project. As explained in 4.5.1 and 4.5.2, locals resisted the project at the start of the construction phase. Only after a long period of gaining society's trust, they started to approve the project. Therefore, for most stakeholders, the highest level of the SLO, psychological identification, has not been reached. Most stakeholders do not regard themselves as project partners, as can be derived from R8: *"I am in close contact with neighbourhood associations. Their input is important. However, I do not think they regard themselves as partners in the project. We do not consider them partners either."*

The experts reflected that after the plans were finalised, few opportunities were provided to participate in the project's decision-making process. They explained that money was budgeted for the participation of society. However, this money was used for technical solutions instead. R12 was especially critical: "*That (the participation process) was from 2006 to 2013. Nowadays, participation is different compared to back then. Therefore, if you reflect on the participation process with today's standards, you regard it as amateurish."* Besides that, experts considered the participation process in the design of the Zuiderplantsoen a failure, as the design is still facing much criticism from locals. One adaptation that succeeded following a participation process was the development of the Papiermolentunnel. As explained by R9: *"The only thing we were able to implement is the bicycle connection near the Papiermolen. Initially, this would have been a bridge over the ring road. We noticed much resistance from local society. Therefore, we investigated the possibility of constructing the connection via a tunnel, which succeeded. Thereby, we gained much support in this neighbourhood."*

Some professional stakeholders considered themselves partners in the project and participated in various stages. R12 explained that a cyclist association and a bat protection group considered themselves partners. R12 is quoted as: *"In case we do not inform them, they are offended as they are used to being treated as a partner. Therefore, they are always informed, engaged, and asked for advice."* Besides these parties, several big employers and entrepreneurs have acted as partners and were willing to collaborate with the project. They understood that it was essential to contribute to the project during significant closures. As explained by R1: *"These big stakeholders were willing to take measures to limit traffic during rush hours. For example, the UMCG and Martiniziekenhuis adapted their schedules and made videos highlighting the importance of cooperating by avoiding using the car during rush hours. Therefore, you can conclude they were willing to work with us."*

To conclude, the boundary of institutionalised trust has not been reached for the local community. Too few participation options have been realised, and they have not regarded themselves as partners in the project. However, for some professional stakeholders, like interest groups and big employers, the boundary, and therefore the level of psychological identification, has been reached.

4.6 The SLO in the selected road infrastructure projects

Besides the findings found specifically in the context of the selected projects, some findings are consistent within all the selected road infrastructure projects. First of all, the SLO was withdrawn by groups of activists during the start of the project. The experts explained that their interests could not be aligned with the objectives of the projects. Therefore, these stakeholders are likely to oppose a road infrastructure project. However, after finalising the decisions by decision-makers, they gave up debating the project. Thus, they caused limited problems in the continuation of the projects. Within all projects of Rijkswaterstaat, stakeholders get the opportunity to engage and participate in the initial stage of the projects. However, the experts explained that locals do not seize the opportunity to voice their interests, as the majority do not yet realise the potential relevance of participating in the initial stage. Locals often tend to engage when they realise the project has a local impact. This is often after construction has started, after which limited participation is possible. Therefore, several projects faced problems in reaching the legitimacy boundary during the start of the construction phase.

To gain trust and legitimacy, the experts highlighted the importance of honesty about the nuisance locals will experience during construction. Furthermore, they showcased accomplishments to locals, helping society understand that the project contributes to the common good. Project developers should also try to understand different interests in an early project stage to overcome potential problems later. Furthermore, these interests should be used to engage with local context and social performances, which is important to reach the level of approval. The highest level is only reached for some professional stakeholders, as they were the only ones to become that involved that they consider themselves partners in a project. Although professional stakeholders are a minor group, project developers should strive to work with them, as they potentially cause problems to the project. They could, for example, withdraw a legal license.

5. Success factors, barriers, and conditions of the SLO

Chapter 5 relates to the 3rd sub-question. The findings are primarily based on the semi-structured interviews with the experts, the document analysis, and the Focus Group Discussion. The success factors of the SLO are discussed in 5.1. In 5.2, potential barriers to the SLO are discussed. Lastly, the conditions of the SLO are described in 5.3.

5.1 Success factors of the SLO

Within all projects, except for the Southern Ring Road in Groningen, stakeholder satisfaction monitoring has been performed. A yearly survey was spread among these projects' local inhabitants, professional stakeholders, and road users. These results have been used to potentially adapt stakeholder management or communication strategies to improve support for the project. R4 and R5 explained that car users did not understand why roads were closed over a long period while not seeing any construction practices. Therefore, the project developers adapted their communication strategy by explaining why these road closures were needed. Thereby creating understanding and avoiding potential negative sentiment. Within A12 Lunetten - Veenendaal, the criteria of satisfied society were introduced. According to R13: *"During the tender, potential contractors could submit plans which included, besides the costs, the quality of stakeholders satisfaction, which meant maintaining a minimum percentage of satisfaction among different groups of stakeholders."* In line with R4 and R5, R13 explained how their communication strategy was adapted to explain the interventions taken and why. As R13 stated: *"Inhabitants thought we do very little to protect nature. However, we do a lot. Therefore, instead of taking additional measures to protect nature, we increased awareness within our communication strategy about which measures we take."*

At the Southern Ring Road of Groningen, a satisfaction monitor was only conducted twice by an external agency and once by university students. The experts involved explained that the survey, as was conducted by the agency, did not have any value to them. According to R9: *"The research about the local support towards the project was nothing special. It is only an external agency that is, based on basic numbers, trying to grasp the support base. Therefore, we decided to quit."* R12 agreed, on behalf of the client, that they also thought the questions were too suggestive and were, therefore, useless to the project. R6, R7, R8, R9, R10, and R12 explained that their knowledge of local satisfaction is mainly based on responses on social media, questions from locals, and group discussions. These experiences can potentially be used to adapt their communication strategy. As explained by R6: *"We try to get a feeling of satisfaction from society. We try to adjust our communication strategy depending on the number of questions, the questions asked within the council, and the ambience on channels like Facebook."*

Therefore, during the FGD, stakeholder satisfaction monitoring and social media were discussed. FGD3 started on a critical note by explaining that the survey held at the ring road of Groningen was useless, which aligns with R9 and R12. The quality, the respondents, and the questions' flexibility were insufficient. Therefore, FGD3 suggested that the survey quality is a condition for the monitor to have added value to the project. Therefore, FGD3 preferred to work with an environmental analysis based on, among other things, social media. However, FGD1 argued: *"We use these monitors a lot to understand how we can improve and adapt our communication strategy to improve societal perception on the measures we implement to limit nuisance. However, I agree you need an excellent agency capable of performing this monitor. Otherwise, it is completely useless."* Therefore, it can be concluded that using a stakeholder satisfaction monitor can be considered a success factor, but under the condition that the survey quality is sufficient.

