



Public participation in infrastructure: understanding contractors implementation of public participation during realization phase under the new environmental Act

Master thesis

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Public participation in infrastructure: understanding contractors implementation of public participation during the realization phase under the new Environmental Act

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Preface

With gratitude and reflection, I present this thesis, an academic journey rooted in my interest in how societal, legal, and technical systems interact in shaping our built environment. This research originated from a curiosity about the evolving governance of infrastructure projects and, more specifically, how public participation is implemented in practice. As the new Environmental Act marked a significant shift in Dutch spatial planning, I was drawn to explore its implications not from the policy-maker's view, but through the lens of those who bring projects into reality: contractors.

This study, titled *"Public participation in infrastructure: understanding contractors' implementation of public participation during the realization phase under the new Environmental Act"*, examines how legal responsibilities and societal expectations intersect in the day-to-day practice of infrastructure delivery. It aims to contribute meaningful insights to the ongoing discourse on participatory governance and the changing role of market actors in project implementation.

I would like to sincerely thank those who supported me throughout this process. My heartfelt gratitude goes to my parents, my partner and my housemates for their continued encouragement and belief in me. I am especially thankful to my company supervisor, Philine Goldbohm, for her practical guidance and for sharing valuable insights from the professional field, which helped me ground this research in reality.

Furthermore, I want to express my appreciation to my graduation committee: Marian Bosch-Rekvelde, Maedeh Molaei, and Leonie Koops. Their critical feedback, academic expertise, and constructive guidance have greatly contributed to the quality and relevance of this thesis.

As you read through this work, I invite you to join me in exploring the complex and dynamic relationship between legal frameworks, societal expectations, and project execution. This thesis is not only the outcome of academic inquiry, but also a reflection on the practical challenges and opportunities of making participation work, where policy meets the construction site.

Thank you for being part of this journey.

Willemijn van der Meer
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Executive summary

Public participation plays a crucial role in decision-making processes for infrastructure projects (Bobbio, 2019). This evolved from limited consultation to more integrated and decentralized governance practices in the Netherlands (Alpkokin, 2012). The Environmental Act, introduced in 2024, aims to simplify regulation, enhance stakeholder involvement, and promote local governance. By embedding participation legally, the Act mandates early involvement of stakeholders in spatial and environmental decision-making processes (T. Kamer der Staten-Generaal, 2013a).

This transition redefines participation not merely as consultation, but as a shared societal task involving governments, contractors, and citizens. Public-private collaboration increasingly takes place in a context where formal contract relations are secondary to shared goals and mutual trust, requiring mature partnerships that deliver societal value (Verweij et al., 2022). Consequently, responsibilities in stakeholder engagement, permit coordination, and environmental management are shifting, especially for contractors. While the benefits of participation in early project phases are well documented, its role during the realization phase remains underexplored, despite its importance for adaptive project delivery and long-term legitimacy.

This study addresses the research question:

How does the Environmental Act impact public participation during the realization phase of infrastructure projects, particularly for contractors?

To answer this question, a qualitative research approach was adopted. The study combined a literature review, exploratory interviews, and three in-depth case studies to understand how the Environmental Act affects contractor responsibilities during realization. The interviews clarified how participation is currently organized and what challenges are experienced. The case studies explored, using hypothetical scenarios, how the projects would have been affected under the new legal system. Six cross-case statements were developed and subsequently validated through expert evaluations to test their relevance and accuracy in practice.

The findings conclude that the Environmental Act has not yet led to a fundamental shift in participation practices during realization. Participation remains largely procedural, focused on communication and documentation. While contractors often enter the process after major decisions are fixed, limiting opportunities for meaningful engagement. Consequently, participation tends to be instrumental: aimed at managing risks and fulfilling legal requirements, rather than enabling dialogue or co-creation. Although the contractor's role is evolving, practical constraints, such as unclear mandates, fixed contracts, limited resources, and tight timelines, undermine their capacity to fulfil participatory responsibilities. This creates a structural gap between assigned responsibility and actual influence. Most observed changes under the Act occur at the second-order governance level (contracts, reporting, and procedures) while the third-order governance remains underdeveloped. Meaning there are not yet any structural changes in mutual trust, shared values, and role clarity on this level of governance.

Importantly, the findings highlight several subjects for improvement: early contractor involvement, clearer role division, and contracting models that allow more flexibility in participatory execution. Without reform in these areas, participation risks remaining symbolic. As contractors take on roles traditionally held by public authorities, they must also internalize the corresponding responsibilities. This calls for a proactive and value-driven stance towards participation and public accountability.

Methodologically, the study demonstrates the value of using hypothetical scenarios to explore expected effects in the early stages of legislative implementation. While empirical strength is limited due to the recent enforcement of the Act, this forward-looking approach offers useful insights and lays a foundation for future studies on long-term behavioural and institutional effects.

Several limitations must be acknowledged. First, the Environmental Act only recently came into force, which limits the analysis to short-term and expected effects. Second, the study focuses on three case studies, which limits generalizability. Third, the perspectives represented are primarily institutional; the views of citizens and other societal stakeholders are underrepresented. Finally, conceptual ambiguity around “participation” and variation in procurement practices complicate implementation and interpretation.

In summary, the Environmental Act represents a symbolic shift with conditional potential. Its real impact depends on institutional alignment, enabling structures, and a redefinition of participatory roles across the project lifecycle. Only when embraced as a shared societal task, supported by a more proactive stance from both contractors and public clients, can participation during the realization phase contribute meaningfully to more inclusive, legitimate, and adaptive infrastructure development.

The Environmental Act brings contractors closer to traditionally public responsibilities, particularly when they are involved early. If contractors choose to take ownership of participation, they must also embrace its societal purpose; promoting inclusiveness, sustainability, and legitimacy. Participation should therefore be approached not as a procedural obligation, but as a shared, value-driven responsibility.

To support this shift, contractors are encouraged to:

- Invest in internal capability and stakeholder engagement skills;
- Integrate participation into risk management and team planning;
- Engage early with clients to clarify roles and expectations;
- Adopt a mindset of co-governance rather than compliance.

Simultaneously, public clients must create enabling conditions through:

- Flexible procurement structures;
- Space for contextual adaptation;
- Clear and consistent accountability frameworks.

Further research should examine the following four themes. Firstly, the long-term behavioural effects of the Environmental Act are important. Secondly, it is interesting to figure out how contractors adapt to their evolving role in participatory governance. Thirdly, it is valuable to further understand the impact of contract types on participation quality. Lastly, it is advised to research optional strategies for reducing bureaucratisation while preserving participatory value.

Contents

Preface	I
Executive summary	II
List of figures	VII
List of tables	VII
1. Introduction	1
1.1 Background	1
1.2 Problem definition	2
1.3 Research objective	3
1.4 Research questions	3
1.5 Research design	4
1.6 Research scope	4
1.7 Research relevance	5
1.7.1 Scientific relevance	5
1.7.2 Societal relevance	5
1.7.3 Practical relevance	6
1.8 Thesis Outline	6
2. Methodology	7
2.1 Research Design	7
2.2 Theoretical Framework	7
2.3 Data Collection Methods	8
2.3.1 Exploratory Interviews	8
2.3.2 Case Study Design	9
2.3.3 Expert evaluation	11
2.4 Data Analysis Methods	11
2.4.1 Exploratory interview Analysis	11
2.4.2 Case Study Analysis	12
2.4.3 Expert evaluation	13
3. Literature study	14
3.1 New Environmental Act	14
3.1.1 Background	14
3.1.2 Principles and objectives of the new Environmental Act	15
3.1.3 Content of the new Environmental Act and General Administrative Orders	16
3.1.4 Participation pillar	17
3.2 Public participation	18
3.2.1 Definition and goal of public participation	18
3.2.2 History of public participation in spatial planning	19
3.2.3 Public participation theories	24
3.3 Public participation in Infrastructure projects	27
3.3.1 Contract forms focused on collaboration	28
3.3.2 Stakeholder management	29
3.3.3 Stakeholder management in the realization phase	30

3.4 Concluding remarks literature study	32
4. Exploratory interviews	34
4.1 Findings Exploratory interviews	34
4.1.1 Public participation	34
4.1.2 Barriers	36
4.1.3 Expected impact new Environmental Act	37
4.2 Summary	38
5. Introduction Cases	39
5.1 Project: Stadsdijken Zwolle	39
5.2 Project: Dike Reinforcement Lauwersmeer – Vierhuizergat	40
5.3 Project: N211 – Wippolderlaan	41
5.4 Concluding remarks on case selection	42
6. Case study results	43
6.1 Stadsdijken Zwolle	43
6.1.1 Findings	44
6.1.2 Discussion framework: impact new Environmental Act	45
6.2 Dijkversterking Lauwersoog-Vierhuizergat	46
6.2.1 Findings	46
6.2.2 Discussion framework: impact new Environmental Act	48
6.3 Casus N211 Wippolder	49
6.3.1 Findings	49
6.3.2 Discussion: framework impact new Environmental Act	51
7. Cross case results	52
7.1 Data analysis	52
7.2 Statements	55
7.2.1 Statement 1	55
7.2.2 Statement 2	55
7.2.3 Statement 3	55
7.2.4 Statement 4	55
7.2.5 Statement 5	56
7.2.6 Statement 6	56
7.2.7 Concluding remarks	56
8. Expert evaluation	57
8.1 Findings	57
9.1.1 General	57
8.1.2 Statements	57
8.1.3 Summary	58
9. Discussion & limitations	59
9.1 Discussion	59
10.1.1 Limited observed impact in the realization phase: between policy and practice	59
9.1.2 Participation as an instrumental tool in the realization phase	59
9.1.3 Legitimacy over speed: the paradox of early participation	59
9.1.4 Shifting contractor responsibilities: towards interactive governance	60
9.1.5 Early contractor involvement enables co-governance	60

9.2 Limitations	61
9.3 Relevance of findings	62
10. Conclusion & recommendations	63
10.1 Research Sub questions	63
10.1.1 Research question 1	63
10.1.2 Research question 2	63
10.1.3 Research question 3	64
10.2 Main research question	65
10.3 Recommendations	67
10.3.1 Practical recommendations	67
10.3.2 Recommendations for future research	68
References	70
Appendix A: Consent Form	77
Appendix B: Data management plan (DMP)	78
Appendix C : Notable changes new Environmental Act	79
Appendix D: Additional information MIRT and HWBP	80
Appendix E: Interview protocol Exploratory interviews	81
Appendix F: Analysis Exploratory Interviews	83
Information Respondents	83
Top 10 most frequent codes	83
Clustering and Containerization	83
Appendix G: Interview protocol Case studies	87
Appendix H: Cross case analysis Matrix	90
Appendix I: Transcripts (in Dutch)	91

List of figures

Figure 1 - Research Framework (Adapted from Dingelstad, 2021).....	4
Figure 2 - Thesis Outline	6
Figure 3 - Visualization new Environmental Act instruments	16
Figure 4- Motives for public participation (Visser et al., 2019).....	19
Figure 5 - Governability Model (Bavinck & Kooiman, 2013)	Fout! Bladwijzer niet gedefinieerd.
Figure 6- Ladder of Arnstein (Arnstein, 2019).....	24
Figure 7 - Direction of information.....	26
Figure 8 - Visualization Internal and External Stakeholders(Atkin & Skitmore, 2008)...	Fout! Bladwijzer niet gedefinieerd.
Figure 9 - Visualization coding phases exploratory interviews	34
Figure 10 – Project Area Stadsdijken Zwolle (Waterschap Dretse Overijssel, n.d.)	Fout! Bladwijzer niet gedefinieerd.
Figure 11 – Project Area Dijkversterking Lauwersoog-Vierhuizen (Bensink, 2022)..	Fout! Bladwijzer niet gedefinieerd.
Figure 12 - Project Area N211 Wippolder (Steen van der & Verhoeven, 2021)	Fout! Bladwijzer niet gedefinieerd.

List of tables

Table 1 - Respondent information exploratory interviews	9
Table 2- Interview planning case studies	10
Table 3 - Societal developments shifts.....	14
Table 4 - Summarized key findings exploratory interviews	38
Table 5 - Overview Foundation Cross case analysis	53
Table 6 - Comparison new Environmental Act with previous legislation.....	79
Table 7 - Respondent information exploratory interviews	83
Table 8 - Top 10 most frequent quotes.....	83
Table 9 - Overview Clusters.....	84
Table 10 - Overview Clusters and containers exploratory interviews.....	86

1. Introduction

1.1 Background

Public participation, as defined by Bobbio (2019), is an umbrella term for the involvement of citizens, businesses, and civil society in decision-making, ranging from informing to joint decision-making. The Environmental Act defines participation as the early involvement of stakeholders in decision-making, with the aim of improving the quality of decisions, increasing public support, and accelerating processes (van Binnenlandse Zaken en Koninkrijksrelaties, n.d.; Visser et al., 2019).

Participation has grown in importance over time, evolving in Dutch spatial planning and infrastructure through three main phases. Between 1950 and 1980, spatial planning was centrally managed with limited public participation. Although initiatives such as the 'Structuurnota' emphasised transparency, participation was largely limited to consultation (Alpkokin, 2012). In the United States public participation gained prominence in the 1960s amid democratic movements and planning inefficiencies, as in the Netherlands, participation often remained symbolic; Arnstein's Ladder (1969) exposed this imbalance by distinguishing tokenism from meaningful citizen influence (Gaber, 2019). Between 1980 and 2000 in the Netherlands, the introduction of strategic spatial planning and interactive governance led to a broader role for citizens and civil society organisations in policy-making (Edelenbos, 2005). From 2000 to 2020, decentralisation and an integrated approach further strengthened the role of local governments and stakeholders in participation processes (Rijksoverheid, 2023).

The structure of governance determines how public participation is organized. Participation is most effective when legally anchored and structurally integrated into decision-making processes (Edelenbos et al., 2010). Without legal safeguards, it risks becoming symbolic consultation without real influence (Jäntti et al., 2023).

Bavinck & Kooiman (2013) distinguish three main forms of governance: hierarchical governance (top-down steering), network governance (cooperation between government, private sector, and civil organizations), and interactive governance (active contributions from government, market, and citizens). Since the 1990s, interactive governance has gained prominence, emphasizing collaboration across sectors to address complex societal challenges (Kooiman et al., 2008).

This shift is closely linked to increasing decentralization, whereby governance responsibilities, decision-making powers, and resources are transferred from central to local governments (Isufaj, 2014). Local authorities now play a greater role in organizing participation and collaborating with private actors, aiming to align governance more closely with societal and market developments (Bannink D. & Ossewaarde R., 2021).

Additionally, integrated governance emphasizes coherent collaboration across policy domains and government levels. In the Netherlands, this approach is evident in spatial planning, water management, and infrastructure projects such as MIRT (Meerjarenprogramma Infrastructuur, Ruimte en Transport), where national projects aim to enhance accessibility, safety, and spatial quality (Rijksoverheid, n.d.-b).

The new Environmental Act (*Nieuwe Omgevingswet*), effective since January 1, 2024, aims to create a cohesive approach to the living environment, promote local customization, and streamline decision-making (IPLO, 2024a; T. Kamer der Staten-Generaal, 2013a). It addresses the complexity and fragmentation of previous regulations, the imbalance between legal certainty and flexibility, and the need to align with societal developments (Hobma, 2022; T. Kamer der Staten-Generaal, 2013a).

Building on earlier spatial planning policies, the Act emphasizes decentralization, integration, participation, and sustainability. Governance responsibilities shift from the national to the local level, granting municipalities and provinces greater flexibility to balance environmental, economic, and social interests. Multiple sectoral policies such as spatial planning, infrastructure, and environmental management are consolidated into a single framework to accelerate and improve decision-making. The

Act aligns with the interactive governance model by fostering co-governance between local authorities, businesses, and communities.

Public participation is a mandatory and integral component. Participation obligations are embedded through instruments such as the knowledge requirement (*kennisverplichting*) and the duty to provide justification (*motiveringsplicht*) (Informatiepunt leefomgeving, 2024b). A flexible approach is necessary because participation must be adapted to the scale, complexity, and local sensitivity of each project. Strict procedural requirements risk reducing participation to a formal exercise rather than a meaningful process. Therefore, the Act emphasizes an active and open approach to stakeholder engagement rather than rigid legal compliance (T. Kamer der Staten-Generaal, 2013a).

1.2 Problem definition

Stakeholder involvement in construction projects, including residential, industrial, and infrastructure projects, has long been recognized as a critical factor for successful project outcomes. This importance continues to grow in the context of democratic societies (Erkul et al., 2016; Leung & Olomolaiye, 2010; Nguyen & Mohamed, 2018). Li et al. (2013) defines stakeholders by highlighting that stakeholders include those who can influence the project process and success, experience positive or negative impacts on their living environment, or experience direct benefits or losses from the project's implementation.

Stakeholders can be categorized into internal and external groups (Atkin & Skitmore, 2008). Internal stakeholders are directly involved in decision-making processes, such as owners and contractors, while external stakeholders include those significantly affected by an organization's activities, such as neighbours, local communities, the general public and local authorities. Effective collaboration with these stakeholders begins early in the construction process, helping to mitigate risks related to time and budget while fostering more functional and sustainable solutions (Yang et al., 2023).

By embedding participation into formal procedures, the Environmental Act emphasizes collaboration as key to project success. Over time, citizens and market actors have gained a more active role in decision-making. This shift redefines contractors' roles: they are expected to act not only as builders, but also as consultants, designers, financiers, and maintainers, taking greater responsibility for delivering socially valuable projects (Verweij, 2015). In addition, under the new Environmental Act, bidders must be cautious when using the Model Basic Agreement (MBO). In the Model Basic Agreement (MBO), which outlines the fundamental arrangements with the contractor, Article 6 assigns responsibility for the items listed in Annex I (e.g., permits) to the client, while all other responsibilities are delegated to the contractor. For projects post-January 1, 2024, if no Final Design is available, the contractor must apply for the environmental permit and manage the participation process, especially when qualitative requirements are set. Although obtaining a draft permit is an effort obligation, the contractor must ensure a verifiable participation process, as delays could lead to penalties (Vries de & Tuenner, 2024).

The objective of the new Environmental Act is based on a new framework that represents a paradigm shift: from protecting the physical environment through a restrictive approach to activities, to a policy cycle that prioritizes the continuous care for the quality of the physical environment while allowing room for development that contribute to social or spatial progress (T. Kamer der Staten-Generaal, 2013a).

Public participation strengthens relationships between the public, government, and industry, often leading to safer, more resilient projects (Jalbert et al., 2023). However, research mainly focuses on front-end phases, neglecting the need for participation throughout the project entire life cycle. Xiao & Hao (2023) highlight this gap, emphasizing that public participation should extend beyond decision-making and project assessment phases. The realization phase for example, where ongoing feedback is crucial for project success and reputation, particularly in large-scale projects. In the end, construction projects include multiple stakeholders from the development stage through the realization process to the operational stage (Leung & Olomolaiye, 2010). Furthermore, the average length of time for a large

infrastructure projects, from initiation to operation, is commonly 10-15 years (Memić et al., 2023). While scope changes are generally undesirable, there remains an inherent uncertainty that may necessitate adjustments during the realization phase, impacting costs and schedules (Althiyabi & Qureshi, 2021).

Because of the focus on the front-end phase, studies have primarily concentrated on internal stakeholder perspectives from market developers and governmental bodies, neglecting the insights of contractors who are now increasingly involved in multiple phases of infrastructure projects and seen as an important internal stakeholder.

The overarching research problem revolves around **the gaps in understanding how contractors engage in public participation during the realization phase of infrastructure projects under the new Environmental Act. It examines whether current practices align with the evolving societal emphasis on participatory processes and the new legal responsibilities placed on contractors.**

1.3 Research objective

The new Environmental Act aims to ensure smoother, more integrated project execution by promoting local customization, faster decision-making, and a focus on the physical living environment. Public participation, a key pillar of the Act, is intended to enhance projects throughout all phases, supported by stronger collaboration between internal and external stakeholders.

While previous research has primarily focused on participation in the front-end of projects, the continuous involvement of stakeholders during the realization phase has received limited attention. Additionally, the growing responsibility of contractors, now increasingly tasked with organizing participation, remains underexplored.

This research aims to bridge the gap between current practice and the expectations set by the Environmental Act. It will provide insight into how contractors currently organize public participation during the realization phase of infrastructure projects, how they experience the shift in responsibilities, and what challenges they encounter. By analysing legal frameworks and practical experiences, the study contributes to viewing participation not merely as a formal requirement, but as an opportunity to deliver projects that are more sustainable, efficient, and broadly supported by society.

The objective of this research is **"To get a better understanding of public participation in the realization phase of infrastructure projects from the contractor's perspective within the framework of the new Environmental Act. The study aims to evaluate whether current contractor practices align with the evolving legal requirements and societal expectations for public participation."**

1.4 Research questions

The aim of this research is to gain insight into how the Environmental Act influences public participation during the realization phase. By combining a descriptive analysis of current practices with a hypothetical comparison of potential changes under the Environmental Act, this study provides contractors, policymakers and other stakeholders with the tools to better understand and more effectively organize public participation within the framework of the new legislation.

Main research question:

How does the Environmental Act impact public participation during the realization phase of infrastructure projects, particularly for contractors?

Research question 1

What changes does the new Environmental Act introduce regarding public participation in the realization phase, and what are the resulting implications for contractors?

Research question 2

How is public participation currently organized during the realization phase, and what challenges do contractors face?

Research question 3

How do the responsibilities and practices of contractors regarding public participation change under the Environmental Act?

1.5 Research design

This research framework is structured into four main categories (Activity, Input, Analysis, and Output) across four research components (RQ1, RQ2, RQ3, and MRQ). Below is a breakdown of what each section contains and how they contribute to the study (figure 1).

	RQ1	RQ2	RQ3	MRQ
Activity	Literature study	Exploratory interviews	Case studies	Comparison
Input	Articles, Textbooks, online sources	Semi-structured interviews	Semi-structured interviews and documents.	Overview theory vs practice
Analysis	Document analysis	Qualitative analysis, coding	Qualitative analysis	Comparative analysis
Output	New Environmental Act, public participation	Current practices participation in the realization phase	Hypothetical impact Environmental Act	Insight impact new Environmental Act

Figure 1 - Research Framework (Adapted from Dingelstad, 2021)

1.6 Research scope

In order to complete the research assignment within the given time frame, it is important to delineate the boundaries of the research and define its scope. This research is conducted in collaboration with the consultancy firm Dutch Process Innovators (dpi) . Dpi is a consultant in the construction industry and has projects that vary from rail, to energy, infrastructure, and water management. Their focus is on all processes essential for the successful execution and maintenance of projects: from overall project management for tenders and projects to environmental management and asset management. They are responsible for determining the strategy in tenders, creating an executable, supported, and sustainable design, smooth execution, and an optimal maintenance scenario. They work for both contractor and client. In collaboration with dpi it is possible to focus on the infrastructure projects and the focus on projects which vary from rail to water management. This research scope is structured around three key components: a literature review to establish a theoretical foundation, exploratory interviews to gain insights into current contractor practices, and case studies to analyse expected impacts of the Environmental Act on public participation in the realization phase of infrastructure projects.

- Literature study: Mapping the background, legal frameworks, and existing knowledge on public participation in the context of the Environmental Act.
- Exploratory interviews (individual level): Gaining insight into how contractors currently approach public participation during the realization phase and the challenges and opportunities they foresee with the introduction of the Environmental Act. These interviews focus on the personal experiences of environment managers from the contractor's side.
- Case study (project level): By creating hypothetical scenarios, existing infrastructure projects not yet governed by the new Environmental Act were used to explore how public participation and contractor responsibilities might have been affected if the projects had fallen under the new legislation.
- Expert evaluation: The evaluation aims to assess the clarity and validity of the statements, while also providing insights into how experts interpret and experience these findings in practice, thereby examining their real-world relevance and applicability.

1.7 Research relevance

1.7.1 Scientific relevance

Understanding the different stages that public participation goes through in a project is crucial in order to assess not only the front end, but the whole project lifecycle (Xiao & Hao, 2023).

Under the new Environmental Act, project initiators are required to indicate in their permit applications whether and, if so, how they have engaged with stakeholders. They must also indicate how the results of this participation were incorporated into the project. This addition to the permit application is intended to encourage a different approach to project execution. However, the potential impact of this new requirement remains largely unexplored in the literature.

Furthermore, the perspective of market actors, particularly contractors, is underrepresented in academic research. Gaining insight into their working methods and decision-making processes in infrastructure projects is essential, as they are key internal stakeholders. Evaluating how contractors interpret and comply with these new legal obligations is therefore critical to understanding the broader implications of the Environmental Act on public participation in practice.

1.7.2 Societal relevance

With the introduction of the Environmental Act, the governance structure around spatial projects has changed. Decentralization aims to facilitate more tailored local solutions, improve the physical living environment, and enhance decision-making efficiency. A key pillar of this law is participation, which legally ensures the early involvement of stakeholders and seeks to bridge the gap between the government and citizens (Dijkman & Gils van, 2023; Ros & Rotmans, 2020).

So far, participation has primarily been studied from the perspective of clients and citizens. However, the new Act emphasizes a shift in the role of participation toward a governance structure which is centred on collaboration between government, market, and citizens. A crucial yet underexplored stakeholder in this transition is the contractor.