Within the A12 Lunetten - Veenendaal project, emphasis was placed on careful stakeholder management by increasing the predictability of the project. They aimed to create a buffer to ensure stakeholders accept potential setbacks (Rijkswaterstaat, 2013c). This aligns with the bumper strategy applied in the SAA program, as the program aims to maintain its positive image in case setbacks must be communicated (Rijkswaterstaat, 2019). R12 acknowledged the importance of building credit: *"My experience is, if you step up (your social performance), you can get much credit in return. Having credit can save you many problems in the future. This is easier compared to having to restore confidence."*

Applying a bumper strategy to improve the image in case of potential setbacks was extensively discussed in the FGD. All the participants agreed that building credit from society is key to successful environmental management. To create this bumper, it was suggested that positive communication content should be created, as explained by an example of FGD1: *"We interviewed a traffic warden. Everybody knows her very well. Therefore, you know everybody will love those sorts of things."* FGD2 suggested building confidence by keeping promises, thereby increasing your support base from society and politicians. FGD3 stated: *"Our entire communication strategy is aimed to build as much credit as possible."* FGD4 added a critical note to be aware of the rationale behind the bumper strategy. According to FGD4: *"These sound like tricks to me, but I believe in sincerity. You do not implement things to cover up other things. You need intrinsic motivation to do your best for local society."* The other attendees confirmed the statements of FGD4, always to remain integer and authentic.

The interviewees explained that society can be interested, impressed, and proud of an accomplishment during construction. During the FGD, it was discussed how to seize these opportunities, thereby gaining ambassadors for the projects. Several suggestions have been made by the attendees, for example, providing tours, having stands during construction moments, and opening the construction site to locals. As can be derived from FGD1: *"During the day of construction, we had 2500 visitors, who were very impressed by the project, which we experienced during our tours. Therefore, you notice the group of society that approves your project."* Furthermore, showcasing finalised parts of the project can help society to approve the project. Having locals within society approve the project has benefits, according to FGD3: *"Nowadays people can see that something is finished. Therefore, people start to correct each other, for example, on social media. Someone states that the project is way too expensive. Another responded: "Shut up, it is getting great."*

To conclude, if the quality of the stakeholder satisfaction monitoring is sufficient, it can be considered a success factor. Based on the monitor, the stakeholder management strategy and communication strategy can be adapted, thereby creating understanding among locals as to why interventions are taken. Furthermore, applying a bumper strategy is also considered a success factor, as an improved image can help in case setbacks must be communicated. Lastly, showcasing accomplishments within the project can help people approve and advocate the project.

5.2 Barriers to the SLO

After decisions regarding the project are finalised, society can still oppose them by withdrawing the SLO. Their potential to disrupt a project depends on three factors: their ability to unite, the level of protest, and to ability to draw the attention of politicians, which often is done via the media. Celebrities seem to be particularly effective in drawing attention from the media. R5 and R16 explained how some celebrities have used their ability to influence the media to stop the entire or a part of the project. As explained by R5 in the context of the A9 Gaasperdammerweg: *"You notice that in case famous people seek attention from the media, it becomes interesting for both the media and politicians. The next thing you know, your plan is off. In this case, famous people have successfully gotten the alternative off the table."* R5 continued by explaining how other celebrities have protested via the media, thereby

stopping the development of a tank station and a resting place within the A9 BAHO. Therefore, R5 critically reflected on their role as environmental managers in the A9 Gaasperdammerweg and the A9 BAHO: *"We should have recognised the interests of famous people earlier. Back then, we ignored them, so they sought attention from the media. After that, the tide could not be turned anymore. Therefore, you should engage and embrace them."*

In the case of Groningen, a minor group of society united against part of the project, including severe forms of protest. R9 and R10 explained how, during the construction phase, a construction site was being placed on the south side of the Julianaplein. However, after extreme levels of protest from a well-organised and united cultural minority, it was decided to replace the site. As explained by R9: *"They used air rifles to shoot towards our people. They threatened on a Friday: if we had not left at 10 AM the next morning, they would have blocked the site, mobilising people from all over the Netherlands. They went very far."* R9 continued: *"Therefore, it was decided by the deputy and the safety region to remove the construction site, which cost an enormous amount of money."* R10 critically reflected on this period: *"These people do not attend meetings to express their discontent. You should get acquainted with these people to understand their interests."*

Controversially, other stakeholders who do not apply these forms of protest or seek attention are more likely to be disregarded, even though they sometimes experience a comparable nuisance. However, they are less likely to cause problems for the project. This was acknowledged during the FGD and regarded as a problem. However, the participants did not know how to overcome this. FGD3 suggested: "*Try to get through the layer of loud shouters and try to reach the other people within the neighbourhood."*

Another concern raised by several interviewees was society being less willing to discuss their concerns and interests. A reason for this is the development of the internet and social media, which allows people to complain anonymously and more radically. R3 stated: "*The time we live in is changing, which, in my opinion, makes our job harder. This is something that is within our society. Conversations change. It becomes harder to have a good conversation."* In the FGD, these struggles were confirmed, for example, by FGD2: *"I think this risk is escalating in this period, as it is easier to announce nonsense via social media, which is hard to resolve. This is the case for social media and politics: the opposition seizes the opportunity to oppose a project."*

To conclude, projects are most likely to be disrupted by stakeholders who either apply severe protest strategies or know how to get attention from the media and politicians. Meanwhile, stakeholders who do not are more likely to be disregarded. Furthermore, conversations are becoming more radical as people can complain anonymously online.

5.3 Conditions of the SLO

A good relationship between the contractor and the client is a condition that enhances and maintains the SLO. The relationship depends on three aspects, of which the first is the stability of the scope within the project. R7 explained that in Groningen, many parties are involved within the client and the contractor, which increases the complexity. R11 was involved in the Blankenburgverbinding and the Southern Ring Road of Groningen and confirmed the explanation by R7. According to R11: *"At the Southern Ring Road, the contractor consists of five parties that have to agree on the strategy within their organisation, after which they have to agree with the client. In this case, the client consists of three parties who must speak as one. Blankenburg only had two contractors and one client, which is often simpler."* R11 continued comparing these projects: *"BAAK (contractor Blankenburgverbinding) builds the main road system. If requirements change, it only affects that. At the Southern Ring Road, we adjust the main, provincial, and municipal roads. Potentially three times as many adjustments, and therefore more chance of disrupting the construction process."*

The second requirement for a good relationship between the contractor and the client is the contractor's experience with environmental management. R2, R3, R4, R5, R11, R12, and R13 explained how they have had different experiences with different contractors and their willingness to consider society in their projects and practices. As explained by R2: *"It is about the DNA of the contractor, how are they involved? That can differ a lot."* R4 is critical of their contractor, as they are not used to environmental management. Therefore, they, as the client, had to take additional measures. As can be derived from R4: *"We, as the client, have more work to ensure the contractor complies with the interests of local society, among which the interests of politicians."* On the other hand, R9 is involved with the contractor at the Southern Ring Road in Groningen and questioned the efficiency of using the client's resources to deal with complaints: "*Sometimes I have the feeling they (the client) could have done less."* FGD3 suggested an incentive to improve societal sensitivity within the project team. FGD3 argued that it is easier to understand and incorporate the interests of locals within your own society. Therefore, including some locals in the project team from both the contractor and the client would be helpful.

The financial stability of a project is often mentioned to be important in a good relationship between the contractor and the client. R11 clearly stated this: *"In case big financial problems occur, the contractor is likely to review how to cut budgets. As agreements regarding social acceptance are not clear within the contract, these will likely get cut."* This aligns with R12: *"The first thing a contractor drops is local society as it cannot be measured. In case you try, what is the economic value you obtain?"* R13 backed this: *"We had the financial means to do extras to society. In case you do not have the resources, you do not have a margin to do extras."* Therefore, requirements to enhance social acceptance and obtain benefits seem intangible. Thus, financial stability is a condition for the contractor to consider society consistently in their project plans.

As explained before, one of the conditions for reaching the level of acceptance of the SLO is limiting the adverse social impacts. In the project plans of Rijkswaterstaat, social impacts are acknowledged and stated that these will be minimised and mitigated (Rijkswaterstaat, 2011a; Rijkswaterstaat, 2013b; Rijkswaterstaat, 2013c; Rijkswaterstaat, 2016; Rijkswaterstaat, 2017; Rijkswaterstaat, 2019). However, according to experts, minimising social impacts can be hard to achieve. As described by R11: *"Often is stated within the contract, the nuisance of construction experienced by society will be minimised. However, what is minimised? That is too broad, and it is not concrete. You cannot state what the contractor can or cannot do."* Furthermore, at the Blankenburgverbinding, some requirements from society have been drawn up strictly in the contract. However, these can be in danger of becoming too restrictive. As explained by R2: *"Clear agreements have been made, for example, construction vehicles should never drive on local roads, or the Zuidbuurt will never be closed. These agreements are too restrictive."*

The contract form seems to have a minor influence on social acceptance, as only R2 and R13 suggested it has any influence. R11 explained why the contract form has little effect: "*The party responsible for the maintenance is not necessarily the same party as the construction contractor. This can also be said about the project team at Rijkswaterstaat. Therefore, the ones involved within the realisation phase are a different team involved during maintenance. Therefore, it might make a difference in theory, but I do not recognise the difference at all in practice."* R13 explained that in the case of Lunetten-Veenendaal, the construction contractor was the same party as the one responsible for the maintenance, including shared profits. Therefore, according to R13, a DBFM contract can positively affect the SLO. However, it is a minor effect. As R13 explained: *"It is important to challenge the contractor to do some extras continuously. The form of a contract is certainly not the only success factor."*

The requirements of the contract to society have been discussed in the FGD. The attendees argued that several requirements have been incorporated into the contract. However, if these requirements are not met, the experts argued that the sanctions they can take are insufficient. As stated by FGD3: *"Reflecting on our requirements, I can confirm these have not been met. However, I do not have any suitable sanctions to ensure the requirements are met."* FGD2 provided a practical example: *"Our demands on maintaining cycling routes are apparent. However, you are in a dilemma, as these cannot be maintained safely. We do not have any sanctions, as the work needs to continue. I cannot give them an incentive to adhere to the requirements."* FGD1 and FGD3 recognised these struggles and enhanced them with comparable examples. Therefore, they argued that sanctions should be set to comply with the requirements in the contract and budget flexibility to compensate society in case demands are not met.

To conclude, a condition of maintaining and enhancing the SLO is a stable relationship between the client and the contractor, which depends on the stability of the scope, the willingness of the contractor to consider society in their project, and the financial stability of a project. Besides that, it is hard to draw up hard demands regarding society or enhance the contractor to meet these. Therefore, the client needs suitable sanctions to force the contractor to comply with the demands.

6. Strategies to maintain and enhance the SLO in road infrastructure projects

Chapter 6 answers the last sub-question. Several strategies are presented to maintain and enhance the SLO to benefit road infrastructure projects, like the Southern Ring Road in Groningen. The strategies presented are focussed on findings specifically found in this research, not the strategies that Rijkswaterstaat already standardises. These strategies are based on the findings presented in Chapters 4 and 5, the semi-structured interviews, the Focus Group Discussion, and the document analysis.

6.1 Building confidence in the project

If a group of stakeholders withdraws the SLO, the potential problems depend on the level of protest, their ability to unite, and the ability to influence the media and politicians. However, criticism of groups of stakeholders should never be regarded as a singular incident but as potential to escalate protests. For example, FGD2 questioned to what extent the action group Groningen Verdient Beter should be regarded as a singular group of activists or a broader social movement aimed at discontinuing the project in the initial phase. FGD3 enhanced this: *"Groningen Verdient Beter is an action group, which can cause much stress, potentially causing other stakeholders to doubt the reliability of your project."* Therefore, the concerns of these activists should be managed. However, experts explained that the activists' objectives are often impossible to align with the project. Accordingly, it is important to resolve the concerns to preserve the reliability and confidence of most stakeholders in the project.