In infrastructure projects, contractors hold a dual role: on the one hand, they operate as market actors with economic interests, while on the other, they fulfil a public function as executors of stakeholder management. This presents several challenges: How do contractors perceive their new role? Are they sufficiently prepared for this responsibility? And how can participation be optimally utilized to achieve the objectives of the law?

This study contributes to a deeper understanding of these gaps and facilitates in developing effective strategies to better position contractors within the evolving governance structure. In doing so, it not only enhances participation but also supports the broader societal objectives of the Environmental Act.

1.7.3 Practical relevance

By examining contractors perspectives, challenges, and strategies, this study contributes to bridging the gap between legal requirements and real-world project execution. This research supports the practical implementation of public participation under the Environmental Act, ensuring it is both feasible and impactful. The Practical Contributions cover the following topics:

- Improved collaboration frameworks: Insights into how contractors, clients and government can work together to strengthen public participation.
- Guidance for contractors: Practical recommendations on how to effectively integrate public participation into infrastructure projects while ensuring compliance with legal requirements.

1.8 Thesis Outline

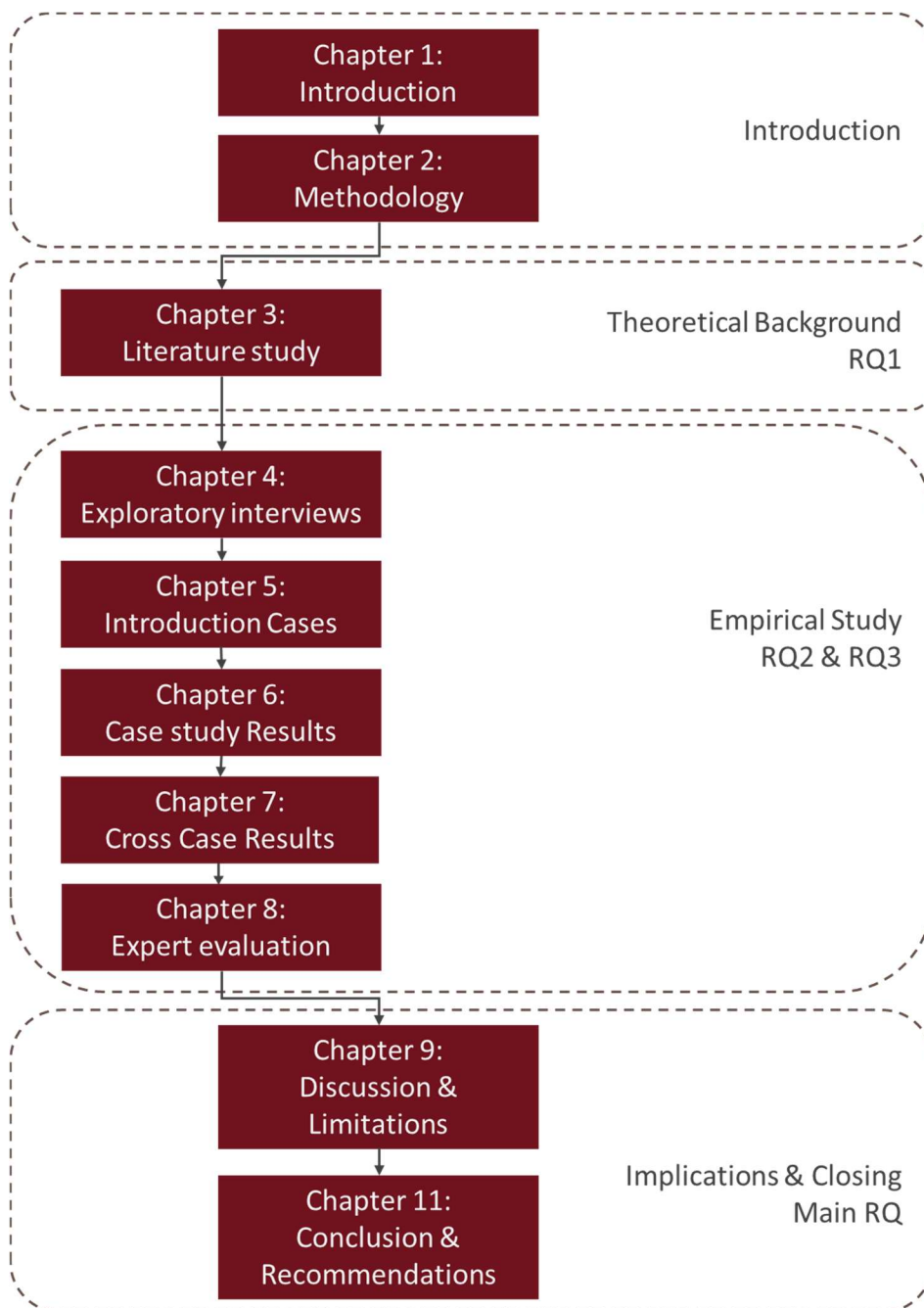


Figure 2 - Thesis Outline

2. Methodology

2.1 Research Design

For this research, a qualitative research approach is used. Qualitative research is concerned with exploring, sometimes without pre-formulating. Although this research is explorative in nature, the theoretical framework provides analytical guidance without predefining outcomes. It supports the identification of key concepts, helps interpret qualitative data, and connects empirical insights to existing literature. This allows the study to move beyond description and contribute to theoretical reflection on participatory governance in infrastructure delivery. This type of research focuses on understanding human behaviour, experiences, and social phenomena by collecting non-numerical data (Lim, 2024).

2.2 Theoretical Framework

To understand the dynamics among the client, contractor, and the public during the realization phase, it is necessary to conduct a literature review. This review entails the use of structured keywords in reliable databases and references academic journals like the International Journal of Project Management (IJPM) and Project Management Journal (PMJ). The selected databases include Google Scholar, Scopus, ResearchGate, and ScienceDirect. These journals are known for publishing research articles that explore the dynamics of public participation in infrastructure projects. Since this research focuses on Dutch legislation, relevant Dutch-language sources have also been consulted throughout the study. The theoretical framework provides the conceptual foundation for analysing public participation in the realization phase of infrastructure projects. It supports the research design by offering structured approaches to categorize and interpret participatory practices. The following key subjects definitions are established for this research:

Public participation:

The Environmental Act defines participation as the early involvement of stakeholders in decision-making, with the aim of improving the quality of decisions, increasing public support, and accelerating processes (van Binnenlandse Zaken en Koninkrijksrelaties, n.d.; Visser et al., 2019).

For this definition the following keywords are used: keywords:

public participation (PP)	Citizen participation	Citizen engagement (CE)
Public participation Infrastructure	stakeholder engagement	public engagement
citizen participation infrastructure	PP construction	CE construction
Stakeholder management	external stakeholders	Burger participatie
Participation	stakeholder involvement	Stakeholder management

Infrastructure projects:

Next is important to define infrastructure projects for which the following definition is used; Infrastructure projects are projects focused on the planning, development, construction, and/or maintenance of physical and technical structures that provide essential services and facilities to society(*Infrastructure; Definition, Meaning, and Examples*, 2025). These projects often include transportation networks (roads, bridges, railways), water management systems (dikes, canals, sewage systems, locks), energy infrastructure (electricity grids, wind farms), and communication networks (fiber optics, cell towers)(*Infrastructure; Definition, Meaning, and Examples*, 2025).

The goal of infrastructure projects is typically to enhance economic activity, facilitate mobility, and improve the quality of life by creating and maintaining reliable basic facilities.

Realization phase:

The realization phase refers to the phase in an infrastructure project that spans from winning the bid to the delivery of the project.

2.3 Data Collection Methods

To investigate public participation in the realization phase of infrastructure projects under the new Environmental Act, multiple qualitative data collection methods were employed. These methods ensure a comprehensive understanding of the topic by gathering insights from various sources, including expert opinions and real-world project cases. The data collection strategy consists of exploratory interviews, multiple case studies and expert evaluation, each designed to address specific aspects of the research question. For all interviews and project-related information, participants were asked to sign a consent form to ensure compliance with HREC and DMP guidelines (see template consent form Appendix A and approved DMP in Appendix B). This guarantees that sensitive and personal data are handled appropriately and with care.

2.3.1 Exploratory Interviews

Purpose and approach

The exploratory interviews aim to provide initial insights into how public participation is addressed during the realization phase and its relationship with the new Environmental Act. Combined with the literature review, they help identify challenges and barriers to participation during the realization phase under the new Act.

For the exploratory interviews, Semi-structured interviews were used because they yield qualitatively rich results that enhance the trustworthiness of qualitative research. For this qualitative research method, an interviewer uses pre-determined but open-ended questions to gather information (Given, 2008; Longhurst, n.d.). This approach combines the structure of a standardized interview with the flexibility of an open interview, making it ideal for exploring nuanced and complex topics. To achieve this, the five-phase approach, as outlined by Kallio et al. (2016), is utilized. The full interview protocol is included in Appendix E.

Selection respondents

To gain a comprehensive understanding of public participation during the realization phase, interviews were conducted with contractors' organizations, focusing on internal stakeholders. Environmental managers were specifically selected based on their crucial role in aligning project activities with the interests of the surrounding environment, facilitating collaboration among stakeholders, and managing permit applications (House of Tenders, n.d.; Indeed, 2024). Their direct responsibility for public participation processes makes them particularly well-positioned to provide insights into how the Environmental Act affects stakeholder engagement during project execution.

While project managers were also considered due to their broader oversight of time, quality, finances, and scope, environmental managers were prioritized. Their specific focus on implementing public participation strategies and ensuring regulatory compliance under the Environmental Act made their perspective essential for this research. Table 1 provides an overview of the respondents interviewed for this research.

	Function	company	Experience (years)
OM1	Senior advisor Environmental manager	Con	8
OM2	Senior advisor environmental manager	Con/ON	2,5/10
OM3	Environmental manager	ON	12
OM4	Environmental manager	ON	10
OM5	Environmental manager	Con	7
OM6	Environmental manager	ON	2

OM7	Environmental manager	OG (N.A.)	9
OM8	Environmental manager	ON	8
OM9	Environmental manager	ON +OG	10

Table 1 - Respondent information exploratory interviews

2.3.2 Case Study Design

Case studies provide an opportunity for an in-depth investigation of particular phenomena within the research subject (Fellows & Liu, 2015). This depth is provided by the flexibility of the case study approach that allows the use of multiple data collection techniques including archival, interviewing, surveying, observing and others. When exploring complex issues that require nuanced understanding, such methods are particularly appropriate.

In case study research, the strategy is especially effective for addressing ‘how’ and ‘why’ questions, making it a valuable approach for this study (Yin, 2003). The design of the case study follows a structured framework inspired by Hamza & Elmahroug (2018) and Yin (2003), whose studies demonstrate that applying these steps can lead to successful case study research:

1. Determine the research problem(s);
2. Decide on the number of cases;
3. Choose data gathering techniques;
4. Prepare to collect data; and
5. Collect and analyse the data.

Purpose and approach

The research problems for the case studies are in line with sub-question 3. To answer this research question, explore potential new responsibilities for contractors, assess how their approach to and prioritization of public participation in projects may shift, and examine the impact of the Environmental Act on collaboration.

Case Selection

First of all, all three cases fall under the MIRT (Meerjarenprogramma Infrastructuur, Ruimte en Transport), where the national government aims to enhance accessibility, safety, and spatial planning in the Netherlands through national projects and programs (Rijksoverheid, n.d.-b). This programme is perfectly in line with the objectives of the new Environment Act, which seeks an integrated approach to projects. In this case, it is about ensuring accessibility and safety in the Netherlands.

In addition, the ‘Code of Social Participation’ plays an important role within these cases. This code has served as a model for the participation pillar within the Environment Act (T. Kamer der Staten-Generaal, 2013a). This means that all projects within the MIRT programme must take this code into account, making participation an essential part of their approach. Another important similarity between the cases is the intensive participation processes that took place in the exploration phase and/or the plan development phase. This makes it possible to analyse what effect participation has had on the final implementation of the project and to what extent the outcomes of these processes are still taken into account in the realisation phase.

Furthermore, the delay of the Environment Act plays a crucial role in the relevance of these cases. Originally, the Senate (Eerste Kamer) had already approved the new legislation in 2016 (“Nieuwe Omgevingswet Voor Vijfde Keer Uitgesteld Nu Tot Januari 2024,” 2023), but due to repeated postponements, these projects still had to submit their permit applications under the old legislation. This creates the situation where the projects should have fallen under the new legislation but have still been dealt with under the old framework.

In addition, cases are selected based on the following specific criteria:

- A participation process that occurred during the planning or exploratory phase.
- Mid-sized projects with a focus on environmental interests (e.g., projects like the N211, with a budget of approximately €133 million).
- Documentation of participation requirements as mandated by the Environmental Act

- The project is currently in the realisation phase.

The selected cases all went through an intensive participation process, both in the exploration phase and in the planning phase. As a result, participation took shape in a structured way within each project. To analyse the potential impact of the Environment Act, we create a hypothetical situation in which we examine what changes the new Act would entail. We then compare this with the actual changes created by the participation process. In this way, we gain insight into how the Environment Act would affect decision-making and participation processes.

Data gathering

To understand the impact of the new Environment Act, three case studies are compared. The cases used for the case studies are 'Dijkversterking Lauwersoog-Vierhuizergat', 'Stadsdijken Zwolle' and 'N211-Wippolder'.

Interviews

Semi-structured interviews with environmental managers (from both contractors and clients) and project managers of the clients. This was chosen because it is suitable for follow-up questions and thus can better answer the real why question. In addition, it offers flexibility to ask further questions on topics. In addition, it offers individual perspectives, which are independent and honest without group influence (Adams, 2010). The semi-structured interview protocol (Appendix G) is divided into three key themes. The first theme, current practice, examines how public participation is currently organized during the realization phase of projects. Respondents reflect on real-world experiences, using specific project examples. The second theme, hypothetical impact of the Environmental Act, explores expectations regarding how the Environmental Act may affect public participation in infrastructure projects. It aims to assess whether the Act will enhance participation processes, introduce new challenges, or create unforeseen opportunities. The final theme, reflection and recommendations, focuses on respondents' experiences and their recommendations for others.

The interview protocol consists of ten structured questions along with various prompts to encourage in-depth discussion.

Online Sources

Collection of additional information about projects through government websites and other public sources, to provide context and background information for the selected case studies.

Interview Planning

	Person	Date
N211 - Wippolder	OM-ON	31-1-2025
	OM-OG	23-1-2025
	PM-OG	27-1-2025
Dijkversterking Lauwersoog- Vierhuizergat	OM-ON	28-1-2025
	OM-OG	28-1-2025
Stadsdijken Zwolle	OM-ON	21-1-2025
	OM-OG	21-1-2025
	PM-OG	21-1-2025

Table 2- Interview planning case studies

Document Collection

When collecting documents, the first step is to contact the relevant person to obtain access to documents and the contact details of the contractor's and client's environmental managers and project manager. During case study interviews, respondents (contractors and clients) will be asked about their expectations and reflections on the potential impact of the Environmental Act. Insights from these interviews, combined with findings from the literature review and exploratory interviews, will be used to construct hypothetical scenarios of public participation under the Act. As this influences the

conclusions, validation by independent experts is essential to ensure a broader and more realistic understanding of practice.

2.3.3 Expert evaluation

Purpose

The evaluation aims to examine whether the statements are clear and valid. In addition, it provides valuable insights into how experts interpret these findings and how they experience the statements in practice. In this way, it also examines whether the results match reality and are usable in practice.

Selection of experts

The experts evaluating the statements are working at dpi. Both experts are responsible for the companies implementation of the new Environment Act and facilitate colleagues to deliver a better service to their clients. Both experts are experienced Environment Managers with experience in infrastructure.

2.4 Data Analysis Methods

The chapter describes step-by-step how the data were processed, coded and interpreted, as well as the measures taken to reduce bias and strengthen the credibility of the findings.

2.4.1 Exploratory interview Analysis

Data import

Atlas.ti was used to encode the transcripts. This programme provides a convenient workbench for the qualitative analysis of large amounts of textual, graphical, audio and video data (Preface ATLAS.Ti Quick Tour, 2024). It contains a number of tools for the systematic work with unstructured data that cannot be analysed in a formal, statistical way. In such qualitative analysis, Atlas.ti helps to explore and make sense of complex phenomena in the data.

Coding

In order to analyse the exploratory interviews as fully as possible, the analysis was divided into three phases.

Phase 1- Exploratory coding: This is an exploratory step in which the researcher is open to all possible ideas and themes in the data without immediately structuring them (Saldaña, 2013). This approach is chosen because it allows for an first exploration and understanding of the data. After the preparatory phase of exploratory coding, initial coding is applied.

Phase 2 - Initial and focused coding:

Initial coding: is to describe the data in key words or short phrases to create a rough inventory of codes (Saldaña, 2013). Each code is evaluated to confirm whether the quotations grouped under it remained relevant after the first round of coding.

Focused coding: To bring focus and structure to the analysis, the most relevant and frequently occurring codes are selected and further elaborated through a process of focused coding (Saldaña, 2013). This approach enables a deeper understanding of the data and ensured consistency with the research objectives. The top ten most significant codes are compared to identify shared patterns, after which they are grouped into thematic clusters. These clusters are organised further into containers, each offering a structured lens for interpreting the data. The connections between clusters are informed by insights from the literature review, allowing for a strong alignment between empirical findings and theoretical concepts.

Phase 3 - Pattern coding: The final phase is pattern coding. In this third round, patterns, themes or case-related structures are identified beyond individual codes. This leads to the selection of larger connections and the discovery of insights, such as cause-effect relationships and repeated barriers

(Saldaña, 2013). Taking the coding's and clusters together in manageable containers to identify further patterns and themes. This involved exploring the differences and similarities in the results from each cluster. Frequently mentioned results were merged and differences retained.

Reliability & Validity

Through these five stages in the preparation of an interview guide, the credibility, confirmability and dependability of the semi-structured interview results will be trustworthy and valid (Kallio et al., 2016). While the flexibility allows for depth, a prepared set of questions ensures consistency across interviews and ensures that critical topics are addressed (Given, 2008). This method also supports the discovery of new ideas and perspectives, helping to refine the problem scope and identify key variables for further research (Kitchin & Tate, 2013).

Additionally, the structured coding process will provide a clear analytical framework, supporting a systematic and coherent exploration of public participation practices in the realization phase. By repeatedly revisiting and reviewing the data, patterns will become apparent and thematic relationships can be refined, which contributed to a deeper and more grounded understanding of the underlying dynamics.

2.4.2 Case Study Analysis

Data Import

Atlas.ti and excel were used to encode the following data collection:

- Interviews: Conducted using a semi-structured interview protocol.
- Documents: Collected documents include the communication plan, environmental plan, participation plan, and complaint management documentation.
- Online Sources: Online resources are used to enrich the case context.

Coding

Case study:

To analyse the case study data in a structured manner, an initial round of open coding was conducted on the interview transcripts. This first step helped to familiarise with the material and identify recurring concepts. Based on the interviews, themes were then identified around three central dimensions: responsibilities, changes in approach and/or priorities, and collaboration. These themes reflect the main focus areas of the third research question.

Each interview question was then reviewed in detail, with summaries created per question and enriched with illustrative quotes and practical project examples. This allowed for a transparent and traceable structure of the data.

Following this, a comparative analysis was performed to assess how respondents expected the project would have unfolded had it been governed by the Environmental Act. By applying this hypothetical lens to current projects, the analysis provided insight into expected changes in stakeholder roles, procedural dynamics, and collaboration practices. To further understand these expectations, responses were compared across different roles within and between organisations.

Cross-case analysis:

Based on the nine interview questions and case study themes, pattern matching was used to identify structural similarities, differences and exceptions. This involved looking not only for general trends, but also for specific factors that explain why certain projects are different or similar (Saldaña, 2013).

Reliability & Validity

To ensure the reliability of the analysis, a systematic and transparent methodology will be followed. The coding process will be conducted iteratively, allowing for continuous reflection and refinement of codes and emerging themes. This approach is intended to promote analytical consistency and minimise interpretation errors.

To further reduce the risk of interpretation bias, the coded material will be repeatedly compared with the original interview transcripts. This step helps to ensure that findings remain closely aligned with the actual responses of the participants.

Both the semi-structured interviews and the case studies are designed based on literature-informed frameworks. Grounding the research in established methods is intended to strengthen the study's reliability and validity, and to ensure that the analysis is both reasoned and academically robust.

In addition, the results of the cross-case analysis will be validated through expert evaluation. This validation is essential, as the interviews involve hypothetical scenarios. Comparing the research findings with expert insights and the literature will allow for a more comprehensive assessment of their practical relevance. This triangulated evaluation will contribute to the overall credibility of the study.

Impact on Conclusions and Main Case Study Question

A comparative approach is used to evaluate differences and similarities between legal expectations, current practices, and anticipated changes. This results in a comprehensive insight into the impact of the new Environmental Act on public participation and contractor responsibilities in the realization phase.

The main research question remains unchanged; however, the conclusions will be partially speculative and will focus on a combination of:

- Current situation: A description of how public participation currently functions and where weaknesses exist in the realization phase.
- Expected changes: An analysis of how public participation is likely to develop under the Environmental Act, based on a combination of:
 - Legal requirements (literature review).
 - Current practices and initial expectations regarding the impact of the new Environmental Act (exploratory interviews).
 - Expectations compared to actual practice (case study).

2.4.3 Expert evaluation

Method of evaluation

The experts will be asked in a small focus group (2 participants) to evaluate the statements from the cross-case analysis. A semi-structured approach will be used, in which the statements will be presented to answer the following questions:

- The degree of recognition in practice.
- Possible improvements in wording or substantiation.
- Any contradictions or missing aspects.

The key insights and arguments presented by the experts are noted.

Step 1: Show statement

For example: 'The Environment Act will make participation in the realisation phase more efficient.'

Step 2: Individual reflection and initial reactions

Ask participants:

- 'How do you see this in practice?'
- 'Do you agree or disagree with this? Why?'
- 'What challenges do you experience with this?'

So the aim is also: to understand how the experts experience the statement in practice.

Processing the evaluation

The feedback will be categorised per statement with the practical insights that are giving. Then, as a follow-up step, the similarities and differences in the experts' feedback will be identified. This discussion will then reflect the insights from the expert evaluation.

3. Literature study

This chapter examines the theoretical and legal foundations needed to understand how the Environmental Act affects public participation during the realization phase of infrastructure projects. It provides the conceptual basis for the empirical research by analysing the Act's intended changes, its legal structuring of participation, and the implications for the contractor's role.

This chapter first outlines the objectives, legal instruments, and policy context of the Environmental Act. It then examines public participation as a governance tool, tracing its historical development and underlying motives. Finally, it investigates how participation is embedded in infrastructure projects and contract forms, with specific attention to the realization phase.

3.1 New Environmental Act

Societal challenges are the major topics that governments will need to address in the coming years. Examples include livability (a healthy living environment), accessibility (mobility), the circular economy, and sustainable agriculture (closed-loop farming). The instruments of the Environmental Act serve as tools to work on these challenges (IPLO, 2024a).

3.1.1 Background

In T. Kamer der Staten-Generaal (2013) rules regarding the protection and utilization of the physical environment are outlined. There are two key reasons that serve as the basis for the new Environmental Act. The first reason is that the current legislation no longer aligns with present and future developments. For example, the law lacked sufficient focus on sustainable development, did not sufficiently account for regional differences, required more customization, and placed too little emphasis on early involvement in project decision-making. This is highlighted in the report from the Ministerie van infrastructuur en Milieu (2011) an 'imbalance between certainty and flexibility'. The second reason for the new Environmental Act relates to the situation where initiators of activities struggled with various laws, each with its own procedures, planning forms, and rules. The legislation was complex and fragmented (Ministerie van Infrastructuur en Milieu, 2011). Lengthy procedures due to consultation rounds and research requirements, combined with high administrative burdens and detailed standards, hinder innovation and flexibility. Additionally, uniformity limits customization, while a lack of adaptability, caused by protected rights and outdated techniques, obstructs adjustments to new developments (Ministerie van Infrastructuur en Milieu, 2011).

These societal shifts are reflected in key topics that illustrate the need for legislative reform. Table 3 provides an overview of these developments and their implications for environmental law (IPLO, 2024b; Ministerie van Infrastructuur en Milieu, 2011b):

Table 3 - Societal developments shifts

Topics	Societal development shifts
Sustainability:	In addition to the values of people and planet, the importance of profit is increasing. Citizens and businesses are taking over initiatives from the government and expect the government to facilitate rather than lead.
Mobility	Growth in inland shipping for container transport, an increasing share of electric transport, and intensified rail transport.
Type of development challenges	A shift from large expansion projects to more management-focused situations, redevelopment tasks, and restructuring.

Ecological main structure	Protecting existing locations while also developing ecological networks.
Culture Heritage	Moving from preservation to active management.
Soil	Cleaning up the underground environment.
Approach to development challenges	Transition from a sectoral approach to integrated vision development and planning.
Government-citizen relationship	A shift from hierarchical governance to direct citizen and business involvement, facilitating their initiatives.
Role distribution	Between client and contractor, with new contract forms giving contractors responsibility for financing and management.
Financing opportunities	A transition from government funding to increased private financing.