Locals often appreciate that Rijkswaterstaat does not appear as the party that knows everything to create space for open discussion (Rijkswaterstaat, 2013a). Furthermore, R7 and R13 explained that such discussions can help locals understand the contradicting interests within society. Therefore, confidence and transparency are critical in project development (Rijkswaterstaat, 2013a). FGD4 stated: *"First, you need to gain confidence from society, both in the project developers and the government. Only after that people can become proud of the project."* This aligns with statements by the experts involved in the Southern Ring Road, who enhanced the importance of building confidence in successfully completing the project. R6, R8, R9, R12, R14, and R15 explained to do so by celebrating and showcasing the completion of parts of the project. Therefore, FGD3 enhanced the importance of organising such events: *"Make sure you organise yourself in such a manner you can organise these events. Therefore, make sure you have the budget and the means available. For example, state in the contract that you can enter the construction site with locals."* Furthermore, FGD1 explained the added value of having construction workers explain what and how the project is being constructed. According to FGD1, their story is authentic, which locals appreciate. Having locals advocating for the project can have benefits. For example, they can resolve negative online comments. Also, the FGD enhanced to be honest and prepare locals for the nuisance during construction.

6.2 Set additional regulations and potential sanctions

The interviewees raised the concern that noise pollution regulations are insufficient, which can cause problems, especially during sheet piling. It was argued that additional regulations concerning noise pollution are needed. As stated by R4: "*In other projects, very few regulations on noise pollution were in place. Therefore, we explained to the municipality of Amstelveen that they should develop regulations to prevent piling construction from happening 24/7."* During the FGD, attendees enhanced the importance of these additional regulations. FGD2 and FGD3 enhanced the importance of setting requirements and sanctions in your contract concerning sheet piling. As stated by FGD2: *"You should take nuisance as standard and prescribe in your contract how to construct these sheets because relying on existing legislation does not work. I consider this very agonising."* FGD1 strengthened the statements of R4, FGD2, and FGD3: *"At the Gaasperdammerweg, the regulations were not dealt with. Therefore, the contractor always got a legal licence. Locals experienced extreme levels of nuisance. We learned to set nuisance frameworks at the A9 BAHO, which made a huge difference."*

The experts argued that regulations to limit nuisance to local society are difficult to draft in the contract. R11 explained that nuisance is often stated to be minimised; however, what is minimised? Furthermore, several interviewees argued that in case of financial problems, the contractor easily drops regulations regarding society. The attendees of the FGD agreed that it is hard to incentivise the contractor to keep these regulations, as the sanctions are insufficient. This can be derived from FGD3: *"We can draw up requirements in the contract, which can be verified. However, I do not have any sanctions if these requirements have not been met."* Therefore, it was recommended that sanctions should be drawn up to incentivise the contractor to meet the regulations regarding social acceptance.

6.3 Get acquainted with the interests of local society

All experts argued that in complex cases, customised treatment is necessary. Some experts had to deal with a group of stakeholders that withdrew the SLO. In these cases, the stakeholder groups disrupted the projects as they sought attention from politicians via the media or united against the project, including severe protest strategies. Interviewees R4, R5, R9, R10, and R16 explained that they learned that some people with different socio-cultural backgrounds do not answer public invitations to engage with the project. This was the case of a construction site in Groningen, as explained by R10: "*We never realised the sensitivity with these people. We learned you have to announce this better and differently. These people will not attend public meetings, and you have to get to these people yourself."* Therefore, it is vital to get acquainted with locals, especially those from different socio-cultural backgrounds, and learn how to approach these people. Otherwise, project developers will be unable to understand and deal with their concerns, potentially causing problems for the project.

The experts learned the importance of getting acquainted with local stakeholders and their interests. As R5 stated: *"The most important thing is to confirm locals' interests, not assume them."* Therefore, the respondents highlighted the importance of using several strategies to contact them, preferably on a local or individual scale, as significant social groups will not respond to public invitations. FGD2 suggested: *"Plan a day to visit the neighbourhood, walk or bike around, have conversations, and listen. Realise you need time to get to know society."* Another option to get acquainted with the locals is via a stakeholder satisfaction monitor. As R4, R5, R13, and FGD1 explained, if the quality is sufficient, helpful information can be gathered, and the communication strategy can be adapted.

Several experts explained that participation in the project is only possible during the initial phase. However, by then, local society would not yet be acquainted with the project, regardless of the efforts of the project developers. As R12 stated, *"There is an important difference since we put much attention to informing and engaging people, but they only realised once they were affected by construction."* FGD1 agreed and recommended: "*You should be adaptive within your projects to ensure you can incorporate wishes from society. To ensure the final result aligns with societal expectations and interests."* Two conditions to seize this opportunity, according to FGD1 and FGD3, are a good relationship with the contractor and the financial means available. This is enhanced by R9, who explained how the completion of the Papiermolentunnel created much support from local society.

6.4 Findings to maintain and enhance the SLO in road infrastructure projects

To conclude, criticism should be resolved to maintain confidence among most stakeholders. Getting stakeholders engaged during the construction phase can help them approve the project. If they approve, they can become ambassadors, benefiting the project by resolving criticism. Furthermore, project developers should set additional regulations regarding sheet piling, as existing legislation is insufficient. To incentivise the contractor to adhere to regulations regarding society, the client should draw up suitable sanctions at the start of the project. Also, it is important to get acquainted with and confirm the interests of locals and acknowledge different socio-cultural backgrounds. Lastly, project developers should be adaptive and include emerging interests from society in the projects.

7. Conclusion & Discussion

This research aimed to develop a framework to operationalise the Social Licence to Operate within the context of road infrastructure projects and identify strategies to maintain and enhance the SLO to benefit the project. This chapter concludes the research findings and answers the main research question. To this end, the sub-questions will first be answered. After that, the strengths and potential improvements of the research are discussed. Lastly, suggestions are made for future research.