In addition, the report of **Ministerie van Infrastructuur en Milieu (2011)** highlights that the legal framework is difficult to access and lacks clarity due to its complexity and varying definitions, causing confusion and frustration among governments, businesses, and citizens. Furthermore, outcomes are often unpredictable due to a lack of coherence between laws and procedures.

3.1.2 Principles and objectives of the new Environmental Act

The societal objectives of the Environmental Act are further elaborated in the **T. Kamer der Staten-Generaal (2013)**. These are twofold:

- A. Achieving and maintaining a safe and healthy physical environment and a good environmental quality.
- B. Efficiently managing, using, and developing the physical environment to fulfil societal functions.

The Environmental Law Information Point outlines the principles of the Environmental Act's design, highlighting four improvement objectives that this new environmental law aims to achieve:

1. Inclusive Environmental Law: Achieved through the consolidation of existing legislation.
2. Focus on the Living Environment: Emphasizing the connection between buildings, infrastructure, the environment, and heritage.
3. Room for Local Customization: Allowing flexibility to achieve objectives in different living environments. This means local governments have the freedom, within certain limits, to deviate from nationally determined rules. The principle of "decentralized unless" applies, where municipalities are authorized to establish regulations unless there is an overarching national interest.
4. Faster Decision-Making: Decision-making for projects in the living environment aims to be faster and more effective under the Environmental Act, thanks to an integrated approach involving governments, citizens, and businesses.

In addition to the four improvement objectives for the new Environmental Act, the law is established under the motto: "room for development, guarantees for quality." The purpose of the new Environmental Act is based on a new framework that marks a paradigm shift: from protecting the physical environment through a restrictive approach to activities, to a policy cycle that focuses on continuous care for the quality of the physical environment while creating room for development (**T. Kamer der Staten-Generaal, 2013**). The physical living environment includes, among other things, buildings and infrastructure, water, nature, and cultural heritage Article 1.2 from the Environmental law (*Omgevingswet*, n.d.).

Key terms associated with the new Environmental Act include "open, flexible, inviting, innovative, and trustworthy." The Act emphasizes integrated and coherent working methods, balancing various perspectives and interests across different topics.

3.1.3 Content of the new Environmental Act and General Administrative Orders

The Act consists of six legal frameworks, instruments, procedures for these instruments, and the allocation of power to specific authorities. Additionally, the Act includes several special provisions and separate instruments (IPLO, 2024a). The legislator has chosen to keep the Act concise by incorporating substantive norms into General Administrative Orders (AMvB's). As a result, some AMvB's have become quite extensive, although the norms largely align with existing law (Veen, 2023). The new Environmental Act consists of four General Administrative Orders (AMvB's):

- Environmental Decree (Omgevingsbesluit)
- Decree on the Quality of the Living Environment (Bkl)
- Decree on Activities in the Living Environment (Bal)
- Decree on Buildings in the Living Environment

The new Environmental Act contains six instruments (figure 3). These instruments are (leefomgeving, 2024):



Figure 3 - Visualization new Environmental Act instruments

Environmental Vision (Omgevingsvisie): This instrument establishes the strategic long-term vision for the physical living environment, developed by the national government, provinces, and municipalities (Iplo, 2024).

Program (Programma): This instrument is used by governments to develop measures and actions to achieve environmental objectives (leefomgeving, 2024). Examples include air quality or noise management.

Decentralized Regulations (Decentrale regels): Consists of the Environmental Plan (replaces the zoning plan (bestemmingsplan)), Water Board Regulation (waterschapsverordening), and Environmental Regulation (Omgevingsverordening).

Environmental Permit (Omgevingsvergunning): This permit consolidates various permits for all activities that impact the living environment (leefomgeving, 2024).

Project Decision (Projectbesluit): With this decision, the government enables large (often infrastructural) projects. This decision can amend planning regulations when necessary (leefomgeving, 2024).

The new Environmental Act considers municipalities as the most suitable level of government, reflecting a shift from the national or provincial level to municipalities, thereby emphasizing decentralized regulation. For governments, the instruments include the environmental vision and program to outline their policy objectives and how they intend to achieve them. Instruments for

decentralized authorities include tools to establish rules for the physical living environment, such as the environmental plan for local authorities, the environmental regulation for regional authorities, and the water board regulation for water boards (Informatiepunt leefomgeving, 2024a). While local authorities gain more autonomy in drafting the environmental plan, this freedom is not absolute. The national government and regional authorities can set frameworks through instruction rules that local authorities must adhere to (E. Bakker & L. van de Ven, 2024).

3.1.4 Participation pillar

As previously mentioned, with the introduction of the Environmental Act, citizens gain a stronger role in the decision-making process regarding activities and projects. This marks a significant difference from the previous environmental law and is emphasized by the pillar of participation, as described by the Informatiepunt leefomgeving (2024b). Participation plays a crucial role in this process, as it contributes to the early involvement of stakeholders, increases public support, and leverages local knowledge. The strengthening of participation in the Environmental Law originates from the Nooren motion, which was adopted by the Dutch Senate (eerste kamer) in 2020 (E. Kamer der Staten-Generaal, 2020). This motion requested the government to obligate municipalities, provinces, and water boards to develop participation policies. These policies must outline how participation will be organized and the requirements it must meet. The motion led to explicit provisions in the Environmental Act and the Environmental Decree, making participation a mandatory and integral part of decision-making processes. In the context of the new Environment Act, a participatory approach contains involving stakeholders, including citizens, businesses, civil society organizations, and governing bodies, at an early stage in the decision-making process regarding a project or activity (van Binnenlandse Zaken en Koninkrijksrelaties, n.d.).

The Environmental Act contains several articles devoted to participation. For example, *Article 5.51 ("BWBR0037885/Omgevingswet," 2024)* states that a *project decision (projectbesluit)* must indicate how citizens, businesses, societal organizations, and administrative bodies were involved in its preparation. It must also provide insight into the results of this participation, including possible solutions proposed by third parties and advice from experts. Additionally, *Article 16.55 ("BWBR0037885/Omgevingswet," 2024)* requires that an applicant for an *environmental permit (omgevingsvergunning)* specify whether and how participation has taken place and what the outcomes were. The competent authority takes this information into account during the integrated decision-making process.

The Environmental Decree (Omgevingsbesluit) complements these requirements with rules on notification and justification obligations (Kenningsgevingsplicht en motiveringsplicht). A notification must clearly state who will be involved, what they will be involved in, and when this will take place. It also specifies the roles of the competent authority and the initiator. Furthermore, the justification obligation requires that, for preferential decisions and project decisions, the reasons behind certain choices must be substantiated.

The project decision is particularly important during the realization phase because *Article 5.49* states that a preferential decision can lead to the implementation of a project, an alternative without a project, a combination of the two, or no development of a solution at all ("BWBR0037885/Omgevingswet," 2024).

The Environmental Act also includes a *broad duty of care (zorgplicht)* (*Article 1.6*), which holds governments, businesses, and citizens responsible for ensuring a safe, healthy, and sustainable living environment. This principle aligns with the ambition to create societal value through participation. For construction activities, *Article 5.20* establishes rules regarding safety, health, sustainability, and usability ("BWBR0037885/Omgevingswet," 2024).

These provisions emphasize that participation is no longer optional but a mandatory part of decision-making. By defining a framework of how participation should be organized and how the results should be processed, in which governments, businesses, and citizens share responsibility for a liveable and sustainable environment.

In the *Environmental Regulation (Omgevingsregeling)*, which is a list of implementation rules that determine how applications are assessed and which standards apply, participation is further addressed in Article 7.4 as *(Participation)* (“BWBR0037885/Omgevingswet,” 2024):

1. The application must state **whether** citizens, businesses, societal organizations, and administrative bodies were involved in preparing the application.
2. **If** such stakeholders were involved, the applicant must include details in the application about **how** they were involved and the **results** of this involvement.

Further notable differences between the new and old Environmental Act can be found in Appendix C.

3.2 Public participation

This chapter delves deeper into a literature study on public participation. The previous chapter briefly outlined why participation is important in the new Environmental Act, as well as how, when, and what aspects are crucial in designing and implementing a participation process.

3.2.1 Definition and goal of public participation

Public participation has evolved over the years, encompassing various definitions and terminology. To delve into research on public participation, it is essential to establish a clear understanding of its definition. The term "public participation" encompasses a range of related concepts, including citizen engagement, public engagement, citizen participation, community involvement, civic participation, stakeholder engagement and public involvement. These terms often share similar meanings and are used interchangeably in literature and discourse.

The term "public" in "public participation" refers to its broad inclusivity, involving people in general rather than being limited to a particular group (Cambridge University Dictionary, n.d.; Merriam Webster Dictionary, 2025).

"Participation," on the other hand, is a broad concept encompassing various levels of engagement and empowerment. Engaged citizens may participate in-person or online, for differing durations, and address matters of varying significance. Participatory processes may involve individual citizens or representatives of associations or organized groups (Bobbio, 2019). In policy contexts, public participation is often described as a procedural tool that allows policymakers to involve new actors in policy networks and entrust them with design-related tasks. Something they want to promote with the new environmental law.

Furthermore, public participation is viewed as an umbrella term that includes a spectrum of interactions with people, ranging from informing and listening to dialogue, debate, and joint solution implementation (Hügel & Davies, 2020).

Participation is necessary to share information, knowledge, interests, and viewpoints, with the aim of achieving a higher-quality decision, greater support, and a shorter project timeline. These goals are achieved by utilizing the input, initiatives, and ideas from society (*Ministerie van Infrastructuur en Waterstaat, 2013*).

Through participation, the interests of different stakeholders can be captured and incorporated into the final design, which should help to improve the long-term viability of projects and their benefits to the community (Li et al., 2013). The importance of participatory decision-making, then, lies in the effects of the application. An investment in participatory decision-making can be a gaining of time, a generator of support, relevant knowledge, and even control in the long term (Woltjer, 2009).

Carr (2015) states that public participation serves three key purposes:

- creating space for deliberation and consensus-building to improve decision quality;
- mobilizing and developing human and social capital to make better decisions and implement them more effectively, and;
- enhancing the legitimacy of decisions, ensuring smoother execution.

Motives for participation differ per stakeholder (Figure 4), making it essential to understand

participation from multiple perspectives. Both governments and citizens may have democratic and instrumental reasons for engaging in participation (Visser et al., 2019).

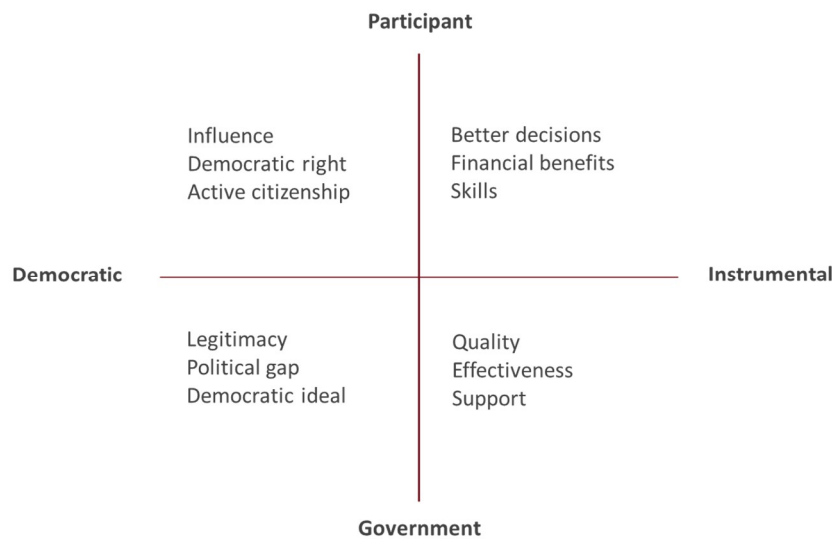


Figure 4- Motives for public participation (Visser et al., 2019)

For governments, democratic motives include fostering legitimacy, narrowing the gap between politics and citizens, and honouring democratic ideals. Instrumental motives aim to improve decision quality, implementation, and public support.

For participants, democratic goals involve having a voice and promoting active citizenship, while instrumental goals relate to better outcomes, financial gains, and skill development.

Because this research focuses on public participation under the new Environmental Act, both the purpose of participation and the goals of the legislation are considered. Most definitions focus on early project phases with room for decision-making. However, this raises the question: what does public participation mean specifically during the realization phase of infrastructure projects?

Public participation in this research is defined as: ***'the (early) meaningful involvement of stakeholders in sharing information, knowledge and perspectives, with the aim of achieving a better decision-making, fostering greater public support, and enhancing project quality.'***

3.2.2 History of public participation in spatial planning

The history of spatial planning in the Netherlands has had a direct impact on the development of the new Environmental Act, particularly in the areas of participation, decentralization, and integrated policy-making for infrastructure. Spatial development includes infrastructure, making it important to study how it has influenced projects over the years.

This paragraph is an analysis of how previous spatial policy strategies have led to the principles on which the new Environmental Act is based.

1950-1980: Centralized spatial planning and the rise of public participation

From 1950 onwards, spatial planning was strongly centralised through national policy papers. The First and Second Spatial Planning Memoranda focused on specifying spatial development problems. It was the first long-term vision and strategic spatial planning. This memorandum was a collaboration between the government, experts and researchers. As a result of this memorandum, the government and citizens became more aware of the problems of spatial planning (Alpkokin, 2012). The second note, published in the 1960s, was more concerned with specifying policy measures and instruments that focused on strengthening the Randstad conurbation. The plan emphasised transparency in policy making and focused on deconcentrating to manage urban growth. However, its implementation fell

short of expectations due to a lack of complementary programmes to support the policy measures. The Third National Policy Document (1970s-1980s) focused on urban growth centres and compact cities. However, financial constraints hindered the full implementation of the policy. (Alpkokin, 2012).

Public participation: tokenism or true power-sharing?

To understand the goal of public participation we have to go a few years back. The history of public participation in strategic planning is marked by a rapid rise in interest driven by democratic movements, administrative inefficiencies, and public concern for urban development.

Gaber (2019) describes the historical development of public participation, particularly through the work of Sherry Arnstein and her influential model 'A ladder of Citizen participation'. The initial lack of participation in the 1950's and 1960's used a top-down approach which focused on government-led solutions without consulting communities. The Kennedy and Johnson administrations introduced 'Community Action Programs', aiming for more involvement from local residents (Gaber, 2019). The 1960s was a time of a lot of democratic movements. Multiple demonstrations were held in America concerning civil rights. The Model Cities Program (1966-1974) marked a shift, requiring widespread citizen participation in federally funded urban projects. However, the implementation of public participation has often been criticized for being more about legitimizing planning decisions rather than truly redistributing power to the public (Damer & Hague, 1971). There was no clear definition of what participation entailed, leading to inconsistent implementation of institutionalized participation. Sherry Arnstein identified the power imbalances in participation and developed her Ladder of Citizen Participation (1969), distinguishing between tokenistic and meaningful involvement. Her model critiqued superficial participation and emphasized true power-sharing between governments and communities.

1980-2000: Strategic spatial planning and interactive governance

Fourth Policy Document (1980s-1990s) introduced in the Netherlands a collective aim to promote sustainable urban expansion, reduce car dependency and strengthen regional cooperation (Alpkokin, 2012). Strategic spatial planning reemerged in the 1990's due to the increase in complexity of urbanization, environmental concerns and the need for long-term governance strategies (Albrechts, 2004). The Netherlands had developed several key policies to manage urban growth efficiently and sustainably such as Compact City Development with VINEX-locations (Priemus, 1998), ABC Firm Location policy (Martens M.J. & Griethuysen S.v., 1999) and Inter-Municipal Coordination.

Interactive Governance

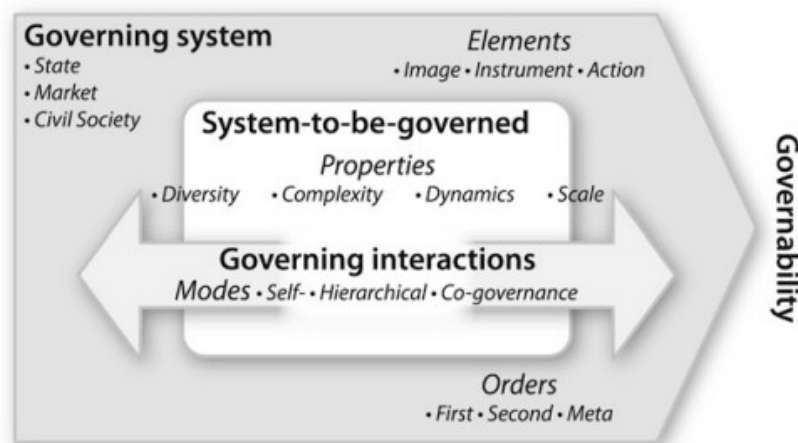
Since the early 1990s, the Dutch government has invested in the interactive governance method in policymaking (Edelenbos, 2005). Interactive governance emphasizes broad societal participation as both a democratic ideal and a practical necessity, advocating for interaction over isolated decision-making. It views governance as a dynamic process where values, principles, and goals are continuously shaped through negotiation and exchange. Rather than following a fixed grand plan, governance typically evolves step by step through interactive and experiential learning, making the goals and the roles of stakeholders a matter of reality rather than an assumption (Bavinck & Kooiman, 2013). The interactive process refers to participatory decision-making in which citizens, civil society organizations, and other stakeholders are actively involved in policy development and decision-making.

Interactive governance is a dynamic process in which the state, market and society work together to solve societal issues (Kooiman et al., 2008). Governance in addressing societal challenges encompasses the private sector and civil society as well as just government policy and consists of a wide range of actors. It is important to note the emphasis on the interaction between both private and public parties. The private parties can diverse from universities to media, to civic organizations to the general public, among others, are all in a certain way involved in governance (Bavinck & Kooiman, 2013). Additionally, it recognizes a dynamic process that continuously responds to increasing diversity, complexity, and societal challenges. For policy areas such as natural resources, spatial planning and infrastructure, interactive governance provides a valuable framework to enhance the effectiveness

and legitimacy of policies (Kooiman et al., 2008).

Governability: Understanding Governance Capacity

The model in Figure 5 highlights that Governability is a dynamic and multi-dimensional concept that reflects the ability of a governance system to effectively manage societal and environmental challenges. It depends on the interaction between three key components: the system to be governed, the governance structures, and the governance interactions. By analysing these elements, policymakers and institutions can assess how governance frameworks function in complex and dynamic settings, and identify ways to improve their capacity to meet societal needs. Governance is not a linear process but



a continuous and adaptive interaction between the governing system and those being governed. The three orders of governance, decision-making, implementation, and sustaining choices, further determine the effectiveness and resilience of governance outcomes.

The System-to-Be-Governed

This refers to the entity being managed, which could be a natural environment, an economic sector, or a policy domain. It is characterized by:

- **Diversity:** The presence of multiple stakeholders with different interests and needs.
- **Complexity:** The interconnection of various policies, regulations, and institutional frameworks.
- **Dynamics:** The constant changes due to shifting societal demands, environmental conditions, and technological advancements.
- **Scale:** The different levels of governance, from local to national or even international, influencing decision-making.

The Governance System

The governance system consists of institutions, laws, policies, and actors that regulate and coordinate activities within the system-to-be-governed. Governance systems are commonly structured around three key domains: State Governance (Hierarchical and centralized), Market governance (efficiency and economic incentives) and Civil society Governance (non-governmental organizations, communities, and citizens in shaping governance processes). Hierarchical and centralized. These governance systems are not mutually exclusive; they interact and evolve based on policy needs and societal expectations.

Governing Interactions

Governance is shaped by interactions between different actors, which occur at multiple levels. Bavinck & Kooiman (2013) name two levels of governing interactions. The actor level which is the intentional participation with individuals or groups in governance. Namely citizen participation has advantages for legitimacy, accountability and learning. But it also has its downsides like inefficiency, high costs and false expectations. The structural level focuses on the broader system and societal structures that shape interactions. There are three modes of governing interactions; self governing interactions (private actors take initiative), hierarchical governing interactions (top-down approach) and Co-governing interactions (public-private decision-making responsibility).

The Three Orders of Governance

Governance operates on different levels, often conceptualized as three orders of governance (Gjaltema et al., 2020):

1. First-Order Governance (Network Governance): This level focusses on everyday decision-making to address issues or take advantage of opportunities.
2. Second-Order Governance (Institutional Frameworks): This level refers to the rules, laws, and institutional structures that enable and sustain governance.
3. Third-Order Governance (Meta-Governance): The highest level which defines the values and principles of the underlying governance itself (Gjaltema et al., 2020).

Relation between governance and public participation

Participation without governance is ineffective and governance without participation lacks legitimacy (Edelenbos & Meerkerk, 2016). Interactive governance and participation must evolve together to create inclusive, democratic, and responsive governance structures. This requires a holistic approach, integrating participation into strategic policy goals, management practices, and direct citizen engagement mechanisms.

Edelenbos et al. (2010) concludes that without the safeguarding of participation in legislation, participation can easily be ignored or marginalized. It is therefore crucial to structurally embed interactive processes in policy to ensure that stakeholder input is not lost (Edelenbos et al., 2010).

The first advantage is the enhanced legitimacy and public trust. When citizens are given a role in shaping policies, governance becomes more transparent, reducing democratic deficits and increasing public confidence in institutions (Edelenbos & Meerkerk, 2016; Jäntti et al., 2023; Røiseland & Vabo, 2016). This participatory approach helps bridge the gap between citizens and decision-makers, making policies more widely accepted. Further, public participation also leads to more effective policies, as governments gain access to local knowledge and community insights (Jäntti et al., 2023; Røiseland & Vabo, 2016). Additionally, early stakeholder involvement minimizes conflicts and costly revisions, making governance more efficient and cost-effective (Edelenbos & Meerkerk, 2016; Røiseland & Vabo, 2016). Beyond policy-making, interactive governance strengthens social cohesion and civic engagement by fostering a culture of collaboration and shared responsibility. Participation helps develop civic skills, increase political awareness, and create stronger community ties, leading to more engaged and proactive citizens (Edelenbos & Meerkerk, 2016; Jäntti et al., 2023).

Despite the benefits and the interconnectedness of interactive governance and participation, there are also risks when participation is not properly implemented. The first risk is tokenism, where participation is encouraged but has little to no influence on decision-making, leading to frustration and distrust among citizens (Jäntti et al., 2023; Røiseland & Vabo, 2016). Additionally, power imbalances can result in elite groups dominating participatory processes, limiting inclusivity and representativeness (Edelenbos & Meerkerk, 2016). Another challenge is bureaucratic inefficiency, which can make decision-making slow and complicated if interactive governance is not well-structured (Jäntti et al., 2023). This can lead to citizen frustration and disengagement when public participation processes are too complex, take too much time, or fail to deliver real results (Røiseland & Vabo, 2016). Additionally, lack of coordination between local, regional, and national levels can weaken participation efforts, making them less effective (Jäntti et al., 2023).

2000-2020: Decentralization and integral approach

Fifth Planning Memorandum & National Spatial Strategy (2000-2020) in the Netherlands shifted towards decentralization, granting more power to regional authorities (Alpkokin, 2012). In addition, it introduced the 'Network of Cities' concept to enhance regional connectivity with railways and highways to urban cores. Lastly it emphasized economic development and quality of life.

These changes in the National Spatial Strategy aimed to better align with market and social trends. There is a greater focus on decentralization, but at the same time, the central government plays a crucial role in facilitating coordination among local authorities to ensure cohesive planning. Another major shift is the increased emphasis on stakeholder involvement, ensuring that decisions reflect broader societal interests. Together, these strategies contribute to a well-planned, sustainable urban environment.

Decentralized governance

Throughout the years, decentralization in governance has been a trend visible in the Netherlands (Rijksoverheid, 2023). This did not come out of nowhere but has been in development since 1960. At that time, a new division of responsibilities in Western countries led to a transfer of authority, tasks, and powers to the decentralized level (Van et al., 2017). Decentralization refers to the process by which governance responsibilities, decision-making powers, and resources are transferred from a central government to local or regional governments (Isufaj, 2014). This shift can occur for various reasons, including improving efficiency, responsiveness to local needs, and fostering democratic participation. Faguet (2014) argues that with decentralization, local authorities become more directly accountable to their citizens, as the accountability loop is shortened and transparency increases which can lead to better alignment of public services with local needs. Decentralization gives local authorities greater administrative responsibility, but this also leads to challenges such as unclear task allocation and limited resources (Bannink D. & Ossewaarde R., 2021). With the decentralisation of governance, Bannink D. & Ossewaarde R. (2021) explain three paradoxes which can emerge from this form of governance:

- The performance paradox can create a local governance which tries to score on measurable results at the expense of broader policy objectives.
- Self-regulation paradox in which the local authorities get a lot of freedom but uses it sometimes for their own advantage instead of the national goals.
- Subsidiary paradox where local authorities inherit complex national conflicts.

Integral approach

Integrated governance refers to a coherent approach in which different policy domains and government levels collaborate. This prevents fragmentation, where policies become dispersed across multiple departments. In the Netherlands, the integrated approach is applied in spatial planning, water management, and infrastructure. One example of this is MIRT. Since 2014, efforts have been made to prepare MIRT for the future. To achieve this, three pillars have been defined, focusing on transitioning from challenges to projects. A "challenge" is defined as a broad term encompassing opportunities, ambitions, bottlenecks, problems, issues, or tasks that emerge from the regional agenda (Rijkswaterstaat Ministerie van Infrastructuur en Waterstaat, n.d.). The three new pillars of the MIRT approach are:

- Pillar 1: Broad perspective
- Pillar 2: Tailored solutions
- Pillar 3: Collaboration

Since 2014, MIRT has included the 'Code for Societal Participation' (Code Maatschappelijke Participatie). This code originates from the recommendations of the Commission for Accelerating Decision-Making on Infrastructure Projects (Commissie Elverdingen), which led to the development of the 'Code for Public Participation: Faster and Better' (Code Publieke Participatie Sneller en Beter) in 2009. This earlier code served as a precursor to the 'Code for Societal Participation.' The 'Code for Public Participation: Faster and Better' was primarily formulated from a top-down perspective. This means that it outlined the necessary steps to involve citizens in the decision-making process (Haag et al., 2017). In 2012, the Verhoeven motion was adopted, requesting the development of protocols for handling promising citizen initiatives in the field of infrastructure. This led to the creation of the Code for Societal Participation, aimed at sharing information, knowledge, interests, and viewpoints to

achieve higher-quality decision-making, greater public support, and improved project timelines. (T. Kamer der Staten-Generaal, 2012). Next the (Hobma, 2022; T. Kamer der Staten-Generaal, 2013a) in the Explanatory Memorandum, it is stated that "The Code for Societal Participation is an important guideline that can be used in the preparation of decisions."

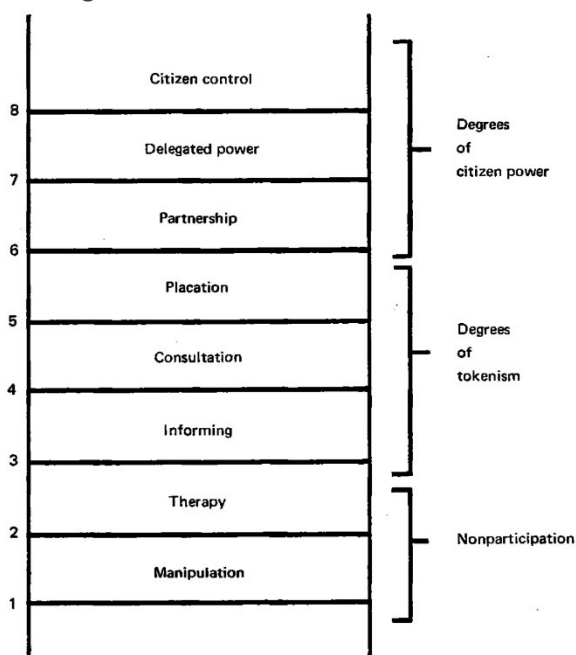
Within MIRT, the Flood Protection Program (HWBP) is also included. HWBP encompasses large-scale infrastructure and water safety projects, including dike reinforcement and water management. Additionally, HWBP projects are largely funded by the Delta Fund, which is part of MIRT (Ministerie van Infrastructuur en Milieu, 2016). (Additional information MIRT and HWBP in Appendix D)

3.2.3 Public participation theories

Levels of influence in participation

Various theories have been developed to conceptualize public participation. One of the earliest and most influential models is Arnstein's *Ladder of Citizen Participation* in 1969 (figure 6). Arnstein (2019) introduced this framework to illustrate the unequal distribution of power in participatory processes, distinguishing between non-participation, tokenism, and genuine citizen power. Her model critiques symbolic engagement and emphasizes the need for actual power redistribution.

Similarly, Pretty (1995) proposed a typology of seven forms of participation, ranging from manipulative involvement to self-mobilization. Both frameworks conceptualize participation as a scale, where lower levels represent limited or symbolic influence, and higher levels reflect meaningful engagement. Arnstein's levels of *informing*, *consultation*, and *placation* correspond to Pretty's *consultative* and *functional participation*, where citizens are heard but lack decision-making authority (Arnstein, 2019; Pretty, 1995). In both models, these intermediate forms are often used to create legitimacy without enabling real influence.



The models, however, differ in focus and application. Arnstein's ladder, rooted in political and urban governance, adopts a critical stance by highlighting how participation can reinforce existing power hierarchies. Pretty's framework is more descriptive and frequently applied in development and community-based contexts. His inclusion of forms such as *participation for material incentives* reflects an emphasis on functional engagement, linking participation to tangible benefits and long-term involvement (Pretty, 1995).

In summary, while Arnstein critiques the misuse of participation to maintain control, Pretty provides a practical framework for understanding how participation functions in different settings. Both remain relevant tools for analysing the depth and purpose of participatory processes.

Figure 5- Ladder of Arnstein (Arnstein, 2019)

Degrees of influence in participation

Bobbio (2019) describes participation in four forms of influence: thinking along, knowing along, co-deciding, and self-organizing. These forms correspond to the rings of influence, which align with the terminology commonly used in the domain of the surrounding by the national government.

Additionally, the government has introduced the interaction index to assist in participation by assessing the degree of interaction and influence. There is a distinguishment between high and low levels of involvement. The five levels identified; are joint governance, co-production, advising, consulting, and

informing (Informatiepunt leefomgeving, 2024c; IPO et al., 2017). In the following section, the various stages of stakeholder interaction index will be outlined and explained.

The informing stage, there is minimal involvement, and the initiator keeps all stakeholders updated on the progress of the project. In the consulting stage, the initiator maintains contact with all stakeholders. The next step on the interaction index is advising, where the most involved parties act as a sounding board and provide advice in an open discussion. However, the initiator still makes the final decisions regarding the content and implementation of the plan.

Next is co-production, where a continuous dialogue shapes the planning and execution of the project. Everyone contributes knowledge, expertise, and networks. A key aspect here is that the initiator safeguards the public interest.

The final level of the interaction index is joint governance, where residents, businesses, and the government share responsibility for the direction, planning, and implementation. An important note regarding the interaction index is that this model serves as a support tool for the different phases within the participation approach described in the Living Environment Information Point.

Other well used framework to evaluate the level of influence is IAP2 framework. This framework has levels from informing to empower. With 'informing' the goal is to provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions. Next ones are 'consult', 'involve' and 'collaborate'. The last step is 'empower' which aims to place final decision making in the hands of the public (*Internationally Recognized Principles for Making Better Decisions Together Public Participation Pillars Become a Member*, n.d.).

All these theories differ between separate phases or levels of participation, meaning the degree of citizen influence and involvement varies. An important commonality is the gradual increase in influence. This gradual increase in influence and involvement is indicated by the presence of different degrees and the recognition that it is situation-dependent, meaning not every participatory approach requires the same level of influence or involvement.

The core idea shared by all models is the extent to which citizens have influence over decision-making. Whether it involves giving advice, assisting in implementation, or having full authority, each model focuses on how public opinion and interests are integrated into the decision-making process.

Multidimensional participation: More than influence

If we look beyond just influence, Fung (2006) three-dimensional model provides a valuable extension. The three dimensions, also democracy cube, describe who participates (authorities, companies, the public, etc.), how they communicate, where preferences, technical expertise, deliberation, and negotiation are considered, and how much power they have (inform, co-creation, consult, etc.) (Bobbio, 2019). Instead of assuming that higher participation is always better, the cube model suggests that different types of participation may be more appropriate depending on the context. Rather than viewing participation as a fixed progression towards "better" engagement, it recognizes multiple valid forms that balance competing priorities based on specific goals and circumstances.

Fliervoet et al. (2019b) cites Rowe & Frewer (2005) describes that the direction of information is a characteristic upon which participation can be defined. This is illustrated in the figure 7. The first figure illustrates the process of informing the surroundings. The second figure focuses on gathering information from the surroundings. The last figure represents two-way communication, which is essential for true participation.

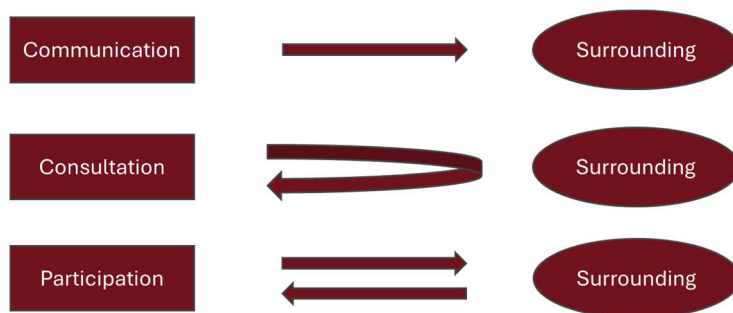


Figure 6 - Direction of information

Bednarska-Olejniczak et al., (2019) focused on a continuous two-way communication between public and decision-makers. He presents that the communication process with stakeholders, following different stages that succeed each other. You start by informing the public, then listen to the public, engage in problem-solving, and finally, trade-offs and agreements are made. Public participation has one overarching goal: improving decisions that are supported by the public opinion (Bednarska-Olejniczak et al., 2019).

Participation can serve various purposes. Michener (1998) describes participation as a spectrum from planner-centred to people-centred. Planner-centered participation focuses on administrative and financial efficiency. Here, the success of the project is central from the planners' perspective. Participation is primarily used to increase the likelihood of achieving project objectives. People-centred participation views participation not only as a mean to achieve goals but as a purpose in itself. It focuses on meeting local needs, redistributing resources, and empowering citizens by actively involving them in decision-making.

Important aspects of public participation

After discussing the various theories regarding the purpose of public participation, this subsector will explain which aspects are important for organizing an effective participation process.

Organizing effective participation requires that the process is perceived as legitimate and credible. This entails that it must be democratic, inclusive, and grounded in reliable information (Webler et al., 2001; Webler & Tuler, 2006). Scientific and factual information plays a key role in building transparency and trust, which are essential for legitimacy. Deliberation on policy options and trade-offs further contributes to the social legitimacy and public acceptance of decisions (Schweizer & Bovet, 2016).

Equal opportunity for all parties to voice their opinions is a basic requirement for legitimacy. In line with the idea of deliberative democracy, where all players have equal access to knowledge and influence, this calls for a fair and capably assisted process (Mumpower, 2001) (Webler & Tuler, 2006). Equal access is thus not only a matter of transparency but also of procedural justice.

Transparency and information sharing foster trust between the public and authorities, making participatory processes more effective (Webler & Tuler, 2006). Long-term engagement additionally depends on education and involvement, which strengthen stakeholder support and reinforce participatory practices (Jones & Russo, 2024). Access to high-quality information is thus critical in supporting participation.

Lastly, a major obstacle in participatory procedures continues to be the conflict between consensus and deliberation. Although reaching an agreement is frequently sought, recognizing and addressing conflict is just as crucial since it can lead to fresh ideas and creative solutions (Willems et al., 2020). In the end, allowing for both discussion and consensus-building improves the quality of decisions (Carr, 2015).

Challenges of public participation

Various scientific sources indicate that participation does not automatically lead to better decision-making and that its effectiveness is highly dependent on contextual factors, such as the sector, implementation, and policy environment.

A common challenge within participation processes and the choices in participation methods is the presence of practical limitations. Relevant is the concept introduced by Mumpower (2001) who

describes a theoretical framework on constraints in public participation methods within decision-making. This article does not specifically focus on infrastructure, but the barriers it identifies can also play a role in infrastructure projects. The study outlines the following key constraints:

1. Cost – Participation involves real opportunity costs. Governments and organizations must weigh whether the resources allocated to participation justify the expected benefits.
2. Time – Participation requires a prolonged process of dialogue, deliberation, and collaboration, which can conflict with tight project deadlines and administrative decision-making.
3. Political support – Without administrative backing, participation often remains symbolic and lacks real influence. Not every policy issue lends itself to collaboration; in some cases, interests are incompatible, requiring negotiation or confrontation instead.
4. Feasibility – In addition to political support, the practical feasibility of participation is a crucial factor. Even well-designed participation processes fail if they are not practically executable. Technical complexity, limited resources, and institutional constraints can hinder participation. Effective participation requires methods that are realistic and workable within policy frameworks.

3.3 Public participation in Infrastructure projects

Infrastructure includes all facilities for the movement of people, animals, goods, liquids and utilities such as gas and electricity that are built under, on and above the landscape. Infrastructure projects means all the facilities that are necessary for the proper functioning of a country, a company or an organisation(*Infrastructure; Definition, Meaning, and Examples, 2025*).

Cantarelli, Molin, et al. (2012) argue that the definition of a large scale project depends on the context, that is the size of the project in relation to the size of the city-country. In term of costs, large-scale projects attract public attention or political interest because of the impacts on community, environment and budgets. What is considered large scale, depends on size and impact of the project, meaning a project that costs over 20 million is considered large-scale in the Netherlands (Cantarelli, Van Wee, et al., 2012) .

Megaprojects are described as large-scale manufacturing or infrastructure contracts, ends up with fast and totally visible changes on the living environment. There is a global trend of Mega Transport Infrastructure Projects (MITP), where infrastructure projects not only serve a functional purpose but also contribute to the sustainable development of urban and rural areas (Cantarelli, Molin, et al., 2012). MIRT has been developed to efficiently plan and coordinate large-scale infrastructure projects, with collaboration between the national government, regional authorities, and private parties at its core. The funding for MIRT projects comes from the Infrastructure Fund and the Delta Fund, demonstrating its support for both transport and water-related megaprojects. Beyond improving physical infrastructure, MIRT projects can also serve as catalysts for broader socio-economic and environmental transformations (Erkul et al., 2016).

Infrastructure projects can be divided into several distinct phases through which a project progresses. The Project Management Institute (PMI) defines a project life cycle as “the series of phases that a project passes through from its initiation to its closure.” A project phase is described as one of a series of distinct steps in carrying out a project that together constitute the project life cycle (Project Management Institute, 2013).

According to Hamza & Elmahroug (2018) , similarities exist between different infrastructure project life cycles as discussed in the literature. From this research, five generic project phases were identified for a typical engineering infrastructure project life cycle:

1. Pre-design phase: This is the first phase of the project life cycle. During this stage, the need, opportunity, or problem to be addressed is identified. Additionally, the feasibility of the project is assessed, and a preferred solution is selected.
2. Design phase: In this phase, the preferred solution is evaluated, and alternative options are explored to refine and optimize the chosen approach.

3. Realization phase: This is the phase where the project is physically implemented. It involves the allocation of resources and materials to achieve the intended project outcomes.
4. Operational phase: The completed project is put into use and maintained to ensure its functionality and longevity.
5. Decommissioning phase: This is the final stage of the project life cycle, in which the project deliverables are dismantled, demolished, or otherwise disposed of at the end of their useful life.

3.3.1 Contract forms focused on collaboration

Public-Private Partnership

The new Environmental Act promotes an integrated approach, requiring closer collaboration between public and private parties in participation processes. This cooperation is named a public-private partnership (PPP), developed in response to budget constraints and the interdependence between public and private actors. Governments collaborate with private entities to improve efficiency in infrastructure and spatial development (Edelenbos & Teisman, 2008).

Sanders M. (2014) identifies three PPP types:

- *Market-PPP*: Emphasizes cost-efficiency, with the government as client and private parties as contractors. Projects are executed via procurement using DBFM (Design, Build, Finance, Maintain) contracts, aiming for efficient project delivery.
- *Network-PPP*: Encourages strategic collaboration in policy development without strict client-contractor roles. It enables shared goals and knowledge exchange between sectors.
- *Authority-PPP*: Involves shared public authority to make binding decisions, executed through formal governance structures like certification bodies or budgetary funds. This model safeguards public interests by enforcing obligations and standards.

Other literature distinguishes between the *concession model* (similar to Market-PPP) and the *alliance model* (similar with Network-PPP). In the concession model, the government grants long-term exploitation rights to private entities through contracts like D&B or DBFM (Edelenbos & Teisman, 2008; Verweij et al., 2017). Though designed to ensure efficiency and risk transfer, DBFM contracts face criticism for their inflexibility, limiting innovation and responsiveness for change (Verweij et al., 2022). In response, alternative approaches such as two-phase contracts have emerged. These separate design and realization phases, enabling early collaboration, open dialogue, and iterative planning. This promotes trust, adaptability, and better integration of stakeholder concerns (Verweij et al., 2017).

The *alliance model* fosters joint planning and shared risk, enhancing project outcomes through combined expertise (Edelenbos & Teisman, 2008). Instead of hierarchy, public and private actors co-develop solutions. Leendertse (2015, as cited in Verweij et al., 2017) notes that while such alliances involve contracts, the public party usually retains clientship.

Ultimately, the value of PPPs lies not in rigid contracts but in the quality of collaboration, trust, and adaptability over time. Contract models must evolve toward frameworks that enable flexibility, co-creation, and responsiveness to societal change (Verweij et al., 2017).

Procurement

Since the amendment of the Procurement Act on July 1, 2016, the meaning of Economically Most Advantageous Tender (EMVI) has been revised (Rijkswaterstaat Ministerie van Infrastructuur en Waterstaat, 2024). Where EMVI was previously seen as a method for evaluating bids based on both price and quality, it is now an umbrella term for three award criteria:

- Best Price-Quality Ratio (BPKV): focuses on balancing price and quality.
- Lowest costs based on cost-effectiveness (lifecycle): considers costs over the entire lifespan of a project.
- Lowest price: the cheapest bid wins.

In practice, BPKV is now used as a replacement for the original EMVI methodology. This means that tenders are no longer awarded solely based on the lowest price, but also take into account factors such as sustainability, innovation, and risk management (Rijkswaterstaat Ministerie van Infrastructuur en

Waterstaat, 2024). According to the 2012 Procurement Act, contracting authorities in the construction sector must, as much as possible, award contracts based on the Best Price-Quality Ratio (BPKV) (Rondaij et al., 2021). This means, in addition to price, quality also plays a significant role in the awarding process. BPKV criteria often include sustainability aspects, such as reducing CO₂ emissions and minimizing environmental impact. Public contracting authorities, for example Rijkswaterstaat and municipalities, frequently apply these criteria, though they are less commonly used in smaller tenders.

The BPKV procurement process consists of three phases (Schotanus & Siersema, 2023):

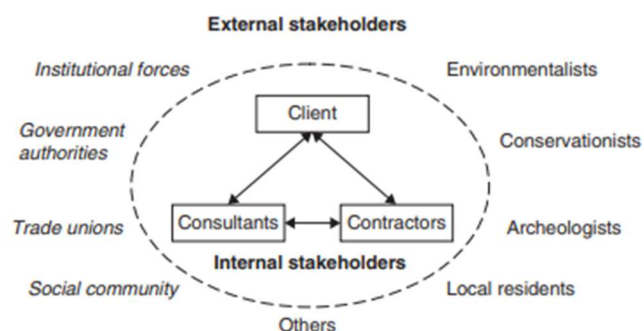
1. Defining criteria – Identifying key quality aspects and incorporating them into the procurement guidelines.
2. Tendering and evaluation – Bidders submit their proposals, which are assessed based on the price-quality ratio.
3. Implementation phase – Monitoring compliance with the promised added value through contract management and evaluations.

Van Daatselaar (2019) In her master's research, described that EMVI/BPKV is safeguarded in the realization phase through contractual agreements, monitoring via audits and consultations, sanctions for non-compliance, and improved integration between project phases. A key finding from the study is that there is often a gap between the bid submission and the actual execution of a project. This can lead to a loss of quality, as the promised added value is not always realized in practice (van Daatselaar, 2019). To prevent this, a stronger feedback loop between the tendering phase and the implementation phase is essential. By establishing structured coordination and actively monitoring the progress of EMVI commitments, the quality of projects can be better safeguarded.

3.3.2 Stakeholder management

A stakeholder is any individual, group, or organization that can affect or is affected by a project's objectives (Atkin & Skitmore, 2008; Wan Yusoff et al., 2017; Waris et al., 2022). Stakeholders may actively participate in the project or experience its impacts, both positive and negative. A distinction can be made between internal stakeholders, such as clients, contractors, and consultants, and external stakeholders, including neighbours, the local community, and authorities (figure 8) (Atkin & Skitmore, 2008; Waris et al., 2022).

Internal stakeholders are directly involved in project execution, ensuring delivery within time, cost, and quality constraints (Leung & Olomolaiye, 2010). Apart from the clients and project consultants, the contractors, sub-contractors and suppliers are the other key internal stakeholders during the construction phase. External stakeholders are mainly impacted by the project's outcomes. Particularly in infrastructure projects, environmental and societal impacts are significant both on site and on regional scale, increasing the importance of effective stakeholder management (Waris et al., 2022). Poor management of stakeholder interests is a major factor in contributing to project failure (Wan Yusoff et al., 2017), emphasize the importance of addressing local community needs and expectations, as neglecting them can result in social instability, collective action, or community resistance to infrastructure and construction projects (van den Ende & van Marrewijk, 2019 in Vuorinen & Martinsuo 2019).



Stakeholder analysis, involvement and strategies

Effective stakeholder management begins with the identification and classification of relevant individuals, groups, or organizations, as this forms the foundation for understanding their interests and influence. Scientific literature emphasizes that this step is essential for internal transparency and context-sensitive engagement (Carlos et al., 2015; Project Management Institute, 2013; Rajablu et al., 2014).

Stakeholder management goes beyond merely identifying stakeholders; it requires continuous engagement, flexible strategies, and systematic monitoring throughout the project life cycle. As stakeholder influence is dynamic and changes across project phases, regular reassessment is crucial (Atkin & Skitmore, 2008; Olander & Landin, 2005a).

Effective stakeholder management revolves around three key aspects (Project Management Institute, 2013; Rajablu et al., 2014):

1. clear engagement and communication with both internal and external stakeholders,
2. maintaining relationships and monitoring stakeholder involvement over time,
3. adapting management approaches as stakeholder influence evolves during different project stages).

Stakeholder management strategies vary by model. The Power-Interest Model by Olander & Landin (2005b) that strategies depend on the power and interest of stakeholders and distinguishes four approaches: collaboration, involvement, monitoring, and defence. The PMI model (Project Management Institute, 2013) takes a broader approach to stakeholder management and consists of four phases: identification, planning, management, and control of stakeholder engagement. While this model places less emphasis on power and interest, it acknowledges that stakeholder influence and interest are essential for identification.

Additionally, Rajablu et al. (2014) emphasize that risk control is the most critical factor in stakeholder management, whereas empowerment plays a smaller role, as it often results in reduced stakeholder influence in decision-making.

Stakeholder participation is crucial for efficient and effective management in complex planning processes. Building strong partnerships with external stakeholders is a key success factor, particularly in project management (Sadkowska, 2008 in Waris et al., 2022). Combining these strategies helps projects better meet stakeholder expectations and manage risks. The project team must understand that managing stakeholders requires continuous monitoring, which can lead to adjustments in planning or execution as new stakeholder positions emerge.

3.3.3 Stakeholder management in the realization phase

The realization phase in MIRT begins at the procurement stage, where the contractor makes construction choices regarding design and materials, guided by the technical conditions established during the project study phase by the client (Kluts & Miliutenko, 2012). In this phase, the responsibility for the project is transferred from the client to the contractor who will carry out the work. The allocation of risks depends on the type of contract agreed upon between the client and the contractor. Stakeholder management in the realisation phase is a crucial part of project control. There is never a one-size-fits-all solution: every environment presents different challenges, stakeholders, and opportunities. Environmental management is the activation, maintenance, and steering of relationships between projects and their surroundings, in service of the project (House of Tenders, n.d.).

In the realization phase stakeholder engagement plays a crucial role. Determining the right approach starts with an assessment of stakeholder influence, taking into account three key factors (Erkul et al., 2016):

1. The stakeholder's power: To what extent can a stakeholder influence decisions?
2. Directives from higher authorities: What regulations or obligations impact the level of participation?

3. Urgency of stakeholder requests: How pressing is the stakeholder's need or demand?

Based on this analysis, three levels of engagement are determined by Erkul et al. (2016), they consist of consulting, involving or empowering the stakeholders. An effective approach requires a balance between project objectives and stakeholder expectations, ensuring the right level of participation is chosen to create support and minimize conflicts.

In the Netherlands, a BLVC plan is commonly used, which stands for Accessibility, Liveability, Safety, and Communication. In some municipalities, such as Amsterdam and Utrecht, submitting such a plan is mandatory when applying for an environmental permit for work in the physical living environment. A BLVC plan outlines the agreements between the contractor and the surrounding environment to minimize disruption during construction projects. The four key aspects of the plan are:

- Accessibility: How will the area remain accessible, even during road closures? Traffic measures and clear communication are essential to ensure accessibility.
- Liveability: The environment should remain pleasant for residents and visitors. This includes maintaining a clean and orderly work site and minimizing noise and vibration disturbances.
- Safety: Both residents and visitors, as well as road users, must remain safe around the construction site. Social safety also plays a role in this aspect.
- Communication: Residents and other stakeholders must be informed in a timely manner about the construction activities so they can adequately prepare.

Construction communication plays a crucial role in the success of a project. Stakeholders can either support or hinder a project, and resistance often arises due to a lack of information. Additionally, negative communication can damage the reputation of both the client and the contractor.

By informing stakeholders in the right way and actively involving them in the process, resistance can be reduced, and public support can be built. Well-coordinated communication contributes to a smooth execution, a positive relationship with the surrounding community, and a satisfied client.