7.1 Conclusion

First, the concept of Social Licence to Operate was defined in the context of road infrastructure projects. The SLO is the ongoing level of social acceptance reached among all affected by a certain project. It influences socio-political and market acceptance. Therefore, the government-market-community relations should be understood in order to comprehend the SLO in the context of a project. Four levels of the SLO have been identified. The lowest level is the withdrawal of the SLO, the second level is acceptance, the third is approval, and the highest is co-ownership. Three boundaries, including several criteria, have been used to operationalise and examine which level of the SLO in road infrastructure projects has been reached. The boundaries and a concise description of its examination are:

- Legitimacy boundary: Do local stakeholders understand the relevance of the project?
- Credibility boundary: Did the project developers engage with local society?
- Institutionalised trust boundary: Do stakeholders regard themselves as project partners?

Five road infrastructure projects were selected to operationalise the SLO and research which level was reached within the projects. The Blankenburgverbinding reached the level of approval for most stakeholders, as locals who initially disagreed with the project appreciated how they were treated. Therefore, most of them were willing to engage and increase the quality of the project. During the construction of the Gaasperdammerweg, locals were not convinced the project contributed to the common good, nor did they believe it was the best option. Meanwhile, they experienced a lot of nuisance. Therefore, the project developers faced problems reaching the legitimacy boundary. Only after the completion of the tunnel did locals approve the project, as by then, they started to recognise the improvements of the project to the common good and local society. The A9 BAHO took lessons from the Gaasperdammerweg. Therefore, they implemented and explained strategies to limit nuisance to locals. Therefore, the legitimacy boundary was reached for the majority of stakeholders. Furthermore, for those who benefited from social performances, the level of approval was reached. In the A12 Lunetten – Veenendaal, most local stakeholders approved the project as locals and their interests were incorporated into different project stages. Furthermore, they reflected on the project, rating it with a 7,8 on average. The Southern Ring Road of Groningen faced setbacks in 2018, causing locals to question and resist both the project and the developers. Therefore, back then, the legitimacy boundary was not met. Although some remained convinced that an alternative to the project would be a better solution, most stakeholders gained trust after parts of the project were completed and efforts of social performance were put into practice. Therefore, over time the level of approval was reached for most stakeholders.

After that, the success factors, the barriers, and the conditions of the SLO were identified. The first success factor identified is adapting the stakeholder management and communication strategies after a stakeholder satisfaction monitor, with the prerequisite that the monitor's quality be sufficient. Secondly, applying a bumper strategy to improve the project's image to compensate for potential setbacks. Lastly, showcasing the project's successes can help locals understand the project's benefits. A barrier is that locals who apply severe protest strategies, seek attention from the media and politicians, or can unite, are the ones most likely to disrupt a project via withdrawal of the SLO. However, locals who do not are more likely to be disregarded. Other than that, conversations are

becoming harder and more radical because people complain anonymously online. A stable relationship between client and contractor is a condition of the SLO. The relationship's stability depends on the stability of the scope, the willingness of the contractor to consider society throughout their project, and the financial stability of the project. Furthermore, difficulties occur as the requirements for the benefit of society are hard to draw up in the contract and enhance the contractor to meet these. Therefore, the client should have sanctions to oblige the contractor to comply with the requirements.

Lastly, strategies have been identified to maintain and enhance the SLO, which can be used in road infrastructure projects like the Southern Ring Road of Groningen. First of all, criticism should be resolved to maintain the reliability of your project among most stakeholders. Engaging locals during the construction stage can help them approve the project. Furthermore, existing legislation concerning sheet piling is insufficient. Therefore, additional regulations should be set to limit nuisance. To incentivise the contractor to adhere to set regulations regarding society, the client should have sufficient sanctions. Besides, project developers should engage and confirm with local interests early to overcome potential problems later. Lastly, adaptivity is needed to include the interests of locals later in the project.

The SLO can be operationalised and enhanced in road infrastructure projects using the framework presented in this research. In the early stage, locals are likely not yet to be willing to engage in a project. After they experience any form of local impact, they are likely to have a negative attitude towards a project. Therefore, without any trust building, locals potentially withdraw the SLO. By touching upon the criteria of the legitimacy boundary, project developers are likely to reach the level of acceptance among most stakeholders. If the project developers engage and show their understanding of local society and the local context via social performances, stakeholders are likely to approve the project. Lastly, if stakeholders consider themselves partners in the project, the level of psychological identification could be reached. However, often only professional stakeholders or some individuals have reached this level of involvement within projects.

7.2 Discussion

During this research, the focus has been on the SLO, which reflects the level of social acceptance reached in a project. The level reached influences the government-market-community relations. The research showed that the relationship between the client and the contractor is a condition to maintain and enhance the SLO. Furthermore, the relationship between society and politicians is essential as society seeks attention from politicians in case they disagree with a project. This is in line with the literature, as the concept of the SLO is related to three types of acceptance: socio-political, market, and community acceptance, which were identified by Bice et al. (2017), Morrison (2014), and Wüstenhagen et al. (2007). Moreover, Boutilier (2014) explained that if locals disagree with a project, they seek the attention of politicians via the media.

In the projects, various criteria of the SLO were touched upon. The experts explained how they have, at least, tried to attain most of these criteria. Furthermore, they emphasised the importance of enhancing the SLO and explained which level they thought they reached among different groups of society. Therefore, the framework of Jijelava (2019) can be considered helpful in the context of road infrastructure projects in the Netherlands. However, some critical nodes should be made to some criteria. At the start of the project, the period of local impact is too long for locals to understand that, in the long term, the project is for the common good. Therefore, it is important to the reliability of the project to be honest about all forms of nuisance instead of emphasizing the common good. This contradicts the criteria of Jijelava and Vanclay (2018), who argued that project developers should convince locals that the common good outweighs the local impact. Furthermore, building confidence at the start of the project is vital to reaching the level of social acceptance, which was not included as

a criterion in the framework of Jijelava and Vanclay (2018). Besides, in projects of Rijkswaterstaat, society can always participate or challenge a trajectory decision. However, this is in the initial phase of a project, during which most of society is not yet acquainted with the project. In the later phases, the potential for participation is minimal. Therefore, the framework of the SLO could benefit from the inclusion of different forms of communicative planning, as was explained by Homsy et al. (2019). Lastly, proactive communication with society is standardised in the contracts of Rijkswaterstaat (Rijkswaterstaat, 2011). Therefore, these criteria were not suitable to examine if the highest level of the SLO was reached in these contexts.