3.4 Concluding remarks literature study

This chapter serves as a bridge between the literature review and the empirical part of this thesis. It explores the historical and theoretical foundations of the new Dutch Environmental Act, as well as its practical implications for governance structures and the evolving role of contractors in infrastructure projects. By analysing the policy context, underlying governance models, and emerging challenges, this chapter establishes a conceptual foundation for assessing the effects of the Environmental Act on participation during the realization phase of projects.

Influence of Historical Policies on the Environmental Act

To achieve genuine participatory processes, governance must be institutionalized, well-coordinated, and sufficiently resourced to ensure it contributes to decision-making and improves effectiveness. The Environmental Act makes participation a legal requirement and promotes interactive governance. This approach aims to address complex societal challenges and support future developments.

In doing so, the Act builds on previous spatial planning policies by emphasizing decentralisation, participation, integration, and sustainability. These historical policy directions remain visible in the Act's structure:

- **Decentralization of Authority:** The Act strengthens the role of municipalities and provinces in planning and implementation. Decisions are now made closer to citizens and businesses, allowing for more localized and flexible policies.
- **Participatory and Collaborative Planning:** Participation is now mandatory, with businesses, citizens, and organisations expected to contribute in early planning stages rather than reacting to completed plans.
- **Integration of Policies:** The Act consolidates multiple sectoral domains, spatial planning, environment, and infrastructure, into a single framework, enabling more coherent and faster decision-making.
- **Focus on Quality of Life and Sustainability:** The introduction of 'omgevingswaarden' ensures that spatial decisions take into account not only efficiency but also their impact on health, biodiversity, and sustainability.

In this way, the Environmental Act aligns with long-standing Dutch planning principles. By building on historical lessons, the Act aims to accelerate decision-making, increase participation, and better protect the living environment, preparing policy for future societal developments.

Governance Perspective: From Centralization to Interaction

The model described by Bavinck & Kooiman (2013) is highly relevant to the new Environmental Act, as it promotes a more integrated, participatory, and flexible approach to managing the physical living environment. In this context, the 'system-to-be-governed' refers to the physical living environment, including water management, infrastructure, spatial planning, nature, and energy.

The Environmental Act closely follows key governance principles such as diversity, complexity, dynamics, and scale. It provides more room for local customization and flexibility, allowing authorities to better respond to specific needs and circumstances.

Moreover, the nature of governance interactions is changing. The Act reduces the traditional top-down approach and encourages co-governance and self-governance, reflected in mandatory early public participation and the promotion of initiatives from citizens and businesses. It introduces changes at different governance levels (Kooiman et al., 2008):

- **First-order governance:** Day-to-day decision-making is increasingly shaped by early public participation and decentralization. Decisions about spatial planning and project execution are taken closer to the local population.
- **Second-order governance:** Different sectoral laws, such as spatial planning, water management, and infrastructure, are integrated into one coherent policy framework.
- **Third-order governance:** A flexible and adaptive long-term framework is established, allowing continuous improvement and coordination across governance levels.

All these changes aim to strengthen the governability of the societal system under the Environmental Act. The Act seeks to enhance decision-making speed, transparency, and efficiency while recognizing that cooperation between government, market, and citizens is crucial. This shift reflects the principles of interactive governance, emphasizing governance as a dynamic, participatory process rather than a static set of rules.

The Evolving Role of Contractors in Infrastructure Projects

Traditionally, contractors in infrastructure projects were mainly responsible for execution and technical delivery. Over time, however, new legislation, evolving contract forms, and a growing emphasis on sustainability and stakeholder engagement have significantly expanded their role. Contractors are now expected to be accountable not only for construction outcomes, but also for stakeholder communication, environmental measures, and legal compliance.

In today's governance landscape, particularly under interactive governance, contractors find themselves in a dual position: they remain private market actors, but increasingly serve as a link between public authorities and society, especially during the realization phase. The Environmental Act reinforces this shift by placing more administrative and policy-related responsibilities on contractors, effectively blending their commercial tasks with public ones.

Contractors are also more frequently involved earlier in the project cycle, particularly under integrated contract forms. These models are designed to promote collaboration and expect contractors to contribute to risk analysis, design improvements, and sustainability before any construction begins. In addition, award criteria such as BPKV emphasize quality and innovation rather than focusing solely on cost. Contractors must demonstrate added value, for instance through audits or long-term monitoring. The often substantial impact of infrastructure works on the surrounding environment has made early public participation increasingly important. The Environmental Act mandates such participation, shifting certain responsibilities, previously held by public authorities, onto contractors. While this may enhance transparency and help build public trust, it also presents a complex challenge: contractors must balance efficiency and budget constraints with social concerns and manage potentially conflicting stakeholder interests.

At the same time, meaningful participation can also serve as a form of risk management. By understanding local concerns early, contractors can adapt plans to improve safety, accessibility, or liveability, thereby reducing the risk of costly delays, resistance, or disputes later in the process.

In summary, the contractor's role now extends well beyond execution, encompassing early-stage involvement, stakeholder management, and environmental responsibility. Successful project delivery increasingly depends on structured participation frameworks, adaptability during execution, and strong collaboration with public authorities. The Environmental Act reinforces this shift by embedding integrated cooperation and stakeholder engagement into long-term governance practices.

Concluding remarks

The Environmental Act marks a significant shift in governance, with implications for both public actors and market actors. The evolving role of contractors, decentralisation of power, and emphasis on participation reflect a broader move toward interactive and integrated governance. These developments shape how infrastructure projects are initiated, designed, and realised, and serve as the foundation for the empirical research in the following chapters.

4. Exploratory interviews

The exploratory interviews provide initial insight into how public participation is approached during the realization phase of infrastructure projects with the aim of answering RQ2. The interviews help clarify how participation is interpreted and managed in day-to-day project execution. The focus lies on the contractor's role; how they handle participation within contractual and procedural constraints, what challenges they face, and how they view their responsibilities in light of evolving expectations. Additionally, the interviews give a first insight in how the Environmental Act might affect participation during realization.

To answer RQ2, the findings are divided into three paragraphs. The first paragraph explores how participation is understood and organized during realization phase, how communication and complaint handling play a role in practice. The next paragraph contains the challenges and barriers contractors face in organising public participation. The final paragraph describes the potential impact of the new Environmental Act on the current structure and implementation of public participation in the realisation phase by contractors. The semi-structured interview transcripts can be found in Appendix I. The figure 9 visualises the coding phases used during the analysis of the interview data, which was conducted in three stages: exploratory, initial and focused, and pattern coding. An overview of the respondent information, top 10, clustering, and containerization of the codes is provided in Appendix F.

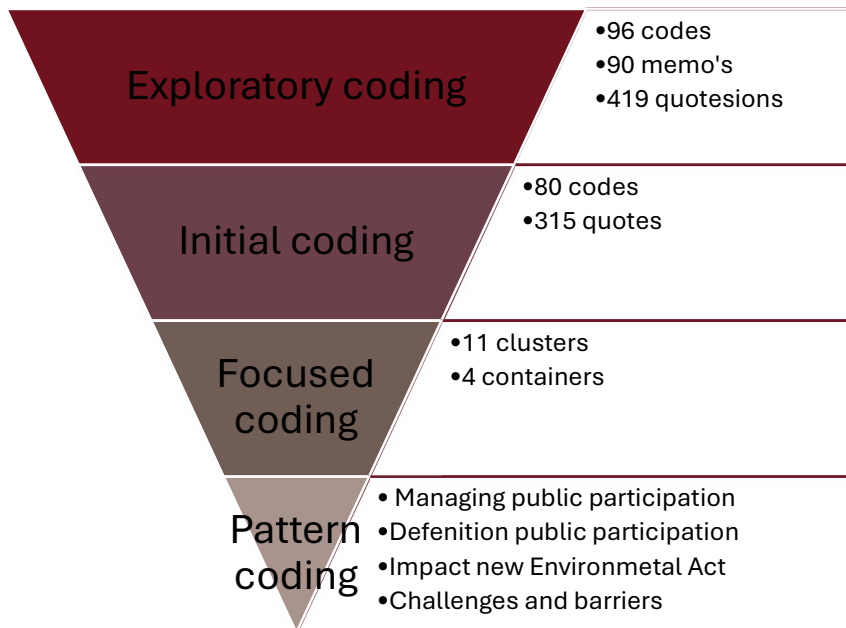


Figure 7 - Visualization coding phases exploratory interviews

4.1 Findings Exploratory interviews

4.1.1 Public participation

Understanding and interpretation of participation

The interviews reveal that all respondents underline the importance of involving the surroundings in infrastructure projects. Participation is generally seen as more than just providing information, it encompasses various levels of influence and requires genuinely considering external interests. However, views differ on who is responsible for participation and when it should occur. Consultants (OM1, OM2, OM5) tend to view it primarily as the client's responsibility in the design phase. Contractors (OM3, OM4, OM6, OM8), on the other hand, often see their role as limited to informing stakeholders during execution, sometimes questioning whether this still qualifies as real participation.

‘The only thing is construction communication so that you do involve people well in planning, less accessibility low threshold information. That they know where they can go with their questions. But it’s more taking them into what’s going to happen rather than them still having an influence on what’s going to happen.’ (OM6)

A recurring tension is that stakeholders often attend meetings with the expectation of being able to contribute, only to discover that key decisions have already been made. This can lead to feelings of disappointment or mistrust when participation is perceived as merely informative.

“People come with the expectation that they are allowed to think, but at the end of the evening they are told: thank you for coming, we are going to make it like this.” (OM8)

Although many respondents state that participation should ideally occur early in the project, this raises the question of what is still possible during the realization phase. Several environmental managers (OM5, OM6) emphasize that while there may be less room for direct influence, there are still opportunities to make adjustments in response to stakeholder feedback. The interviews suggest that participation should be seen as a continuous learning process that adapts to the specific context of each project.

Practical organization of participation during the realization phase

In the realization phase, participation often centres on issues such as accessibility, liveability, and communication. These elements form the basis of BLVC policies and are translated into concrete measures by environmental managers (OM1, OM2, OM5). In residential and business areas, this requires tailored approaches and close coordination with local stakeholders.

‘It often concerns accessibility or coordination within a collaboration, ensuring that the intended construction site is aligned from the outset. For example, when working with schools, we frequently establish early contact to discuss their stance on safety requirements.’ (OM6)

Permit management, utility coordination, and compliance with environmental and ecological regulations are also key responsibilities (OM4, OM8). Several respondents (OM2, OM8, OM5) emphasize the importance of clear communication and expectation management. Fulfilling externally made promises internally is a key principle, as is transparency about what is and isn’t feasible.

‘Communication, securing and maintaining support, consulting where possible, conditioning where necessary, and ultimately delivering internally on what is promised externally. This means ensuring that stakeholder interests are embedded within the organization. The bottom line in everything is keeping commitments, clearly managing expectations and being transparent when something is not feasible.’ (OM2)

Communication emerges as a central component of participation during execution. Respondents stress that communication strategies are highly context-dependent (OM2, OM4, OM5, OM6, OM8), requiring alignment with the specific needs and expectations of different stakeholder groups. This often involves a mix of communication tools, ranging from letters and online platforms to face-to-face meetings, based on insights gathered through stakeholder analysis. Striking a balance between one-way information sharing and two-way engagement is a recurring challenge. Several respondents note that reactive communication, where no news is seen as good news, is not sufficient to build trust. Instead, communication should enable stakeholders to feel heard and involved.

Many respondents describe participation as a learning process. Because every project environment is unique, flexibility and adaptability are essential qualities for project teams (OM5, OM8). This also

means that participation cannot be reduced to a checklist; it must be responsive to feedback and capable of adjusting over time.

Complaint management as a reflection of participation

A core element of participation during execution is how complaints are handled. The interviews reveal a structured process involving four steps: complaint registration, quick response, learning from feedback, and dealing with unfounded complaints (OM2, OM8). Multiple respondents (OM1, OM2, OM6, OM9) stress the importance of systematically registering complaints and identifying patterns. Frequent issues, such as early morning noise or road closures, can serve as signals for adjustment. A crucial follow-up step is responding quickly. Several respondents (OM3, OM6, OM8) emphasize that swift responses help maintain trust and prevent escalation. Handling complaints is therefore not only about resolving issues but also about maintaining relationships and managing perceptions.

'It is important for an environmental manager to demonstrate that they are not just a messenger but also have the authority to resolve issues. This builds trust with complainants and helps prevent unnecessary escalations.' (OM2)

Complaints are also viewed as a source of learning. Respondents (OM1, OM5, OM6) mention that feedback—whether from complaints or informal comments—is used to improve communication strategies and project execution. Even unfounded complaints may contain useful insights into how the community perceives the project (OM4).

'Even if a complaint seems unfounded, it can be useful to look further into the underlying causes. This helps us better understand how the community perceives the project.' (OM4)

The role and focus of environmental managers vary significantly. While some prioritize stakeholder satisfaction (OM3, OM9), others (OM5) focus on delivering a broadly supported project, even if not everyone is fully satisfied. These differences also surface in how managers balance flexibility with execution: some emphasize adapting to local needs (OM9), while others prioritize continuity and efficiency on behalf of the contractor (OM3).

Interestingly, the interviews also show a division in focus regarding the project phase. Several environmental managers (OM3, OM4, OM9) concentrate their participatory efforts on the design phase and see this as the moment to integrate stakeholder input. Others (OM5, OM6) explicitly highlight the importance of the realization phase, where participation may look different, but still contributes meaningfully through responsive communication and minor adjustments.

4.1.2 Barriers

Interviews with OM2, OM3, OM4, OM8, OM9 show that the contractor is usually involved too late in the project to carry out 'real' public participation. When the contractor joins, the project is often already fixed and the design completed, leaving little room for influence or creative interpretation of participation. This feeling of 'too late involvement' leads to the contractor hardly being able to contribute to participation processes.

'The contractor is often involved only when the project is already fully formed, so participation with stakeholders is already over' (OM3).

In addition to the timing of involvement, contractual and budgetary constraints are also seen as barriers by OM1, OM2, OM6 and OM8. Once the contractor is involved, there is often little flexibility due to strict contractual requirements, regulations and limited budgets. These factors limit the ability to respond to stakeholders' wishes and contribute to a passive role in participation processes.

‘Contract requirements limit opportunities for participation because the contractor has to meet strict requirements’ (OM1).

Important consequences arising from this are that time constraints and limited capacity are major obstacles to effective participation. OM3 mentions that the contractor often does not have time to implement additional requests from the surroundings, making participation more difficult (Interview OM3 trans, ¶175). This is confirmed by OM4, who indicates that there is often insufficient capacity to meet additional stakeholder requests (OM4).

‘The contractor often does not have time to implement additional requests from the surroundings, which complicates participation’ (OM3)

The interviews [OM4, OM3, OM8, OM9] show that the client plays a dominant role in defining the frameworks for public participation. Because the client bears the financial responsibility, decision-making power also lies with them, which affects the extent to which contractors can shape participation.

‘The contractor often plays a passive role during participation because they often depend on the client to initiate participation.’ (OM8).

It is noted that in certain cases, contractors are willing to make adjustments when this also proves advantageous for them. However, structural constraints in time, resources and flexibility remain major barriers to meaningful participation in public participation in the realisation phase.

4.1.3 Expected impact new Environmental Act

OM2, OM5 and OM4 see increasing public participation and citizen involvement in spatial projects as a wider societal trend that has been going on for some time, independent of the Environmental Act. The Act is seen as a response to this trend rather than a cause of it. OM4 confirms that the shift towards more participation was not caused by the Environmental Act.

‘Yes, if you, if I just look from the beginning of my career until now, it has become more important. So taking into account surroundings has become more important and has become more important in tenders, but that is actually a trend that has been going on for quite some time.’ (OM4)

This is also recognised [OM2, OM4, OM8] in the role of stakeholder management, which is becoming increasingly important, partly due to social developments and the Environmental Act. This leads to a more professional approach to stakeholder management and participation processes. OM2 notes that the function of stakeholder management has been taken more seriously in recent years.

‘Of course, I have been doing this for quite a long time and I had to fight a lot more for the job and the role in the beginning. [...] Yes, yes, it is, the discipline is increasingly embraced, so to speak, and also seen as essential. The Environment Act is the telling example of that.’ (OM2)

According to OM2, OM3, and OM8, the Environmental Act encourages a new way of collaboration between clients and contractors. Whereas these parties previously focused primarily on their own roles, they are now expected to work together more actively to effectively shape public participation.

‘I do think the idea behind it is very good. Participation is just unthinkable not to do more. It really needs to get into everyone’s DNA. Just like safety.’ (OM3)

Respondents OM1, OM8, OM9 see the Environment Act changing the way permit procedures are conducted. Whereas previously a permit was automatically granted (by rechtsweigen) after a fixed

deadline, this provision has now been replaced by a more flexible interpretation, which can lead to longer processing times. In addition, participation may lead to a longer preliminary process, and once that is complete, your permit process will only start.

‘In the old legislation, a permit was granted by operation of law after a period of time. [...] In the Environment Act, that procedural time has been changed by the word ‘the intention is’. So the pressure to complete a permit within a certain time frame has been removed from the competent authority.’ (OM1)

There is also the risk when participation is not carried out carefully enough, it can lead to misunderstandings or legal conflicts. This risk is not new, but remains relevant under the Environment Act. A key concern is that stakeholder expectations do not always match the final project result, which can lead to resistance.

‘And then it’s logical also that as a citizen, you’re going to object to that. And then you start looking for opportunities. Then you say: that government did not participate properly because I was not included in that.’ (OM5)

Although the Environmental Act makes participation mandatory at an earlier stage, [OM4, OM5 and OM8] say that this does not mean major changes for contractors in the realisation phase. There is still room for a minimal interpretation of participation at this stage, such as information only.

‘The heading participation in the new Environment Act is named, but it doesn’t say the form of participation. So, as you just showed that participation ladder, informing is also participation. So if you only apply informing, with the new Environment Act that is also sufficient.’ (OM4)

Despite the structural changes, it is still too early to assess the full impact of the Environmental Act. Many respondents [OM2, OM4, OM5, OM6, OM8] have not yet noticed any major differences, partly because of the transitional period during which the old and new regulations coexist. OM8 emphasises that the real impact will only be seen in the longer term:

‘Yes, you know, that Environment Act only came into force in January. We are just now in April. I had initially expected that there would be a really big change at the turn of the year, but they’ve given themselves seven years to really do it.’ (OM8)

4.2 Summary

Key findings from the exploratory interviews are summarized in the table below:

Theme	Summary
Role of participation during the realization	Participation remains important but limited; mainly focused on communication, complaints, and learning.
Practical use by contractors	Primarily used as a tool for communication and expectation management, not for real influence.
Barriers	Late involvement of contractors, contractual limitations, and fragmented responsibilities.
Impact of the Environmental Act	Participation is more formalized but has not led to a fundamental shift in contractor roles.

Table 4 - Summarized key findings exploratory interviews

This chapter has already provided a preliminary analysis of how individual practitioners perceive changes in their responsibilities and tasks under the new Environmental Act. The expected impact will be further explored through the case studies in the next chapter.

5. Introduction Cases

For the case study, three projects are selected. All projects fall under the MIRT program of the Ministry of Infrastructure and Water Management, with two of them also being part of the Flood Protection Program. In this chapter a short introduction has been given about the projects goals, area, participation process and time line.

5.1 Project: Stadsdijken Zwolle

The Stadsdijken Zwolle project is part of the High Water Protection Program (HWBP) and is led by the Drents Overijsselse Delta Water Authority (WDODelta). Its goal is to reinforce 7.5 km of urban dikes along the Zwolle-IJssel Canal and the Zwarte Water, enhancing flood protection for the city of Zwolle (figure 10) (Waterschap Dretse Overijssel, n.d.). A 2017 assessment found that most of the 8.9 km dike stretch did not meet safety standards due to issues such as insufficient height, instability, and risk of piping (Stadsdijken Zwolle Verkenningenrapport, 2017).

The project is considered one of the most complex dike reinforcements in the Netherlands, given the limited space and diverse urban and ecological surroundings, including the Voorst industrial estate, Holtenbroek residential district, and Natura 2000 Westerveld. Innovative techniques, such as internal reinforcement using sheet piles, are being applied to minimise environmental and social impact (*Groen Licht Voor Een van de Meest Complexe Dijkversterkingen van Nederland; Stadsdijken Zwolle*, 2023). Stadsdijken Zwolle operates under a two-phase contract between client and contractor.



Participation process

A key feature of the project is its integrated approach to participation and stakeholder

collaboration:

Dijkzone Alliantie Zwolle (DAZ) , a consortium including Dura Vermeer, Ploegam, TAUW, Fugro, and H+N+S, works together with WDODelta under a two-phase contract, ensuring early contractor involvement and improved coordination (Iding et al., 2023; Weerd de & Linde van der, 2019).

Travers Welzijn, a local welfare organisation, played a central role in engaging the multicultural neighbourhood Holtenbroek. This led to the launch of the #OnzeDijk initiative, aimed at:

- Increasing public support;
- Raising awareness about water safety;
- Creating social and recreational value around the dike (Zinsmeyer et al., 2021).

Participation activities included neighbourhood meetings, dike tours, and creative workshops.

Other stakeholders involved included the Municipality of Zwolle, Province of Overijssel, Rijkswaterstaat, and private landowners. While the overall participation process was positively received, some stakeholders noted limited influence during the realization phase (Resultaten Tevredenheidsmeting Stadsdijken Zwolle Zomer 2024, 2024).

Timeline

Planning and development phase (2017–2023)

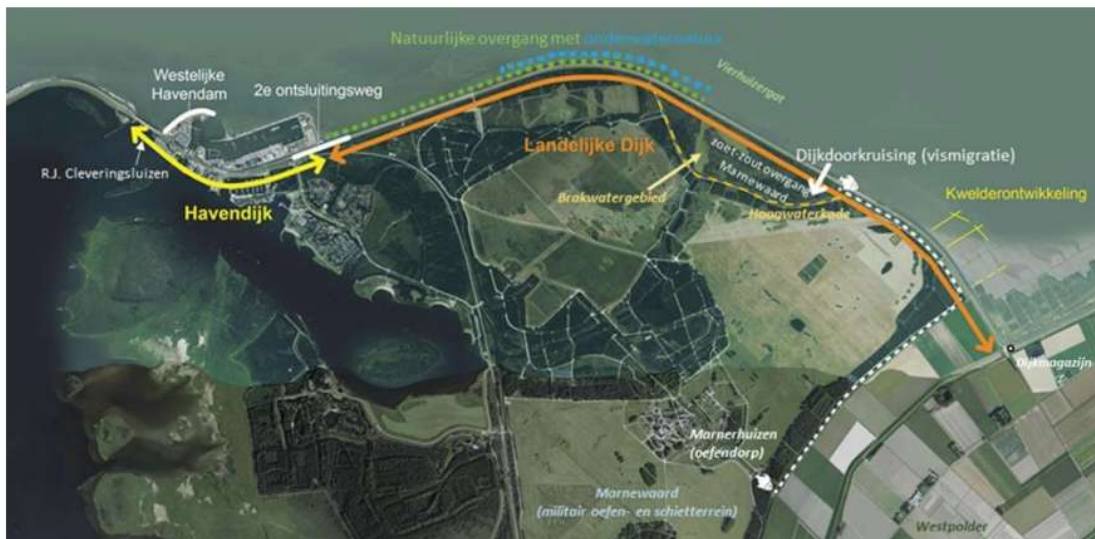
- 2017: End of exploration phase, preferred alternative selected
- 2018–2020: Start of the #OnzeDijk initiative
- 2021–2022: Design phase with iterative design sessions
- 2023: Permits obtained, preparation for execution

Realization phase (2023–2025)

- May 2023: Construction started
- June 2024: Mid-term resident satisfaction evaluation
- 2025: Expected project completion (Iding et al., 2023)

5.2 Project: Dike Reinforcement Lauwersmeer – Vierhuizergat

The Lauwersmeer – Vierhuizergat dike reinforcement project addresses structural deficiencies identified during a safety inspection, particularly regarding height and outer cladding. The area is functionally and ecologically significant, bordering the Wadden Sea, a Natura 2000 site, and a UNESCO World Heritage area. These designations require a balance between safety, nature conservation, and sustainability (Bensink, 2022; Dijkversterking Lauwersmeerdijk-Vierhuizergat:Ontwerp-Projectplan Waterwet (OPPW), 2022). The project covers a 9.3 km stretch of the Lauwersmeer dike, built in 1969, and includes both rural and harbour sections (figure 11) (Dijkversterking Lauwersmeerdijk-Vierhuizergat:Ontwerp-Projectplan Waterwet (OPPW), 2022). Dijkversterking Lauwersmeer-Vierhuizergat uses a construction team contract model from the planning phase. The project has four main goals which entail enhancing water safety through structural reinforcement, ecological and landscape improvement, sustainability and stakeholder involvement (Bensink, 2022; Dijkversterking Lauwersmeerdijk-Vierhuizergat:Ontwerp-Projectplan Waterwet (OPPW), 2022; Oostra et al., 2020).



Participation Process

The project involves a wide range of stakeholders: the municipality of Het Hogeland, the Province of Groningen, Rijkswaterstaat, farmers, residents, and nature organizations (Mosterd & Nijhof, 2023). The participation process focuses on:

- Broad governmental support through cooperation with regional partners;
- Intensive engagement with nature organizations, given the sensitive ecological context;
- Active involvement of contractors and local stakeholders, with an emphasis on sustainability and innovation.