The research showed that groups of stakeholders protesting most severely, or best in seeking the attention of politicians and the media, are most likely to disrupt a project. Besides, their demands are more likely to be considered compared to locals who do not show their discontentment extensively. This is a concern raised in this research and in the literature. As Meesters and Behagel (2017) argued, it could be unclear who is in the position to withdraw the SLO. Furthermore, it was debated that vocal groups are likelier to participate in the project (Meesters et al., 2021; Parsons et al., 2014). However, this is a problem for environmental management in general, not specifically for the SLO (Newell, 2005).

7.3 Strengths and weaknesses of the study and recommendations for future research

A difficulty that appeared during this research was that the authors seemed to use different definitions of terms such as social acceptance, community acceptance, and the SLO. Wüstenhagen et al. (2007), Morrison (2014), and Bice et al. (2017) used social acceptance as an overarching definition of the three types of acceptance. Within these types of acceptance, community acceptance is specifically focused on the perspective of locals on a project, while in most studies, the term social acceptance was used for a comparable definition. Furthermore, Boutilier and Thomson (2011) and Morshed et al. (2021) identified the SLO as four levels of social acceptance. However, the second level was again called the level of social acceptance, which might be confusing. Therefore, in this research, the SLO was defined and used as the ongoing level of social acceptance reached among all affected by a certain project. After this, social acceptance was only used as the level of social acceptance as in the model by Boutilier and Thomson (2011).

This research was conducted based on the perspective of project developers. Their views have been used to identify the level of the SLO reached, as well as the success factors, barriers, and conditions of the SLO. Other than that, documents, the media, and stakeholder satisfaction monitoring were used, and various sources were provided within the triangulation. However, the perspectives of local stakeholders have only been included via stakeholder satisfaction monitors. Although all these sources provided much insight into the SLO in road infrastructure projects, it would be interesting to analyse their perspectives on the SLO in future research. Furthermore, as explained by Jijelava (2019), research of the SLO in different contexts increases our understanding of the applicability and operationalisation of the SLO. This study only focused on the contexts of road infrastructure projects in the Netherlands. Thus, future research could focus on other types of projects and countries, including different institutional settings. Lastly, this research is focused on the construction phase while touching on some aspects of the initial phase and the finalisation of the projects. Future research could extend the focus explicitly on different phases of the projects.

7.4 Recommendations for future practice

This research includes many perspectives from different experts, which can be used to draw lessons that will benefit future infrastructure projects. First, all forms of protest should be taken seriously, as they might escalate into more severe protests, potentially causing problems for the project. Moreover, criticism should be resolved to maintain reliability for most stakeholders. To reach the level of acceptance, project developers should explain the importance, the contribution to the common good,

the project, and why it is the best option. Society will remain critical if they are convinced that an alternative would be a better solution. Project developers should also acknowledge the nuisance locals will experience during the construction. Also, project developers should gain society's trust in completing the project successfully. Applying fair, ethical procedures is important, as protests occur if society and their interests are treated fairly. Therefore, the contractor should be incentivised by the client to apply these procedures, potentially via sanctions. Furthermore, they should engage and confirm the interests of locals. Lastly, the client should set additional regulations regarding sheet piling, as existing legislation is insufficient.

Reaching the level of approval can benefit the project by creating a buffer to compensate for potential setbacks that must be communicated. Furthermore, locals who approve the project can advocate for it, thereby resolving criticism. Getting stakeholders engaged during the construction phase and showcasing accomplishments can create project approval. Moreover, project developers should show their understanding of the local context and potentially apply social performances related to these interests. Only professional stakeholders have reached the highest level of the SLO, as they have been the only ones likely to consider themselves as partners in the project. Although they consist of a minor group of stakeholders, they are the ones in place to cause significant problems to the project. Therefore, project developers should strive to work with them. Although these lessons are relevant to infrastructure projects, they cannot be copied and pasted directly into different contexts, as no context is completely the same. Therefore, experts should remain critical and recognise the complexity of infrastructure planning and environmental management.

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9. Appendices

9.1 Appendix 1: Interviewguide: SLO in infrastructuurprojecten in Nederland

Introductie

Hallo, ik ben Jelmer de Rijke, 25 jaar oud en ik ben momenteel bezig met mijn scriptie van de master Environmental and Infrastructure Planning aan de Faculteit Ruimtelijke Wetenschappen aan de Rijksuniversiteit van Groningen. Daarnaast ben ik in dienst als stagiair bij Rijkswaterstaat op het projectbureau Aanpak Ring Zuid in Groningen. Allereerst, hartelijk dank voor uw tijd en medewerking aan dit onderzoek. Mocht u tijdens het interview vragen en/of opmerkingen hebben, dan kunt u deze ten alle tijden stellen. Daarnaast kunt u altijd verzoeken om het interview te stoppen, indien gewenst. Ten slotte, gaat u ermee akkoord dat dit interview voor verwerkingsdoeleinden wordt opgenomen?

Voordat we beginnen met het interview, heeft u nog vragen en/of opmerkingen, bijvoorbeeld over het vooraf gedeelde toestemmingsformulier?

Dan nu even een korte introductie. Mijn scriptie gaat over *'the Social Licence to Operate/Sociale Acceptatie/Sociaal Draagvlak'* van infrastructuurprojecten in Nederland. Om dit te onderzoeken vergelijk ik 5 infrastructuurprojecten in Nederland, waaronder het project waar u voor werkt.

- Bent u reeds bekend met één van deze concepten?
- In hoeverre acht u één van deze concepten relevant in een project als degene waarvoor u werkt?

Dan gaan we nu verder met wat vragen ter introductie.

Introductievragen

1. Kunt u uzelf kort voorstellen en vertellen wat uw rol binnen het project was/is?
    a. Hoe lang bent u werkzaam (geweest) voor het project?
    b. Gaat u ermee akkoord dat ik u in mijn scriptie anoniem citeer met daarbij de rolomschrijving zojuist door u beschreven?
2. [Indien bekend met één van de concepten]: Is er tijdens het project een poging gedaan om binnen *één of meerdere verschillende groepen stakeholders* de *Social Licence to Operate/Sociale Acceptatie/Sociaal Draagvlak* te meten? [anders toelichten]
    a. Hoe heeft u dit gedaan? Of waarom niet?
3. Zijn er tijdens het project maatregelen genomen om de *Social Licence to Operate/Sociale Acceptatie/Sociaal Draagvlak* te waarborgen en of te verbeteren?
    a. Hoe heeft u dit gedaan?

Politiek-markt-maatschappij relaties

4. Hoe zou u de *relatie* tussen de *aannemer* en de *overheid* (besluitvormers en opdrachtgevers vanuit meerdere overheidsinstanties) beschrijven?
5. Hoe zou de *relatie* tussen de *overheid* (besluitvormers en opdrachtgevers) en de *maatschappij/omgeving* beschrijven?
6. Hoe zou u de *relatie* tussen de *aannemer* en de *maatschappij* beschrijven?
7. Waar denkt u dat deze [eventuele] verschillen in de aard van de *relaties* vandaan komen?
8. In hoeverre denkt u dat de *contractvorm* [= DBFM, D&C,…] invloed heeft gehad op deze relaties?
9. Hoe denkt u dat deze relaties invloed hebben gehad op de [overall] *Social Licence to Operate/Sociale Acceptatie/Sociaal Draagvlak*?

Legitimiteit - Sociale Acceptatie

10. Op welke manieren is geprobeerd om het *belang* van dit project uit te leggen aan *alle stakeholders?*
    a. Hoe heeft u hierbij uitgelegd dat het *publiek belang* opweegt tegen *lokale negatieve effecten?*
    b. Is hierbij ook uitgelegd hoe (eventuele) *lokale negatieve effecten* worden *geminimaliseerd*?
    c. Kunt u een aantal concrete voorbeelden noemen waaruit dit blijkt?
11. Op welke manieren wordt de omgeving *geïnformeerd en betrokken* bij het project?
    a. Kunt u hier ook verschillen noemen tijdens *verschillende fases* van het project, bijvoorbeeld voor het Tracébesluit en na het Tracébesluit ?
    b. Kunt u concrete voorbeelden noemen?
    c. [Hoe reflecteert u vanuit uw rol binnen het project hier tot nog toe op?]
12. In hoeverre denkt u dat u *alle stakeholders* heeft kunnen overtuigen van de *legitimiteit* van het project?
    a. Denkt u dat het mogelijk en/of nodig is om *alle stakeholders* te overtuigen van *legitimiteit* van het project?
    b. [Hoe heeft u dit gedaan?]

Geloofwaardigheid Goedkeuring

13. Kunt u concrete voorbeelden noemen van *maatschappelijke bijdragen aan de lokale omgeving* [evt. voorbeelden noemen] die zijn gedaan binnen dit project?
    a. Tijdens *welke fasen* van het project [bijvoorbeeld voor Tracébesluit, realisatie/bouw fase (bijvoorbeeld grote ingrepen) en evt. gebruik] zijn deze gedaan?
14. Hoe heeft u aan lokale stakeholders aangetoond de *lokale context* goed te begrijpen?
    a. Hoe heeft u *ervaringen uit het verleden van de lokale omgeving*, bijvoorbeeld eerdere projecten, hierin betrokken?

Vertrouwen mede-eigenaarschap

15. Hoe beschouwt u uw relatie tot de omgeving: werkt u *voor* of werkt u *met* de omgeving?
    a. Waarom? Waar blijkt dit uit?
16. Hoe is omgeving betrokken bij de *besluitvorming*?
    a. Tijdens welk stadium van het project? Waarom gebeurt dat zo?
    b. [Waarom zitten er verschillen tussen deze fasen?]
17. Is er gebruikgemaakt van *proactieve communicatie* strategieën?
    a. Hoe en waarom zijn deze toegepast?
18. Zijn er stakeholders die zichzelf beschouwen als *partners in* het project?
    a. Waar blijkt dit uit?
    b. Wat voor gevolgen heeft dit voor het project?

Hulpmiddelen van the Social Licence to Operate/Sociale Acceptatie/Sociaal Draagvlak

19. Is er tijdens het project gebruikgemaakt van een *Stakeholder Network*? [evt. toelichten]
    a. Waarom wel/niet?
20. Zijn volgens u *één of meer stakeholders* in de positie om de *Social Licence to Operate/Sociale Acceptatie/Sociaal Draagvlak 'in te trekken'*? [evt. toelichten waarom dit zou kunnen]
    a. Wat zijn gevolgen voor het project: mocht de Social License to Operate/sociale acceptatie/sociaal draagvlak worden ingetrokken door één of verschillende stakeholders?

Tot slot

21. Terugkijkend op het project (tot dusverre), zijn er dingen die u anders had willen doen in relatie tot de omgeving? Wat zou u in een nieuw project anders doen?
    a. Verwacht u in dit project nog kritiek vanuit bepaalde groepen stakeholders?
    b. Waarom wel/niet?
22. Welk level van *Sociale Acceptatie* denkt u bereikt te hebben onder de *lokale omgeving* [Laat afbeelding Boutilier & Thomson (2011) zien]?
    a. Denkt u dat de omgeving het met u eens zou zijn? Waarom wel/niet?
    b. Als u in de toekomst nogmaals bij een vergelijkbaar project betrokken zou zijn: wat zou u anders doen om de Social License to Operate/sociale acceptatie/sociaal draagvlak te versterken? Hoe? Waarom?
23. Heeft u nog documenten of artikelen uit de media die van belang zijn voor mijn onderzoek?
24. Kent u nog andere personen die via een dergelijk interview relevant zijn voor mijn onderzoek?
25. Heeft u zelf nog vragen en/of opmerkingen, of wilt u nog terugkomen op één van de door u gegeven antwoorden?

Dan wil ik u nogmaals hartelijk danken voor uw tijd en bijdrage aan mijn onderzoek. U zult een transcript van het interview ontvangen. Indien u naar aanleiding van het transcript alsnog wilt terugkomen op een antwoord dan wil ik benadrukken dat dit absoluut uw goed recht is.