This participatory approach resulted in an integrated preferred alternative, combining safety, ecological, and social objectives. Stakeholders were consulted throughout the exploration, planning, and realization phases, ensuring that community concerns—such as disruption, logistics, and environmental impact, were addressed (Dijkversterking Lauwersmeerdijk-Vierhuizergat' - Plan van Aanpak - Omgevingsmanagement 2024-2026, 2024).

Various participation formats were used, including: Public information sessions; One-on-one "kitchen table" meetings with local businesses; Expert sessions with ecologists; and community consultations to gather local knowledge and input (Plan van Aanpak Projectcommunicatie Dijkversterking Lauwersmeerdijk-Vierhuizergat, 2020).

Timeline

- Exploration Phase (2018–2020): Collaboration with residents, companies, and organizations to identify solutions.
- Planning Phase (2020–2023): Development of the integrated design.
- Realization Phase (started April 2023): Construction led by the Waddenkwartier consortium, incorporating sustainability principles (*Lauwersmeerdijk Noorderzijlvest*, n.d.).

5.3 Project: N211 – Wippolderlaan

The N211 (Wippolderlaan) is a major provincial road located in the municipalities of Westland and Midden-Delfland, and is among the busiest in the Netherlands. To address frequent congestion and improve accessibility to the Den Haag region, the project involves expanding the road from 2x2 to 2x3 lanes and constructing two grade-separated intersections at (figure 12) (Steen van der & Verhoeven, 2021):

- N211 – N222 Veilingroute / Wateringseveldweg
- N211 – Laan van Wateringse Veld

Due to spatial and legal limitations in the existing zoning framework, an environmental permit with a zoning exemption was granted to allow construction (Steen van der & Verhoeven, 2021). The contract type between client and contractor of N211-Wippolder follows a Design & Construct contract.



Participation process

The project featured an inclusive and structured participation process. A dedicated working group was formed, comprising residents, municipalities, the Province of South Holland, and the engineering firm Antea Group, led by an independent chairperson (Iaverman & Muijs, 2020).

A citizen initiative—the Westland variant—was developed and had a significant influence on the final design. This resulted in the adoption of the Wippolder variant, which combined aspects of the original

zoning plan and the citizen proposal (Steen van der & Verhoeven, 2021). Community concerns such as noise, lighting, environmental integration, and phasing were incorporated into the revised plan. Stakeholder engagement continued through letters, in-person meetings (2019), and online sessions (2020), promoting transparency and collaborative planning. The participation process remains ongoing in the landscape planning phase for the Zwethzone, focusing on green space, lighting, and recreation (Steen van der & Verhoeven, 2021).

Timeline

- November 2015: Provincial Council approved the implementation phase (Steen van der & Verhoeven, 2021).
- End of 2016: Draft design developed based on the zoning plan variant.
- After 2016: Citizen initiative leads to reassessment and temporary suspension of planning procedures.
- April 2018: Comparative study results in selection of the combined Wippolder variant.
- December 2018: Final approval of the Wippolder variant with embedded participation (*N211 Wippolderlaan - Over de N211 & Planning*, n.d.)
- March 2024: Start construction
- June 2027: Expected project completion

5.4 Concluding remarks on case selection

The three selected case studies are all part of the Dutch MIRT program, which requires adherence to the Code of Social Participation, a framework that also served as inspiration for the participation pillar of the new Environmental Act. Each project underwent an intensive participation process during the exploratory and planning phases, where stakeholder input had a tangible influence on the project design.

While the cases differ in project type, ranging from dike reinforcement to road expansion, and in context (urban, rural, and ecological environments), they all represent large-scale infrastructure projects in the Netherlands. This diversity enables a broad and comparative analysis of participation practices under varying spatial and contractual conditions. Despite these differences, all projects are organised around the principle of one environmental management team during the realization phase, promoting integrated coordination between actors.

Two of the projects, both part of the High Water Protection Program (HWBP), also proactively engaged a permit expert to ensure that, if the Environmental Act were to come into force before permit applications were submitted, the documentation would comply with the new legal framework.

This variation provides valuable insight into how contractual structures and project contexts influence the organisation and interpretation of participation during the realization phase.

The following chapter presents the findings from the case study analysis, exploring how these contextual elements shape the practical impact of the Environmental Act.

6. Case study results

Since the case studies involve projects that were initiated before the new Environmental Act came into force, the primary focus is on understanding the potential implications of the Act on public participation practices during the realization phase. The perspectives of various stakeholders, such as environmental managers from both contractors and clients, as well as project managers, are analysed. The findings in this chapter are based on the semi-structured interviews that were conducted to identify patterns, to answer RQ3.

This study examines how the Environmental Act redefines contractor responsibilities in public participation during the realization phase, how this may influence the prioritization and approach to participation, and how both contractors and clients expect the new legal requirements to affect collaboration during project execution. The interview findings are arranged by the assessment of how responsibility (indicated by R), approach (indicated by A), and collaboration (indicated by C) in participation are expected to change. Before the cross-case comparison, each case was individually analysed to identify project-specific dynamics. The transcripts of the interviews can be found in Appendix I

Discussion Framework

The discussion framework links the findings from each case study to the core objectives of the Environmental Act. Rather than merely describing how participation is currently organized, the analysis evaluates whether observed practices align with the Act's ambitions. This allows for a more meaningful interpretation of the results by assessing whether the intended policy shift toward participatory governance is taking hold in the realization phase of infrastructure delivery. The objectives of the new Environmental Act concerning participation are defined as follows:

- **Inclusive Legislation:** Connecting different interests across various sectors to ensure a clear and unified process. This enhances transparency and provides a structured approach to participation.
- **Focus on the Physical Living Environment:** Participation ensures that projects align better with the needs and preferences of the local community. It creates space for discussions on the impact of projects on nature, heritage, and the environment. Citizens and businesses can use participation to express what they consider important for the quality of their living environment.
- **Flexibility for Local Customization:** Participation allows regulations and solutions to be adjusted according to regional needs and interests. In some areas, residents and entrepreneurs may have greater influence. Governments have more freedom to organize participation as they see fit, provided they justify their approach properly.
- **Faster and Better Decision-Making:** Early participation helps accelerate decision-making by resolving potential conflicts at an early stage. Citizens and businesses are informed sooner, reducing the likelihood of legal disputes. Governments and contractors can work more efficiently by having a clearer understanding of community expectations from the outset.

The objectives *Focus on the Physical Living Environment* and *Flexibility for Local Customization* are discussed jointly. Because both objectives centre around the importance of aligning infrastructure projects with local needs, values, and conditions.

6.1 Stadsdijken Zwolle

The Stadsdijken Zwolle project offers a nuanced perspective on how the Environmental Act may affect participation during the realization phase. Based on interviews with both client and contractor representatives, this section explores shifts in responsibility, documentation practices, and the evolving dynamics of collaboration, highlighting both opportunities and challenges introduced by the new legal framework.

6.1.1 Findings

R: Shift in Responsibility and Dynamic Collaboration

The responsibilities associated with this shift involve more active accountability and assessment of participation processes. Contractors are expected to take on a more active role in monitoring and addressing clients when participation is not properly organized.

OM-ON: 'The client must also fulfil their role as a client. If that is not done properly, it should be addressed.'

This results in a more dynamic division of roles during the project, with more intensive collaboration in the initial phase, followed by a clearer separation of client and contractor responsibilities later in the process.

OM-OG: 'We are one. We speak with one voice. This is not the client or the contractor—we are the dike team.'

After the start of the realization phase, roles become more strictly separated:

OM-ON: 'When we started the realization phase, that's when we really separated. I am now the client, and you are now the contractor.'

While the contractor acknowledges this new responsibility, clients still believe that the primary accountability remains with them, meaning that little changes for the contractor.

PM-OG: 'The law is essentially just a safeguard. So yes, it offers opportunities. But if you recognize the importance of participation, you would naturally implement it anyway.'

R: Increasing Emphasis on Documentation and Demonstrability

Although these new responsibilities for the contractor are not directly recognized by the clients, they do acknowledge that the new Environmental Act places a greater emphasis on the documentation and demonstrability of participation. This means that participation processes must not only be well executed but also carefully documented.

OM-OG: 'We already have a high level of documentation and record-keeping. That was already the case here, but I can imagine that in other projects, this will become even stricter. ...Contractors will probably have more responsibility to demonstrate how they have handled participation.'

One risk identified by the client is that participation could become a bureaucratic process with no real impact. Turning into a mandatory administrative task rather than a process of genuine engagement.

PM-OG: 'Participation is important, but it shouldn't become just a checklist without real impact.'

C: More Formal Collaboration and the Role of Trust

The collaboration between client and contractor is becoming more formal, with a stronger emphasis on structured information transfer. Contractors need to be well-informed about the participation process, and it is expected that dossiers and background documentation will be transferred more effectively. This prevents the loss of crucial information and ensures a more transparent collaboration. While all parties view this as a positive development, it does require additional effort and administration.

OM-OG: 'If a client properly structures participation and effectively transfers it to the contractor, less

information will be lost.'

This more formal and transparent collaboration also requires mutual trust. By working together as one team and prioritizing the project's importance, both the client and the contractor can achieve better outcomes.

PM-OG: 'Give contractors freedom within boundaries. We only had an end date in the contract, and that allowed for smart planning.'

A: Early Involvement: A Necessity Rather Than Just an Advantage

The early involvement of the contractor in this project is seen not only as an advantage but also as a necessity. When contractors are involved from an early stage, they can better integrate participation into planning and execution. Additionally, less information is lost from an intensive preliminary phase when the contractor is already engaged at this stage. This can lead to:

- Fewer legal procedures and objections, as stakeholder concerns are discussed and addressed in a timely manner.
- Fewer surprises and obstacles during the realization phase.
- More efficient collaboration between client and contractor, as expectations are clear from the start.

OM-ON: 'The earlier you, as a contractor, know what the community expects, the fewer surprises you will encounter during the realization phase.'

By properly aligning participation early on, many issues during the realization phase can be prevented:

OM-OG: 'If you organize participation well from the start, it saves a tremendous amount of problems during execution.'

The respondents from the Stadsdijken Zwolle project all agreed that early participation leads to fewer legal procedures and smoother permit processes. Because stakeholders were involved from an early stage, there were fewer objections and legal conflicts. All four respondents considered this a major advantage.

OM-OG: 'Because we had such an extensive participation process, we only had three objections and two appeal procedures. Normally, there would have been sixty or more.'

OM-ON: 'We encountered little resistance because most concerns had already been discussed and resolved in an earlier phase.'

6.1.2 Discussion framework: impact new Environmental Act

The Environmental Act introduces a new approach emphasizing participation, integration, flexibility, and faster decision-making. An analysis of the Stadsdijken Zwolle project shows that many elements already align with these objectives, although certain tensions and challenges would emerge under the new legislation.

Inclusive Legislation

Participation in Stadsdijken Zwolle was structured early in the planning phase, helping to identify and address objections before formal procedures began. This is in accordance with the objective of the Act to securing transparency and bring different interests together. However, in practice, a tension between client and contractor responsibilities was observed: while the contractor was increasingly expected to organize participation, the client retained a dominant role. This tension can discourage the real cross-sectoral collaboration envisioned by the Act. Trust between

client and contractor is therefore essential to ensure that formal role divisions do not undermine flexible cooperation.

Focus on the Physical Living Environment & Room for Local Customization

Participation was approached as an ongoing process rather than a legal obligation, effectively capturing local concerns and reducing objections. This supports the Act's aim to align projects more closely with local needs. However, the growing emphasis on documenting and justifying participation processes risks shifting the focus toward administrative compliance rather than genuine participation. While contractors appreciated the predictability and improved information transfer that structured documentation provides, clients feared it could limit flexibility and turn participation into a checklist exercise. Finding a balance between formal requirements and space for genuine stakeholder input remains a major challenge.

Faster and More Effective Decision-Making

Findings confirm that early, intensive participation contributed to a smoother permitting process and minimized legal resistance. Contractors perceived participation as a strategic tool to avoid surprises during execution and improve project flow. Structured documentation and early alignment on expectations further supported efficient decision-making. Nevertheless, the degree to which participation accelerates processes depends on whether both client and contractor embrace it as a collaborative effort rather than treating it as a formal obligation alone.

In conclusion, Stadsdijken Zwolle largely reflects the objectives of the Environmental Act. However, achieving the full potential of these goals requires careful balancing between formal requirements, mutual trust, and genuine collaboration, particularly in the division of participation responsibilities between client and contractor.

6.2 Dijkversterking Lauwersoog-Vierhuizenweg

The Lauwersoog-Vierhuizenweg dike reinforcement project offers insight into how the Environmental Act may affect participation practices during the realization phase. This section presents findings from interviews, highlighting themes such as shared responsibility, administrative demands, and early participation, while also exploring how these aspects align with the Environmental Act's goals of integration, customization, and effective collaboration.

6.2.1 Findings

C: Collaboration and Shared Responsibilities

The Environmental Act introduces changes in the collaboration between contractors and clients. While participation was previously largely the responsibility of the client, the contractor now takes on greater responsibility during the realization phase, according to the contractor. The client, however, emphasizes that the realization phase does not become more complex as long as the collaboration between OG and ON is well-structured. A clear division of roles and a jointly developed environmental management plan help ensure that participation is effectively organized.

OM-OG: 'The contractor is responsible for participation during the realization phase. The client will reinforce this even further, meaning that more stakeholder management tasks will be assigned to the contractor.'

OM-OG: 'With this dike reinforcement, we aim to ensure that participation and communication form one integrated narrative. One party focuses on nature, another on water safety, but externally, it must be one unified message.'

Although the Environmental Act encourages collaboration, in practice, responsibilities in stakeholder management are sometimes still unclear. This can pose a risk within the framework of the Act, where participation is intended as a shared responsibility.

OM-ON : ‘Roles and responsibilities in stakeholder management are sometimes still unclear. This can be a risk under the Environmental Act, where participation is a shared responsibility.’

However, collaboration can also become more intensive and transparent. This project demonstrates that close cooperation between client and contractor leads to a more efficient approach. Clients and contractors are increasingly working as one team, which contributes to clear communication with stakeholders and a structured process.

OM-OG : ‘In the beginning, you have to get to know each other. But now, you notice that execution immediately comes to us. It's just, we want this. Can you send out a message about it? But okay. So, it works very smoothly.’

Although the Environmental Act strengthens the contractor's role in the realization phase, the client does not expect fundamentally new obligations for the contractor. More emphasis is placed on documenting and justifying participation efforts, but this is not perceived as an additional burden.

OM-OG: ‘What we do now is evaluate our environmental management and communication as a team every year. This helps us continuously improve, but it is not an extra burden.’

Additionally, the transfer of participation-related information to the contractor is seen as a key concern for clients. Proper information transfer prevents miscommunication and ensures that previous participation efforts from the planning phase are not lost during execution. This requires a structured and transparent approach.

OM-OG: ‘The transfer of participation information to the contractor must be done properly.’

R: Shift in Responsibility

One of the biggest concerns for contractors is the additional administrative burden introduced by the Environmental Act. The requirement to formally document and justify participation demands extra effort. The Act mandates that contractors must demonstrate how participation has been conducted, increasing the role of reporting in the process. In particular, the obligation to make participation demonstrable, for example through digital systems, is seen as an additional challenge.

OM-ON : ‘We have to make participation demonstrable in Dialogue, and that requires a lot of extra work.’

There is a risk that the requirement for documentation may shift the focus toward meeting formal obligations rather than substantive participation. This could impact the effectiveness of participation, making the process more about administration than about actual stakeholder engagement.

OM-ON: ‘The obligation to demonstrate participation can increase the burden. We don’t want it to become just a checklist; participation should genuinely add value.’

Despite these concerns, OM-ON acknowledges that a well-structured participation process offers advantages, particularly in building support.

OM-ON: ‘The process runs much more smoothly afterward when there is stakeholder support.’

A: Early Participation and Its Impact on Permits

Contractors and clients acknowledge that participation contributes to a smoother permitting process. By involving stakeholders early, objections and legal procedures are reduced, positively impacting permit processing times. In practice, permits are often arranged in earlier project phases, minimizing issues during the realization phase.

OM-ON: 'During the realization phase, we actually had no real issues with permits. The major permits were, of course, arranged before the start.'

However, the Environmental Act requires that participation is not only initiated early but also demonstrably documented. This means that contractors in future projects will need to undergo more intensive preparatory phases and improve their readiness. While this may increase workload during the preparation phase, it can also contribute to a more effective execution.

OM-ON: 'Give the environmental manager enough space and time to properly set up participation.'

The requirement to make participation demonstrable can help ensure structural stakeholder support and integrate participation effectively throughout all project phases. Both contractors and clients see this as an opportunity to make participation more structured and effective.

OM-ON: 'Participation is now mandatory and demonstrable, which helps to ensure structural stakeholder support.'

Despite these advantages, uncertainties remain about how the Environmental Act will be implemented in practice. Both contractors and clients still need to gain experience with the new legislation and determine how best to integrate these requirements into their processes.

OM-ON: 'I am curious to see how the framework will develop because there is still a lot of uncertainty.'

6.2.2 Discussion framework: impact new Environmental Act

The Environmental Act introduces a new approach to spatial development, focusing on participation, integration, and flexibility. By analysing how the Dijkversterking Lauwersoog-Vierhuizergat project would have operated under the Act, it becomes clear that the project already largely aligns with its objectives.

Inclusive Environmental Legislation

Collaboration between client and contractor was strengthened through a jointly developed environmental management plan and a unified environmental management team. This consistency supported a more efficient realization. However, unclear division of stakeholder management responsibilities posed a risk during execution, highlighting the need for clearer role definitions.

Focus on the Physical Living Environment & Room for Local Customization

The project integrated technical flood protection with broader goals such as nature development and recreation, enhancing the quality of the physical environment. Participation was treated as an ongoing process, enabling practical adjustments, such as road closures, to better accommodate local interests. Findings also emphasize that a well-organized transfer of participation-related information to the contractor is crucial to maintaining early stakeholder efforts. While flexibility is valued, stricter documentation requirements under the Act could increase administrative burdens, risking a shift toward procedural obligation rather than meaningful engagement.

Faster and More Effective Decision-Making

Early stakeholder involvement prevented legal objections, contributing to a smooth permitting process and efficient execution. Structured participation reduced delays and built community support, directly aligning with the Act's goal of accelerating decision-making.

In conclusion, the Lauwersoog-Vierhuizergat project demonstrates that early, integrated participation can fulfil the Environmental Act's ambitions. However, balancing flexibility with the need for thorough documentation remains a key challenge to ensuring that participation remains substantive rather than administrative.

6.3 Casus N211 Wippolder

The N211 Wippolder case illustrates how the Environmental Act affects participation during the realization phase. The analysis below highlights key themes such as documentation, expectation management, legal relevance, and collaboration, showing how these aspects align with or diverge from the Act's ambitions.

6.3.1 Findings

R: Documentation and Contractual Obligation

Both environmental managers do not foresee significant changes for participation in the realization phase. The legislation provides structure and clarity in regulations, but this primarily applies to the exploration and planning phases.

OM-OG: 'The change, of course, happens before that. Because they are now also required to conduct participation during policy development. And that involves real choices.'

However, all three respondents expect a greater emphasis on documentation and accountability for participation outcomes. Participation is not just a process but also an administrative obligation. While this brings additional burdens, it also offers advantages such as clearer verifiability in legal procedures.

OM-ON: 'We have incorporated participation into our project decision, including how we handled viewpoints and stakeholder input. Additionally, extra reporting requirements are being introduced: "Contractors must explicitly account for participation insights.'

PM-OG-N: 'We will probably need to document everything more thoroughly so we can demonstrate what we did with the input received.'

Contractual obligations may also become more stringent due to the integration of participation into legislation. This affects procurement processes. Changes resulting from participation can lead to significant costs and delays, requiring careful consideration from both contractors and clients on how to incorporate stakeholder input.

OM-OG: 'Then you see that in such a tender phase... a few people within a company write to win the contract. So they really tailor their writing to that... But in practice, not much actually comes of it.'

R: Demonstrability and Expectation Management

Clients recognize an increasing responsibility in ensuring that participation outcomes are well secured and accurately translated to the contractor. PM-OG sees an additional responsibility for the contractor, requiring them to actively respond to participation outcomes and integrate them into their work. This means that contractors should not only verify requirements on paper but also ensure that the outcomes align with stakeholder expectations.

PM-OG: "Immerse yourself in what has happened during participation. Do not take it as a given, but try to understand why certain choices were made and what that means for your technical process."

PM-OG and OM-OG emphasize that the contractor's focus is currently primarily on technical feasibility. In post-tender evaluations, stakeholder agreements are sometimes overlooked. Environmental management within the contractor's team will need to play a stronger role in ensuring better integration of participation outcomes.

PM-OG-N: 'Environmental management and participation are often treated as an add-on by contractors, whereas they should play a much bigger role... The environmental manager should have a greater influence on technical decisions.'

OM-ON, however, sees greater responsibility in managing expectations effectively. The increased emphasis on participation raises stakeholder expectations for communication, requiring methods to manage these effectively.

OM-ON: 'People increasingly want to be involved. This is encouraged both by society and the Environmental Act.'

Participation also has financial and time implications:

OM-ON: 'Participation takes time. And time also means money.'

OM-OG-N highlights that participation requires time and resources and cannot continue indefinitely during the realization phase. This makes expectation management essential. This underscores the necessity of clear communication about the possibilities and limitations of participation.

A: Legal Procedure

All respondents agree on how participation can help reduce objections and legal actions. Stakeholders feel heard earlier, which can contribute to a smoother permitting process. Additionally, clients mention that an intensive participation process helps in assessing potential objections, giving them more confidence in the permit application.

PM-OG: 'Permits were granted more quickly because stakeholders had already been involved in the decision-making process.'

While participation is often seen as a way to reduce resistance, it can also make resistance more explicit. This means that decisions must be well-substantiated and that participation does not necessarily lead to full acceptance. Expectation management and resistance remain challenges.

OG-OM: 'Participation does not mean there will be no resistance. It can actually help make resistance more visible, allowing for more informed decision-making.'

C: Collaboration

According to all respondents, collaboration is becoming more formal, with an added responsibility for the client to correctly transfer participation information and results to the contractor to minimize information loss. The Environmental Act encourages a more transparent and joint approach between clients and contractors. As a result, there is an increasing shift toward thinking in terms of one team rather than a separate client-contractor relationship.

PM-OG: 'Collaboration will likely become more formal, with greater focus on transferring

participation information and demonstrating results.'

OM-ON: 'If clients and contractors are more open and honest about their interests, decision-making can proceed more smoothly.'

6.3.2 Discussion: framework impact new Environmental Act

The Environmental Act introduces a new approach emphasizing participation, integration, flexibility, and faster decision-making. An analysis of the N211 Wippolder project shows partial alignment with these objectives, while also revealing persistent challenges, particularly during the realization phase.

Inclusive Environmental Legislation

Collaboration is being formalized under the Environmental Act, requiring clearer communication and greater transparency from both clients and contractors. While the Act promotes inclusive participation, the N211 case shows that its main impact lies in earlier project phases, with the realization phase facing increased administrative demands. Participation processes are better documented, but this does not necessarily simplify execution. Clients remain primarily responsible for recording and transferring participation outcomes, while contractors struggle to integrate this information effectively. Although the Act aims to streamline procedures, additional reporting requirements risk increasing bureaucracy without adding substantive value.

Focus on the Physical Living Environment and Room for Local Customization

Early stakeholder involvement in this project improved the environmental design and helped align the project with local needs. However, technical feasibility often dominated decision-making, making it difficult to fully integrate participation outcomes during execution. While participation led to better stakeholder communication and coordination, unforeseen circumstances still required adjustments, though strong relationships enabled effective solutions.

The Environmental Act encourages local customization but demands stricter documentation. The N211 case shows that participation can be effective with clear communication about negotiable issues, yet in practice, contractors often revert to a technical focus, and stakeholder agreements risk being overlooked after tendering. This highlights a gap between the Act's goals and project realities. Effective implementation requires structural integration of participation into project processes, while balancing local customization with increasing contractual obligations and associated risks.

Faster and Better Decision-Making

Participation helped build greater stakeholder support and reduced potential resistance, contributing to a smoother permitting process. However, despite early participation efforts, legal objections still arose during execution. This emphasizes that while participation can streamline processes and improve predictability, it does not eliminate all legal risks or guarantee faster decision-making in practice.

In conclusion, the N211 Wippolder project demonstrates that early and structured participation supports many objectives of the Environmental Act. However, challenges remain in transferring stakeholder input effectively into execution and balancing administrative demands with the flexibility needed for local customization.

7. Cross case results

In this chapter, the cases are systematically compared to gain insights into the similarities, differences, and specific characteristics of each project.

7.1 Data analysis

The cross-case analysis was conducted through a horizontal comparison of the responses from the interviews. This means that, instead of analysing each case separately, the responses were compared per question across all cases. For this purpose, a matrix was created that provides a clear overview of the key characteristics of each project. To effectively compare the cases, the study first examines how participation was structured in each project. Additionally, it analyses how process changes were managed, the impact of participation on the permitting process, and the extent to which involved parties are familiar with and have expectations regarding the new Environmental Act. This part of the matrix was then converted into table 5, and serves as the foundation for identifying patterns and differences between the cases.

To facilitate comparison between the projects, the collected responses were organized in a matrix (Appendix H), grouping observations per theme and project. This enabled the identification of similarities, differences, and project-specific characteristics, and revealed where projects aligned or diverged. Through pattern matching, structural trends and exceptions were recognised, offering insight into both commonalities and the underlying factors explaining project-specific deviations.

The matrix was analysed iteratively. Recurring observations within each theme and project were coded and then clustered into overarching insights. These provided the foundation for six statements regarding the predicted influences of the Environmental Act. For instance, when a specific participation challenges appeared across multiple projects, this was interpreted as an indication of a broader, structural impact of the new legislation. By examining themes across cases, insights were developed that go beyond individual projects and point to broader implications. Exceptions were also considered to explain deviations from general patterns and to nuance the resulting statements with contextual understanding.

These six overarching statements reflect the broader implications of the Environmental Act and offer a basis for further discussion on its impact on participation and collaboration in infrastructure projects. They will be presented in an expert evaluation (Chapter 8), where the findings will be reflected upon in light of practical experience and professional perspectives.

Table 5 - Overview Foundation Cross case analysis

Categories	Stadsdijken Zwolle	Dijkversterking Lauwersoog-Vierhuizergat	N211 Wippolder
Participation in the realization phase	<p>Limited, primarily focused on informing and impact mitigation. In this phase, the emphasis was on communication and minimizing disruptions, with stakeholders being regularly informed about the project's progress and impact.</p> <p>PM OG: "The main participation took place before the realization phase. During realization, it is more about informing and communicating."</p>	<p>Broadly structured, with active collaboration and transparency with stakeholders. This went beyond mere information-sharing; efforts were made to actively explore synergies with other area developments, such as nature projects and infrastructure improvements.</p> <p>PM OG: "We always say: we are temporary neighbours, and that is how we should treat them."</p>	<p>Limited, primarily focused on informing and minimizing disruptions. Clear and timely communication is crucial in this regard. The focus in this phase was on logistical coordination and impact mitigation.</p> <p>OM ON: "During execution, you mainly need to ensure that what was previously agreed upon is followed. That prevents problems."</p>
Communication channels	Newsletters, site visits, meetings, and kitchen table discussions.	Resident meetings, social media, flyers, and kitchen table discussions. Guiding principle: "temporary neighbours."	Periodic meetings, newsletters, emails, and environmental managers as points of contact.
Stakeholder strategy	Strategic environmental management: co-decision makers, co-workers, co-thinkers, and informed stakeholders.	Individual conversations with residents, entrepreneurs, and nature organizations. Proactive stakeholder engagement.	Environmental managers as the link between the client and stakeholders.
Degree of changes	Hardly any changes, with detailed execution agreements. In cases of resistance from the community, such as extended road closures, additional consultations were organized to address	<p>Significant changes in phasing and design due to technical and logistical challenges.</p> <p>OM OG: "There is a policy in the Wadden Sea stating that fishing is no</p>	Some changes in phasing and scheduling impacted traffic and local residents. Timely communication with stakeholders was considered

	<p>complaints seriously and foster understanding.</p> <p>PM OG: "We want to deviate as little as possible from what we have agreed with stakeholders. We try to resolve changes within the planning and budget."</p>	<p>longer allowed within a 250-meter radius around a fish passage. This led to resistance from fishermen."</p>	<p>crucial to fostering understanding and minimizing resistance.</p> <p>OM ON: "Some schedules had to be adjusted due to unforeseen circumstances, but we always aimed to coordinate this well with the involved parties."</p>
Impact permitting process	<p>Few objections due to early participation, resulting in a smooth permitting process.</p> <p>PM OG: "Because we had such an extensive participation process, we only had three objections and two appeal procedures. Normally, there would have been sixty or more."</p>	<p>Due to strategic participation and a proactive approach, the permitting process proceeded smoothly with minimal legal delays.</p> <p>OM OG: "Three viewpoints were submitted, but ultimately, no appeals were filed against the project."</p>	<p>Participation minimized legal procedures, but some objections remained. The realization phase began while an appeal was still pending at the Council of State.</p> <p>OM OG: "Because we organized participation well in advance, we encountered few issues with permits during execution."</p>
Knowledge new Environmental Act	<p>Familiar with the participation requirement, but its implementation is flexible. There is still much uncertainty about how strictly this obligation will be enforced and the level of participation actually required. Participation must genuinely add value to the process and decision-making.</p>	<p>Early participation is mandatory, but the level of stakeholder input depends on the initiator. Limited influence on technical requirements, but input is allowed on execution aspects such as fences and driveways.</p>	<p>The Environmental Act mandates participation but allows significant flexibility in its implementation. This means that projects can determine how they organize participation, as long as they can demonstrate stakeholder involvement. There is uncertainty about enforcement, but an expectation of increased accountability.</p>

7.2 Statements

The six statements are elaborated further with the help of quotes from the interviews. The quotes provide direct answers from the respondents, indicating how different stakeholders perceive the expected impact of the Environmental Act. The statements highlight key themes such as the changing of responsibilities and evolving collaboration between contractors and clients, giving an improved understanding of the expected impact of the new Environmental Act.

7.2.1 Statement 1

"The actual impact of the Environmental Act in the realization phase is minimal."

Respondents indicate that the Environmental Act mainly affects the front-end phases of the project, where participation is now a formal requirement. During the realization stage, most current practices remain in place, and the new laws do not bring about significant structural changes. Although the law mandates participation, the degree of enforcement and flexibility in its effort remain uncertain. As such, the realization phase sees minimal direct impact from the Environmental Act.

7.2.2 Statement 2

"The Environmental Act increases the responsibility of contractors in participation, requiring a more active role in environmental management and stricter documentation and accountability requirements. This leads to additional administrative burdens and carries the risk that participation becomes a formal process without genuine substantive impact."

Respondents uniformly agree that the Environmental Act increases contractors responsibilities in participation, particularly regarding environmental management and accountability. Contractors have to become more proactively engaged with stakeholders and thoroughly document their actions and decisions. This shift brings additional administrative burdens, as both contractors and clients, have to provide detailed report on participation processes, including stakeholder analyses, structured documentation, and result validation. Smooth transfer of information is crucial, especially when contractors join later in the project.

While this formalisation enhances transparency, respondents warn that participation could become overly procedural. If reduced to a contractual obligation or tick-box exercise, participation risks losing its meaning and becoming a bureaucratic process rather than fostering meaningful dialogue.

7.2.3 Statement 3

"The participation process facilitates a smoother permitting procedure that aligns better with the physical living environment, but it is not necessarily faster."

Respondents consistently indicated that early participation contributed to a smoother permitting process by helping in the identification of possible risks, sources of resistance, and opportunities for mutual gains. Early stakeholder participation enabled project teams to address concerns proactively, which reduced the number of legal objections and facilitated better alignment with the physical and social context of the project area. This approach was seen as beneficial, particularly because the projects were moving forward regardless, making it worthwhile to seek collaborative solutions. However, respondents also emphasized that this smoother permitting process did not necessarily result in time savings. The planning phase required to enable early participation was generally time-consuming and resource-intensive, with significant use of time and money.

7.2.4 Statement 4

"The Environmental Act fosters [through participation] a more intensive and formalized collaboration between client and contractor, with transparency and trust at its core."

Respondents indicate that the Environmental Act contributes to a more structured and formalized collaboration between client and contractor, particularly through increased transparency and documentation. Transparency is regarded as essential in building mutual trust and improved communication, hence enabling more effective cooperation. A shared environmental

management team, which exists in every case, further reinforces this collaboration by providing a central coordination point of contact for stakeholders and preventing uncertainty in responsibilities. While the Act promotes this intensified form of cooperation, respondents also indicate that success will depend upon role clarity and continuous flexibility in order to allow client and contractor to contribute their respective strengths.

7.2.5 Statement 5

"Participation in the realization phase is not only about exerting influence but also about effective expectation management, where clear frameworks and flexibility in the realisation phase must be balanced."

Respondents point out that participation in the realization phase is as much about managing expectations as it is about stakeholder influence. Clear frameworks are essential to prevent unrealistic expectations and ensure that participation remains feasible within the boundaries of the project. Flexibility is still necessary, however, particularly in reacting to unexpected events or legitimate stakeholder concerns. The case of Dijkversterking Lauwersoog- example describes how minor adjustments during the realization phase, when communicated well, can meaningfully improve stakeholder satisfaction without compromising project goals. Overall, respondents emphasize that effective communication, realistic commitments, and a willingness to adapt on a limited scale are key to balancing structure and responsiveness in the realization phase.

7.2.6 Statement 6

"Early involvement enables the contractor to look beyond just the technical feasibility of a project."

The cases show a clear contrast in the impact of contractor involvement on the role of participation. In the N211 project, where the contractor was not involved during the participation process, the focus remained on technical feasibility, with stakeholder impacts assessed only afterward. In the HWBP projects, earlier involvement allowed contractors to anticipate participation requirements and integrate stakeholder interests more effectively. Respondents note that this reduces surprises during execution and contributes to smoother project delivery. Early involvement thus enables contractors to move beyond purely technical considerations and adopt a broader perspective that includes stakeholder needs, though concerns remain about maintaining feasibility as participation demands grow.

7.2.7 Concluding remarks

The six statements provide insight into how practitioners expect the Environmental Act to affect participation during the realization phase. Although the Act formally anchors participation in law, its practical impact is viewed as limited and very much an extension of existing trends. The statements reveal how responsibilities shift, how collaboration becomes more structured, and how early contractor involvement can broaden the scope of participation beyond mere technical feasibility. At the same time, the findings show a strong emphasis on documentation, expectation management, and the risk of formalisation without meaningful influence.

To assess the relevance of the findings, Chapter 8 presents an expert evaluation in which professionals reflect on the six statements, recognize trends, and consider the practical implications of the Environmental Act.

8. Expert evaluation

In order to evaluate the results of the cross-case analysis, the prepared statements were presented to experts from dpi who have experience with contractors in this sector. The aim was to find out to what extent the experts recognise the statements in practice, what arguments they put forward in support of them, and whether there are any additional insights or nuances. The focus was on how they perceived the impact of the Environmental Act and whether the changes outlined were actually visible in practice.

The results of this expert meeting not only provide insight into the practical applicability of the statements, but also shed light on the underlying causes of the observed changes. For example, it has been shown that experts tend to see the Environmental Act as a consequence of existing developments rather than a cause of them. These findings help to sharpen the conclusions and better interpret the impact of the Act in practice.

8.1 Findings

9.1.1 General

While the statements suggest that changes stem from the Environmental Act, experts argue the Act is itself a result of long-standing sector developments. Despite the fact that the Act advocates for the inclusion of stakeholders at an early stage, it is not explicit regarding the timing of contractor involvement. Experts are sceptic whether clients truly base contract choices on participation requirements. Instead, expertise, risk mitigation, and project-specific experience are more decisive considerations. Participation may not be the primary driver in contracting, but the Environmental Act aligns with the broader trend of shifting responsibilities across the project chain.

8.1.2 Statements

Statement 1: "The actual impact of the Environmental Act in the realisation phase is minimal."

The experts confirm the statement based on their experience. In principle, permits for the realization phase should already be granted, so there is no significant direct impact expected from the Environmental Act on implementation. However, the Act forces contractors to think more actively about participation and stakeholder management, increasing contractors awareness. Experts also note that considering participation only in the realization phase is 'very late'. Experts note that the transition to the Environmental Act is difficult, as supervisors and clients are often the same party, and unforeseen circumstances require handling both old and new permit procedures simultaneously.

Statement 2: "The Environmental Act increases the responsibility of contractors in participation, requiring a more active role in environmental management and stricter documentation and accountability requirements. This leads to additional administrative burdens and carries the risk that participation becomes a formal process without genuine substantive impact."

The experts observe that responsibility for stakeholder management is increasingly assigned to contractors, though stricter documentation and accountability requirements are often not being fully realized.

When contractors join after the Design Development (DO) or Final Design (UO) phase, understanding earlier participation efforts becomes more challenging. But this is already common practice as permits require solid documentation. An environmental managers can benefit from a clear understanding of the preliminary process to ensure smooth permitting.

The Environmental Act may have a greater impact on smaller projects by formalizing documentation requirements, as larger projects already follow this practice.

Statement 3: "The participation process facilitates a smoother permitting procedure that aligns better with the physical living environment, but it is not necessarily faster."

Both experts generally recognise this statement in practice, though they note the need for balance. The Environmental Act aims to better align projects with the physical living environment, but this depends on achieving positive outcomes from participation efforts. Otherwise, weaknesses are exposed. The approval process can be simpler for the authority than for the applicant: if the applicant can clearly justify the project and demonstrate thorough participation, decision-making becomes easier, though the process can still be intensive for the applicant.

The Act creates more flexibility in permitting and spatial planning, moving away from stern rule-based assessments toward greater room for site-specific considerations. However, this shift creates a larger 'grey area,'.

Statement 4: "The Environmental Act fosters [through participation] a more intensive and formalized collaboration between client and contractor, with transparency and trust at its core."

None of the experts saw a direct link between the Environmental Act and more intensive or formalized cooperation. According to the experts, contractors are now more aware that they will be asked to provide information on stakeholder management, and that it is on the agenda from the start. However, they emphasize that proper information transfer was already standard practice for successful project execution and is not a direct result of the Environmental Act.

Statement 5: "Participation in the realization phase is not only about exerting influence but also about effective expectation management, where clear frameworks and flexibility in the realisation phase must be balanced."

The experts consider proper expectation management essential for effective public participation. Unrealistic expectations often lead to resistance, particularly when information meetings are poorly structured or lack transparency. To prevent this, participation should be an interactive process with effective communication about the scope of influence, realistic timelines, and early, honest engagement. Instead of presenting fixed plans, meetings should clarify where input is still possible and communicate any limitations openly.

Statement 6: "Early involvement enables the contractor to look beyond just the technical feasibility of a project."

In practice, the experts observe that earlier involvement of contractors naturally increases their influence and scope, particularly regarding integration with the physical environment, stakeholder interests, and innovation. As a result, projects tend to move beyond a narrow focus on technical feasibility, which traditionally concerns engineering, budgetary, and logistical aspects. Early involvement enables contractors to also consider broader social, environmental, and spatial dimensions from the outset.

8.1.3 Summary

Experts see the Environmental Act not as the cause of change, but as a result of ongoing sector developments. While the Act formally reinforces participation, its impact on the realization phase is minimal. Participation often starts too late for contractors and is rarely decisive in contract choices, where risk management and expertise matter more.

Contractors are increasingly responsible for stakeholder management, though experts have not yet observed the stricter documentation requirements mentioned in Statement 2, expecting this to emerge more in smaller projects. Participation does contribute to better-supported permit applications, even though through a more intensive process for participants.

Experts see no direct link between the Environmental Act and more intensive client-contractor collaboration, but they note a growing awareness of stakeholder management and the importance of clear expectation management. Early contractor involvement is seen as key to broadening the focus beyond technical feasibility to societal and environmental considerations.

9. Discussion & limitations

This chapter reflects on the empirical findings of the exploratory interviews, case studies and expert evaluation by connecting them to the theoretical framework and academic literature on governance, participation, and institutional change. Rather than evaluating the results per individual statement, the findings are created across five key themes that reflect recurring patterns in the data. This thematic approach enables a deeper understanding of how the Environmental Act affects public participation during the realization phase and how contractors respond to these shifts. The final section reflects on methodological limitations, followed by a reflection on the relevance and implications of the findings.

9.1 Discussion

10.1.1 Limited observed impact in the realization phase: between policy and practice

The findings show that the Environmental Act has had limited direct impact on the realization phase. Participation largely occurs during the planning and design phases, with contractors reporting minimal changes during execution. Due to the Act emphasizes early engagement of environmental and social concerns into the permit process most participatory decisions are made before realization begins. As a result, contractors report that participation during execution remains limited to communication and documentation efforts.

Using (Bavinck & Kooiman, 2013) governability framework, this context reflects low institutional responsiveness and evolving roles between clients and contractors, supporting Hebinck et al. (2022) view that institutional transitions unfold gradually through incremental learning and adaptation. Consequently, the realization phase reflects an institutional setting where legal frameworks are in place, but behavioural change is still in progress.

9.1.2 Participation as an instrumental tool in the realization phase

The study finds that participation in the realization phase is primarily used instrumentally. Contractors approach participation mainly as a tool for communication, managing expectations, and maintaining local support, rather than enabling meaningful influence or shared decision-making (Visser et al., 2019). In this context, participation reflects what Michener (1998) describes as difference between the goal planner-centred participation or on democratic engagement highlighting that participation can take on different meanings depending on its intent and design.

This instrumental use is reinforced by legal requirements to document stakeholder engagement, often leading to an administrative framing of participation as a compliance task, particularly once contracts are fixed and project scope is defined. In this context, participatory activities tend to lack the deliberative qualities that authors such as Arnstein (2019) and Pretty (1995) associate with democratic or transformative participation. However, as Rowe & Frewer (2000) in Fliervoet et al. (2019) argue, the intent and structure of participation matter more than its formal presence. In the realization phase, participation risks becoming a "tick-the-box" exercise, which may support execution but undermine trust and legitimacy if perceived as insincere.

9.1.3 Legitimacy over speed: the paradox of early participation

While early participation contributes to more legitimate and locally responsive projects, it does not necessarily accelerate processes. The planning phase often becomes longer due to dialogue, negotiation, and incorporation of stakeholder concerns, although this investment can lead to smoother execution by reducing objections and increasing acceptance. Participation improves responsiveness to local needs (Faguet, 2014) but also introduces complexity that may lengthen decision-making (Mumpower, 2001). The Environmental Act supports this shift through its focus on decentralisation and the living environment, yet decentralisation can cause variation in municipal implementation, leading to risks of fragmentation and legal uncertainty (Bannink D. & Ossewaarde R., 2021; Jäntti et al., 2023). Critics, such as Maat ter (2022), warn that the complexity of the Act, combined with limited capacity at local and regional authorities, may hinder its effective implementation. Despite this, the Act's

integration of environmental legislation aims to streamline procedures and improve consistency. Experts point out that the Act intends to improve contextual alignment of projects, but this goal may backfire if participation lacks clear objectives or transparent communication. Poorly designed processes risk exposing project flaws rather than building support (Røiseland & Vabo, 2016). Its true value lies in its capacity to produce legitimate and context-sensitive outcomes, which may only become visible over longer timeframes.

9.1.4 Shifting contractor responsibilities: towards interactive governance

A key finding is the growing responsibility of contractors in managing both participation and environmental concerns. The Environmental Act, with its focus on local customization and the physical living environment, reinforces the importance of environmental management. Contractors are no longer assessed solely on their technical capabilities, but also on their approach to stakeholder engagement, an expectation further supported by the Dutch Procurement Act (2012) (Rondaij et al., 2021). This development reflects a broader transition from traditional hierarchical governance to a model of interactive governance, in which actors jointly shape process. Within this shift, a trend towards co-governance is also visible. Responsibilities for public values such as participation and sustainability are increasingly shared between clients and contractors.

The findings show that this collaborative model is becoming more formalised under the Environmental Act, particularly through participatory reporting and documentation obligations. Respondents note rising demands for contractors to document efforts beyond permit procedures into the realization phase. While this may improve transparency, it risks reducing participation to a formality. Additionally, the shift towards decentralised governance, while offering opportunities for local tailoring, introduces the risk of the performance and subsidiarity paradox (Bannink D. & Ossewaarde R., 2021). Contractors must navigate varying expectations, creating implementation inconsistencies and administrative complexity. Unclear guidance and varying expectations contribute to administrative pressure. Participation is increasingly connected with legal accountability, broadening the role of environmental management in the realization phase. In this evolving context, participation should be understood not merely as a legal obligation, but as a shared responsibility between clients and contractors.

However, experts point out that many of these developments predate the Environmental Act and are part of broader governance trends. These include the Dutch Procurement Act (2012), which introduced awarding models like the Best Price-Quality Ratio (Rondaij et al., 2021), and the rise of integrated contracting models including alliances and concessions (Edelenbos & Teisman, 2008). Similar developments are visible in national programmes like MIRT, which emphasise customisation and multi-actor coordination (Rijksoverheid, n.d.-b). As such, the Act reinforces rather than transforms existing practices.

Bavinck & Kooiman (2013) governance levels help interpret this shift: changes are most visible at the second-order level (process rules and interaction), but lasting collaboration requires alignment at the third-order level (shared values and trust). Without the third-order foundation, institutionalisation alone is insufficient and may backfire if not supported by relational trust and mutual openness (Edelenbos & Meerkkerk, 2016).

9.1.5 Early contractor involvement enables co-governance

The findings and expert interviews suggest that early contractor involvement improves conditions for co-governance. When contractors are engaged early, they can contribute to project goals, design choices, environmental considerations, and stakeholder alignment, thus aligning project delivery with broader societal objectives. This supports the notion that contractors are expected to take on responsibilities that go beyond technical execution. Reflecting a growing expectation for contractors to respond to societal and environmental concerns, requiring them to engage more openly with external stakeholders Verweij et al. (2017) .

Although the Act promotes both participation and efficiency, in practice, technical and contractual feasibility often take precedence. Participation is frequently used to secure public support but must remain within the boundaries of what is executable (Monitor Werking Omgevingswet van Aanpak,

2023; Pionieren Met de Omgevingswet Houd Het Eenvoudig, Maak Het Beter, 2016). Nonetheless, the Environmental Act redefines infrastructure as a societal intervention rather than a purely technical task, with implications for the contractor's evolving role, and in line with the Act's broader focus on sustainability, liveability, and spatial quality (IPLO, 2024c; T. Kamer der Staten-Generaal, 2012; Ministerie van Infrastructuur en Milieu, 2011b).

Thus, while early contractor involvement can create space for co-governance, it does not guarantee it. Without third-order alignment—shared values, trust, and openness (Bavinck & Kooiman, 2013; Edelenbos & Meerkerk, 2016)—formal collaboration may remain procedural rather than transformative.

9.2 Limitations

This study is subject to several limitations that must be taken into account when interpreting the findings.

Temporal scope: First, the research focuses primarily on the short-term effects of the Environmental Act, which formally came into force in January 2024. As a result, the long-term institutional effects, such as behavioral change, systemic adaptation, and embedded co-governance structures, lie outside the scope of this study. As Hebinck et al. (2022) and Bavinck & Kooiman (2013) argue, institutional transitions unfold gradually, and real impacts often emerge only after prolonged interaction and learning. Consequently, many conclusions remain speculative or anticipatory in nature.

Empirical limitations: The study is based on three in-depth case studies, offering detailed insight into specific project settings. However, this limited number restricts the generalizability of findings across different infrastructure types, contract models, and regional governance structures.

Hypothetical scenarios: Due to the Act's recent implementation, the research relies heavily on hypothetical assessments, asking respondents how current projects might have unfolded under the new Environmental Act. While this provides insight, it also weakens empirical strength: the findings reflect perceptions and expectations, not verified outcomes. The insights must therefore be interpreted as indicative rather than definitive.

Expert evaluation: Findings from the expert evaluation should be interpreted cautiously due to the limited number of evaluators and shared organizational background.

Stakeholder perspectives: The study mostly draws on interviews with professionals from contractors and the role of environmental managers. This limits understanding of how participation is experienced by non-institutional stakeholders and may lead to a professional bias in framing challenges or burdens, such as administrative load or role ambiguity. There is a possibility of interpretive bias, since those respondents may intentionally present their involvement in ways that favour their operational interests.

Conceptual ambiguity: Throughout the interviews, definitions of “participation” varied widely among respondents, creating inconsistency in data interpretation. Moreover, some participants demonstrated limited familiarity with the Act or needed clarification on core concepts. This suggests that the Act's principles have not yet been fully internalized in practice, further complicating reliable data collection.

Contractual and procedural differences: Because infrastructure projects differ significantly in terms of contract type and process design, it is challenging to attribute observed changes in participation or collaboration solely to the Environmental Act. Such factors may have an equally strong influence, making it difficult to isolate the Act's specific impact.

Administrative burden and learning curve: Finally, the increased administrative burden linked to participation may partly reflect a learning curve. Contractors are still adjusting to new documentation requirements and stakeholder expectations. Over time, this burden may decrease as routines stabilize and more efficient practices emerge. For now, however, it remains an important operational challenge that influences how participation is perceived and enacted in the realization phase.

9.3 Relevance of findings

This study provides new insights into the impact of the Environmental Act on public participation during the realization phase, a topic that remains overlooked in both academic and policy contexts. Using governance theory, the findings reveal a structural gap between assigned responsibilities and actual influence, challenging assumptions about co-governance in integrated project delivery.

A key contribution is the reframing of the contractor as a public-private actor. Contractors are no longer just technical executors but increasingly tasked with public responsibilities such as stakeholder engagement and environmental accountability. This shift challenges the boundaries between public and private roles and calls for a broader understanding of the contractor's role.

The findings also give empirical substance to the concept of instrumental participation. Participation is often used to manage risks and fulfil formal requirements, particularly when key project decisions are already made. Rather than fostering dialogue, it tends to become a strategic or procedural task shaped by legal and contractual structures.

From a practical standpoint, the study offers guidance for improving participation in the realization phase. It identifies early contractor involvement, clear role division, and enabling contract models as key conditions. Decentralisation emerges as both a chance for contextual tailoring and a risk for fragmentation, depending on local implementation.