9.2 Appendix 2: Consent formulier

Betreft: Onderzoek in het kader van mijn masterscriptie Environmental and Infrastucture Planning aan de Rijksuniversiteit Groningen. Mijn onderwerp is het meten en waarborgen van sociale acceptatie in infrastructuurprojecten.

Beste ……,

Allereerst hartelijk dank dat u de tijd wilt nemen om mee te werken aan mijn onderzoek middels dit interview. Het doel van het interview is om met u te bespreken hoe sociale acceptatie eventueel gemeten en verbeterd wordt in een project als de Blankenburgverbinding.

Het interview zal plaatsvinden op: XX-XX-XXXX om XX:XX uur, te XXXXX. Als u met onderstaande voorwaarden instemt, zal het interview worden opgenomen en worden de resultaten verwerkt in het onderzoek. Het interview zal ongeveer één tot anderhalf uur gaan duren.

Mocht u nog vragen hebben, dan kunt u contact met mij opnemen via j.w.de.rijke@student.rug.nl Voor verdere vragen bent u ook vrij om mijn scriptie begeleider namens de universiteit te benaderen via jos.arts@rug.nl

Hierbij verklaar ik dat:

Mijn deelname aan het onderzoek geheel vrijwillig is en ik

Begrijp dat ik op ieder moment kan besluiten te stoppen.	Ja / Nee
De resultaten mogen worden verwerkt in het onderzoek.	Ja / Nee
Ik toestemming geef om het interview op te nemen.*	Ja / Nee
Ik mij te allen tijde kan terugtrekken uit het onderzoek.	Ja / Nee

Datum: ……..

Handtekening: …….

*De opname zal na uitwerking van het interview verwijderd worden.

9.3 Appendix 3: Code tree:

Codes in italics show emergent codes

Usage of stakeholder network?

- Did the project developers use a form of a stakeholder network?
- *Were stakeholder satisfaction monitors used?*
- *Were they used to adapt the project strategies?*

Relations:

- How does the interviewee think the SLO is affected by relations between the client and the contractor?
  - *Financial stability*
  - *Stability of the scope*
  - *DNA of the contractor*
- How does the interviewee think the SLO is affected by relations between the client and society?
- How does the interviewee think the SLO is affected by relations between the contractor and society?
- Has the contract form had any influence on any of these relations?

legitimacy:

- To what extent does the interviewee refer to the importance of legitimacy, including the following criteria?
  - Convincing society of the importance of the project?
  - Convince the affected community and wider public benefits outweigh disadvantages?
  - Contribution to the common good while limiting adverse social impacts
  - Society convinced there is no better alternative?
  - Are fair, ethical procedures applied?

Credibility:

- To what extent does the interviewee refer to effective engagement strategies in their strategy documents, including the following criteria?
  - Demonstrate aspects of social performance?
  - Understanding of the local context?
  - Understanding of past experiences of local society?

Trust:

- Have legitimacy and credibility been established over a longer period?
- To what extent does the interviewee refer to aspects of institutionalised trust, including the following criteria?
  - Are stakeholders regarding themselves partners in the project?
  - Did stakeholders get an opportunity to participate in the decision-making process?
  - Are communication strategies proactive?
  - Are the project developers working for or with the project?

Reflection:

- How does the interviewee reflect on the project?

9.4 Appendix 4: Script of Focus Group Discussion

Introductie (Chair – 10 mins) – Slide 1, 2 en 3

1. Welkom
2. Doel van FGD:
    - Doel vandaag is om de SLO te bespreken en belangrijke lessen te leren voor toekomstige projecten
3. Ethical Considerations:
    - Net als de vorige keer vraagt Author of hij het gesprek mag opnemen. Opnieuw zal het gesprek getranscribeerd worden, waarna de opname verwijdert wordt. Daarnaast zullen jullie functie worden gebruikt zoals de vorige keer.
4. Planning van vandaag:
    - Introductie: Welkom, introductie van het onderwerp en kennis making door Chair
    - Korte introductie van onderzoek en de voorlopige resultaten van deelvraag 2 (Welk level bereikt RWS in haar projecten) (Author)
    - Discussie: Discussie van de (voorlopige resultaten op deelvraag 3 & 4
    - Conclusie: Laatste les/opmerking
5. Vragen?

(Author – 10 mins)

Slide 4 – Onderzoek (3 mins)

Klein stukje achtergrond: waar komt de SLO vandaan, hoe ben ik tot mijn vragen gekomen?

Hoe beantwoord ik deze vragen?

Slide 5 – Model Boutilier & Thomson (7 mins)

Hoe scoort RWS op haar projecten?
Welke trends zijn we over het algemeen binnen de projecten?
Bruggetje naar waarom belangrijk → problemen onder withdrawal en bumperstrategy.

(Chair – 60 mins)

Slide 6 – Start discussie: deelvraag 3: succes factoren

- Bumperstrategie: waarom genoemd in documenten?
    - Is dit toegepast?
    - Belangrijk om te implementeren in nieuwe projecten?
- Stakeholder tevredenheidsonderzoek
    - ARZ: hoe reflecteren jullie hierop?
    - Andere projecten: nemen jullie dit mee in nieuw project?
    - Kunnen we zo de SLO omhoog krijgen?

Slide 7 – deelvraag 3: barriers

- Wie is in de positie om de SLO in te trekken en wat zijn de gevolgen?
    - Level of protest?
    - In hoeverre verenigd men zich?
    - Wat is de rol van media?
    - BN'ers?
- Hoe betrekken we "alternatieve" groepen?

- Hoe gaan we in de toekomst het gesprek aan?

Slide 8 – deelvraag 3: conditions

- Relatie tussen aannemer en opdrachtgever
    - Financiële stabiliteit
    - Stabiele scope
    - DNA van de aannemer

Slide 9 – deelvraag 4: strategie om te waarborgen en te verbeteren

- Legitimiteit:
    - Nadruk op common good of overlast?
    - Vertrouwen in de vaardigheid van het afmaken van het werk
- Hoe neem je de lokale context mee?
- Welke stakeholders kunnen zich partner voelen?

Slide 10 – conclusie

- Wat zijn belangrijke lessen?

Slide 11 – Afronden

- Herhalen conclusie
- Bedanken respondenten
- Hoe nu verder?