Finally, the use of hypothetical scenarios proves to be a valuable method for exploring the expected effects of recently implemented legislation. While this approach limits empirical strength, it enables a forward-looking and practice-oriented assessment of anticipated challenges and opportunities before structural effects become visible. This research thus serves as a starting point for further investigation into the long-term behavioural and institutional impacts of the Environmental Act.

10. Conclusion & recommendations

In this chapter, the research questions and findings of this study are addressed. A critical analysis is conducted on the impact of the Environmental Act on public participation during the realization phase of infrastructure projects, with particular emphasis on the role of contractors.

10.1 Research Sub questions

10.1.1 Research question 1

To answer RQ1 *‘What changes does the new Environmental Act introduce regarding public participation in the realization phase, and what are the resulting implications for contractors?’*.

The introduction of the Environment Act marks a fundamental shift in the way spatial planning and environmental management are organised in the Netherlands. Where previously different sectoral laws coexisted and procedures were fragmented, the Act introduces an integrated approach that focuses on efficiency, coherence and flexibility (Ministerie van Infrastructuur en Milieu, 2011b).

This reform aligns with a broader governance trend toward decentralisation and local customisation in spatial planning (Alpkokin, 2012; IPLO, 2024a). Another core principle of the Environmental Act is its emphasis on sustainable and development-oriented planning. The Act allows more room for new initiatives, provided they contribute to a safe, healthy, and high-quality living (T. Kamer der Staten-Generaal, 2013c). By introducing environmental values, projects are assessed not only on economic feasibility, but also on sustainability, biodiversity, and (Ministerie van Infrastructuur en Milieu, 2011b). This positions the Act as both a planning tool and a framework for inclusive, future-proof development. In addition to streamlining procedures, the Environmental Act makes early public participation a legal requirement. Citizens, businesses, and civil society must now be involved from the start, reinforcing the link between governance and participation (Edelenbos & Meerkerk, 2016). This legal embedding aims to improve decision-making quality, increase public support, and minimise objections.

It also promotes transparency and collaboration, supporting interactive governance where public and private actors jointly shape infrastructure projects (Edelenbos & Teisman, 2008). As part of this shift, contractors are increasingly responsible for stakeholder engagement, participation, and risk management.

This evolving role is reflected in procurement practices. Traditional realization-phase contracts are less suited for complex, participatory projects. Instead, tenders increasingly emphasise quality and cooperation, encouraging early contractor involvement and integrated responsibilities for construction and stakeholder management (Verweij et al., 2022). Participation is thus becoming an embedded part of project management.

In summary, the Environmental Act expands the responsibilities of contractors, requiring them to act not only as builders but as co-governors contributing to sustainable, participative, and context-sensitive infrastructure development. However, in the realization phase, the practical implications of these institutional changes remain limited. While the Act outlines clear ambitions, actual shifts in roles and participation practices are still emerging. These developments are examined in more detail in the answers to RQ2 and RQ3.

10.1.2 Research question 2

To answer RQ2 *‘How is public participation currently organized during the realization phase, and what challenges do contractors face?’*.

In the realization phase, contractors play a supporting but increasingly visible role in public participation. Their activities mainly revolve around informing stakeholders, managing complaints, and reducing nuisance. Contractors typically do not perceive themselves as co-creators in participatory processes, but rather act in an executive role, implementing stakeholder strategies predefined by clients, an approach that aligns with what Edelenbos & Teisman (2008) describe as “non-strategic

participation,” where participation is reactive and procedural rather than proactive and embedded in decision-making.

Despite this passive framing, respondents report some degree of adaptive capacity. However, these adjustments are typically minor and operational, rather than strategic or structural.

OM6: ‘During the realisation phase, it is harder to make major changes, but there is still room to make adjustments based on feedback from the surroundings.’ (OM6)

This dynamic reinforces the idea that participation in the realization phase tends to follow an instrumental participation (Visser et al., 2019): its main function is to minimise resistance and ensure smooth project execution. Respondents sometimes experience participation as a separate obligation when problems arise rather than an integrated part of project delivery, further reinforcing its instrumental nature and limiting its strategic potential.

Contractors face multiple, interrelated challenges in organizing public participation during the realization phase, many of which stem from their late involvement in the project lifecycle. Which limits their ability to respond meaningfully to stakeholders concerns. As one respondent noted:

“The contractor is often involved only when the project is already fully formed, so participation with stakeholders is already over” (OM3).

Rigid procurement frameworks and fixed project specifications leave little room, financially or practically, for meaningful stakeholder input. Participation is often underfunded and formally assigned to the client, leading to passive contractor involvement and undermining the principles of interactive governance. Time pressure and limited capacity further constrain contractors, making participation feel more like an obligation than an integrated project function. Together, these barriers reveal a systemic mismatch between the ambitions of participatory governance and the practical realities contractors face.

Although the Environmental Act aims to address some of these challenges by legally embedding participation, contractors remain sceptical about its practical impact. Contractors generally do not expect it to bring transformative change to public participation during the realization phase. Interviews reveal that many see a gradual cultural shift toward more stakeholder sensitivity, rather than a legal game-changer.

This reflects a broader institutional phenomenon known as formalisation without transformation (Bavinck & Kooiman, 2013), where participation becomes a procedural obligation rather than a genuine redistribution of decision-making power. It highlights a misalignment between the Environmental Act’s ambition for early, inclusive participation and the operational practices of infrastructure projects, first order governance limitation.

Contractors recognise that the Act may professionalise stakeholder management and increase the visibility of participatory processes. They also foresee a shift toward more integrated collaboration, with both client and contractor accountable for participatory outcomes.

“Participation is just unthinkable not to do anymore. It really needs to get into everyone's DNA. Just like safety” (OM3).

However, greater formalisation brings risks. Respondents fear permit procedures may lengthen due to less predictable approval timelines. Moreover, while the legal obligation formalises participation, it still permits minimalist approaches, such as merely informing stakeholders, risking participation becoming a box-ticking exercise rather than a meaningful dialogue.

10.1.3 Research question 3

To answer RQ3 ‘How do the responsibilities and practices of contractors regarding public participation change under the Environmental Act?’.

The Environmental Act redefines the contractor's role by legally embedding public participation and formalising responsibilities in stakeholder engagement, documentation, and improving the physical living environment during the realization phase. Although participation already played a role in many projects, the Act structures and extends these responsibilities deeper into the realization phase.

This shift reflects a broader move toward interactive governance, where public and private actors share responsibility [Statement 4]. Participation becomes a joint task, in which contractors are accountable for transparency and continuity of engagement, embedded in procurement and contracts, altering the institutional collaboration framework (second-order governance) but not necessarily daily practices (first-order governance).

The Act's focus on sustainability and liveability expands the contractor's role beyond technical execution. Early involvement enables contractors to incorporate social and environmental interests into design decisions, balancing commercial goals with public values, resulting in genuine co-governance [Statement 6]. This demands new competencies in environmental management, communication, and participation.

Participation thus becomes a strategic tool for legitimacy and risk management, though its success still depends on procurement models, contracts and client willingness for collaboration. Despite growing attention, realization phase participation remains limited by tight budgets, schedules, and flexibility [Statement 6]. Contractors expect a more structured, legally accountable participation process that may reduce objections [Statement 3] but increase administrative complexity.

Contractors and clients agree that expectations for justification and accountability around participation have risen [Statements 2 & 4], yet many see this primarily as formalisation rather than transformation. Late contractor involvement and fragmented information transfer hinder effective stakeholder integration [Statements 4 & 6].

Most contractors continue to view participation instrumentally: a tool to manage risks rather than to genuinely share influence (Visser et al., 2019) [Statement 5]. With fixed plans, permits, and budgets during realization, stakeholder input often has limited impact. Participation tends to function as a compliance measure rather than enabling true co-creation.

Although the Act introduces integrated permitting and decentralised governance, it has yet to significantly change the contractor's practical role. Institutional responsiveness and role alignment remain in development (Bavinck & Kooiman, 2013; Hebinck et al., 2022), creating uncertainty and constraining participation's strategic potential.

While participation is most effective with clear objectives, influence, and transparent communication, these conditions are not always met. Many collaborative practices predate the Act through integrated contracts and alliances. The Act mainly formalises existing norms, increasing clarity but also administrative burden.

Contractors appreciate this clarity but warn that unmet documentation or dissatisfied stakeholders could lead to delays and reputational risks. With decentralisation, participatory responsibilities may increasingly shift to contractors, making stakeholder management skills ever more critical [Statements 1 & 4].

In summary, contractors experience the Environmental Act primarily as a formalisation of existing participation practices rather than a transformative shift. While the Act clarifies roles and strengthens legal accountability, its practical impact in the realization phase remains limited due to fixed project parameters, late contractor involvement, and fragmented collaboration. Stakeholder interactions are expected to become more visible and better documented, but whether this results in meaningful participation depends on the balance between institutional formalisation and relational conditions.

10.2 Main research question

This research has addressed the main question: *'How does the Environmental Act impact public participation during the realization phase of infrastructure projects, particularly for contractors?'* By

combining a literature study, exploratory interviews, case studies, and expert evaluations, this study examined current practices, anticipated shifts, and structural barriers related to participation in the realization phase.

Although the Environmental Act institutionally embeds participation into Dutch environmental law, it has not yet triggered a fundamental transformation during the realization phase. Participation remains concentrated in the front-end phase, with contractors entering the process with limited influence. As a result, participation often becomes procedural, focused on communication and documentation rather than deliberation.

Contractors still operate primarily in a reactive role, with participation serving mainly to manage nuisance, mitigate risks, and maintain legitimacy. Legal obligations reinforce this instrumental approach, and when contracts are fixed and stakeholder influence is minimal, participation risks becoming a box-ticking exercise. Additionally, decentralisation, though intended to create room for customization, can lead to fragmented implementation and increased administrative complexity.

At the same time, the contractor's role is evolving. Procurement and contract frameworks increasingly assign responsibilities for environmental and social engagement. However, practical constraints, tight schedules, unclear mandates, limited budgets, and late involvement, hinder meaningful participation. While the Act promotes shared responsibility, it often lacks the structural support to realise it in practice. This creates a gap between assigned responsibility and actual influence, limiting the potential for co-governance.

As Hebinck et al. (2022) suggest, institutional change unfolds gradually through learning and adaptation. This study finds that most change occurs at the second-order level (procedures and contracts), while third-order governance, shared values, mutual trust, and role clarity, remains underdeveloped. Importantly, without reform in procurement strategies, contract models, and early collaboration, participation could remain symbolic and procedural. As contractors assume roles traditionally held by public authorities, they must also internalise the corresponding responsibilities. Fulfilling the participatory duties embedded in the Act requires not only compliance, but an active and proactive approach towards the delivery of public value.

In conclusion, the Environmental Act represents a symbolic shift with conditional potential. It can serve as a lever for change, but only if accompanied by institutional alignment and a redefinition of participatory roles across the project lifecycle. Without shared values, trust, and early role clarity, participation is unlikely to evolve into a truly democratic and strategic process. This study offers a first step in bridging the gap between legal ambition and practical reality. Future research is needed to assess the long-term behavioural impact of the Act and to develop governance models that support participation not just as a shared responsibility, but as a shared design task.

10.3 Recommendations

Recommendations regard goals and principles envisioned by the Environmental Act in the context of contractor application are explained in this chapter.

To effectively implement participation requirements within the Environment Act and not let it turn into a bureaucratic process, contractors should approach participation strategically. This means increasing knowledge on participation, integrating business processes and improving cooperation with clients and stakeholders. In addition, contractors should respond to the differences in implementation per municipality and keep the administrative burden manageable.

10.3.1 Practical recommendations

Enable contractors to take meaningful ownership of participation responsibilities

Contractors must become aware that increased involvement in the early phases of a project, particularly under the Environmental Act, automatically brings them closer to the legal obligations related to public participation. By stepping into roles traditionally held by public authorities, they also assume responsibility for meeting the participatory requirements embedded in the Act. This includes the duty to demonstrate how stakeholder input was gathered, considered, and reflected in project outcomes.

This shift implies more than just an administrative burden, it signals a deeper institutional transformation in which contractors influence not only the technical execution but also the socio-political legitimacy of infrastructure projects. As such, participation must no longer be seen as a procedural checkbox but as a value-driven process tied to broader societal objectives.

Therefore, contractors must critically assess whether they are willing to take on this extended role. If so, they must ensure they are adequately prepared in terms of internal capacity, participatory expertise, and contract strategies.

This includes:

- Investing in stakeholder management skills and participatory tools;
- Engaging in early dialogue with clients about role division and expectations;
- Adapting procurement strategies to allow time, space, and flexibility for genuine participatory processes;
- Recognising that this new responsibility requires a cultural shift: from compliance to co-governance.

At the same time, public clients and contracting authorities have a responsibility to create the structural conditions that make such a shift possible. As previous findings in this study show, second-order governance reforms, such as embedding participation in procurement criteria or award models, will only lead to tangible change in practice if they are accompanied by targeted support, clear expectations, and meaningful incentives. Contractors must not only be enabled but also take ownership of the task of connecting rules to practice and practice to purpose.

This requires:

- Allowing flexibility in participation requirements so that contractors can adapt to local project contexts without defaulting to generic, checkbox solutions;
- Linking participation efforts to broader societal values such as sustainability and inclusiveness, so contractors understand the 'why' behind participation;
- Encouraging joint reflection between clients and contractors on both the practical and strategic impact of participation;
- Rewarding contractors who demonstrate initiative and added value in stakeholder engagement, beyond formal compliance.

Ultimately, if contractors are to take shared ownership of the participatory ambitions set out in the Environmental Act, they must not only be equipped with mandates, tools, space, and collaborative structures—but must also actively choose to engage with this role. Meaningful participation requires more than external conditions; it depends on the contractor's own initiative to embrace participation as a strategic responsibility. Only when this mindset shift occurs, and participation is embedded as a

shared, value-driven task, can it align with both the practical realities of project delivery and the normative goals of public governance.

Building internal capacity for meaningful and context-sensitive participation

Due to the objectives of the Environmental Act, infrastructure projects are placing greater emphasis on the physical living environment. This enhances the role of environmental and stakeholder management across multiple project phases, making it a core component of project delivery. To meet the expectations of the Environmental Act and to prevent participation from becoming a mere box-ticking exercise, contractors must invest in strengthening their internal capacity—both in terms of skills and mindset.

This does not mean that every participatory process must involve deep, co-creative engagement. Informing stakeholders can be entirely appropriate, provided the approach is intentional, well-reasoned, and documented. What matters is that contractors can justify *why* a certain participatory approach was chosen, and *how* it fits the project context.

However, several respondents indicated that many contractors currently lack the in-house expertise to design and manage participation beyond basic communication. This institutional capacity gap limits the strategic potential of participation and reinforces its instrumental use.

To address this, contractors should:

- Offer targeted training in stakeholder engagement and environmental communication;
- Integrate participation strategies into project planning and risk management processes;
- Develop internal reflection tools to support conscious decision-making about the form, timing, and intensity of participation;
- Create dedicated roles or teams responsible for environmental and stakeholder management.

By growing into this role, participation becomes not just a compliance task, but a strategic instrument for reducing conflict, improving project legitimacy, and strengthening relationships with the surrounding environment.

10.3.2 Recommendations for future research

This thesis provides a first exploration of how the Environmental Act influences public participation during the realization phase of infrastructure projects. The findings indicate that, while participation is formally embedded in Dutch environmental law, its actual implementation in practice remains limited, fragmented, and often instrumental. Contractors operate under tight constraints, and their evolving role in participatory governance lacks sufficient institutional support. However, this transition is not only externally driven: it also requires contractors to take initiative and ownership. Their ability to shape participation meaningfully depends not just on enabling conditions, but on their own willingness to engage proactively, invest in internal capacity, and embrace participation as a strategic responsibility rather than a procedural obligation. To build on these insights, future research should address the following key areas:

Evaluating the long-term behavioural impact of the Environmental Act

One of the most pressing research needs concerns the long-term behavioural effects of the Environmental Act. As the Act has only recently come into force, its actual influence on project routines, stakeholder relationships, and decision-making processes remains largely hypothetical. A longitudinal research design, following infrastructure projects over several years, would be valuable in assessing whether the Act leads to more integrated participation practices, stronger stakeholder engagement, and improved project legitimacy during execution. Such research could clarify whether institutional change, as conceptualised by Hebinck et al. (2022), is indeed taking place or whether participation remains symbolic and superficial in the realization phase.

Understanding the evolving role of contractors in participation processes

A second important direction for future research lies in understanding how contractors are adapting to their evolving role in participation processes. The Environmental Act shifts responsibilities for

participation, previously held by public authorities, towards co-governance. This study has shown that while contractors increasingly acknowledge their role in stakeholder engagement and environmental management, many still lack the internal capacity, tools, and organisational support to fulfil this role effectively. Research could focus on how contractors interpret these responsibilities, what practical challenges they face, and what forms of support (e.g., training, guidance, collaboration tools) are most effective in enabling them to fulfil participatory tasks meaningfully.

Investigating the influence of contract types on participation quality

A third area that requires attention is the influence of procurement and contract models on participation. As this thesis highlights, the extent to which contractors can meaningfully engage with stakeholders during realization depends heavily on contract timing, flexibility, and role clarity. Many contractors are involved too late or work under rigid output specifications, limiting their room for manoeuvre. Future studies should explore how different contract types, such as two-phase procurement or alliance models, affect the depth and quality of stakeholder engagement, and whether integrated forms of contracting better support the participatory aims of the Environmental Act. This could also include an examination of specific contractual provisions that help facilitate cooperation, role clarity, and shared responsibility for participation during execution.

Addressing administrative burden and risks of bureaucratisation under the new Environmental Act

Finally, there is a strong need for research into the growing administrative burden and the risk of bureaucratisation of participation. While the legal requirement to document participatory efforts aims to improve transparency, this study finds that it may also lead to participation being reduced to a checklist exercise, focused on compliance rather than content.

Altogether, these research directions respond directly to the knowledge gaps and practical tensions identified in this study. They aim to support a better understanding of how the Environmental Act can move from legal ambition to lived reality, particularly for contractors operating in the complex environment of infrastructure projects. In doing so, they can support the development of governance models that make participation not just a formal requirement, but a shared and purposeful practice in the delivery of public infrastructure projects.

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Appendix A: Consent Form

You are invited to participate in a research project titled *'Life Cycle of Public Participation in Infrastructure: Understanding the Barriers and Drivers to Enhance Its Value During the Realization Phase'*. This study is conducted by Willemijn van der Meer at Delft University of Technology, in collaboration with Dutch Process Innovators as the affiliated graduation partner.

The aim of this research is to explore the role of public participation in infrastructure projects, particularly in light of the recent introduction of the new Environmental Act. Although public participation has been widely studied, the perspective of contractors remains underrepresented, despite their crucial role in every construction project. Gaining insight into their views is therefore of great importance.

The study involves semi-structured interviews lasting approximately 60 minutes. The collected data will be analysed to develop a clearer understanding of how contractors perceive and experience public participation. The interview questions will cover topics such as public participation, the new Environmental Act, contract types, and the design and realization phases of infrastructure projects.

As with any online activity, there is a potential risk of a data breach. We take all reasonable measures to keep your responses confidential. Risks are minimized by securely storing all collected data in a dedicated Project Data Storage folder for this study, located on a network drive supported by TU Delft ICT. Confidentiality is ensured by restricting access to this folder to the principal researcher only. The final research report will be published in the TU Delft Repository and will not contain any personal data. However, it may include anonymised quotes from the interview. All personal data stored on the Project Storage drive will be permanently deleted upon completion of the research project.

Your participation in this research is entirely voluntary, and you may withdraw at any time without providing a reason. You are also free to skip any questions you do not wish to answer.

My contact details are:

Willemijn van der Meer, w.vandermeer@dpi.nu or w.p.a.vandermeer@student.tudelft.nl,
+31 6 19639876, Vlamingstraat 50A, 2611KX Delft

By signing this form, you indicate that you agree with the above statement.

Researcher

Name: Willemijn van der Meer

Date: 25-03-2024

Signature

Respondent

Name:

Date:

Signature:

Thank you for your support in this research!

Appendix B: Data management plan (DMP)

Plan Overview

A Data Management Plan created using DMPonline

Title: Life cycle of public participation in infrastructure: understanding the barriers and drivers, to enhance the value public participation in the realization phase

Creator: willemijn van der meer

Affiliation: Delft University of Technology

Template: TU Delft Data Management Plan template (2021)

Project abstract:

I will conduct semi-structured interviews with infrastructure contractors to explore their perspectives on public participation. Through analysis of these interviews, I aim to compile a comprehensive overview of the barriers and challenges that contractors face regarding public participation.

ID: 147544

Start date: 25-01-2024

End date: 20-12-2024

Last modified: 22-03-2024

Life cycle of public participation in infrastructure: understanding the barriers and drivers, to enhance the value public participation in the realization phase

0. Administrative questions

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

Xinyan Fan

2. Date of consultation with support staff.

2024-03-22

I. Data description and collection or re-use of existing data

3. Provide a general description of the type of data you will be working with, including any re-used data:

Type of data	File format(s)	How will data be collected (for re-used data: source and terms of use)?	Purpose of processing	Storage location	Who will have access to the data
Consent forms which will be emailed and signed by the participant before the interview starts.	PDF	email	To have a written consent that i can use the interview as data	project storage drive, when necessary One drive	Me and the PI. when the Primary Investigator will only share an image of this data with their Graduation Committee when necessary, but the raw data will only be accessible to the PI.
Qualitative data, consisting of semi-structured interviews which contains notes of i record manually during the interview	DOCX	(online) semi-structured interviews (through Microsoft teams)	To identify the perspective from the contractor on public participation in infrastructure projects.	project storage drive , when necessary One drive	Me and the PI. when the Primary Investigator will only share an image of this data with their Graduation Committee when necessary, but the raw data will only be accessible to the PI.
Qualitative data, consisting of raw audio recordings of interviews(in person interview)	mp3 files	semi-structured interviews on site	To identify the perspective from the contractor on public participation in infrastructure projects.	project storage drive , when necessary One drive	Me and the PI. when the Primary Investigator will only share an image of this data with their Graduation Committee when necessary, but the raw data will only be accessible to the PI.
Qualitative data, consisting of raw audio and video recordings if the interview will be held in teams	mp4 files	(online) semi-structured interviews (through Microsoft teams)	To identify the perspective from the contractor on public participation in infrastructure projects.	project storage drive , when necessary One drive	Me and the PI. when the Primary Investigator will only share an image of this data with their Graduation Committee when necessary, but the raw data will only be accessible to the PI.
Qualitative data, consisting of transcriptions of interviews	DOCX	(online) semi-structured interviews (through Microsoft teams)	To identify the perspective from the contractor on public participation in infrastructure projects.	project storage drive , when necessary One drive	Me and the PI. when the Primary Investigator will only share an image of this data with their Graduation Committee when necessary, but the raw data will only be accessible to the PI.
Qualitative data consisting of de-identified transcriptions of interviews (De-didentification is done by hand)	DOCX	(online) semi-structured interviews (through Microsoft teams)	To identify the perspective from the contractor on public participation in infrastructure projects.	project storage drive , when necessary One drive	Me and the PI. when the Primary Investigator will only share an image of this data with their Graduation Committee when necessary, but the raw data will only be accessible to the PI.
Organization, function, age, work experience, education background, contact information	csv file	(online) semi-structured interviews (through Microsoft teams)	To obtain consent from the participants to use the data they provide	project storage drive , when necessary One drive	Me and the PI. when the Primary Investigator will only share an image of this data with their Graduation Committee when necessary, but the raw data will only be accessible to the PI.
Perspective on public participation, derived from the collected opinions.	DOCX	(online) semi-structured interviews (through Microsoft teams)	To identify challenges and barriers for the research of the Master thesis	project storage drive , when necessary One drive	Me and the PI. when the Primary Investigator will only share an image of this data with their Graduation Committee when necessary, but the raw data will only be accessible to the PI.
					*The PI Marian Bosch-Rekveltdt and the graduation committee are Leonie Koops and Maedeh Molaei.

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

- 250 GB - 5 TB

A request has already been put for the project storage folder through the self-service portal

II. Documentation and data quality

5. What documentation will accompany data?

- Methodology of data collection
- Other - explain below

I will share data in my master thesis: a description of the way in which the semi-structured interviews were set up and data was thus collected will be incorporated in the master thesis report.

III. Storage and backup during research process

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

- Project Storage at TU Delft
- OneDrive

A project storage was requested through the Top desk. If necessary for easy processing of the data, One drive will be used as well.

IV. Legal and ethical requirements, codes of conduct

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

- Yes

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

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

- Yes

I will collect data such as organization, function, age, education background work experience from the participants, which can be considered personal data.

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

If you are not sure which option to select, ask your [Faculty Data Steward](#) for advice.

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

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

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

Project Storage from the TU Delft will be used, to which only the Primary Investigator has access.
The Primary Investigator will only share an image of this data with their Graduation Committee when necessary, but the raw data will only be accessible to the PI.
In my graduation agreements no agreements have been made about IPR.

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

- Photographs, video materials, performance appraisals or student results
- Other types of personal data - please explain below
- Names and addresses
- Telephone numbers
- Signed consent forms
- Data collected in Informed Consent form (names and email addresses)
- Gender, date of birth and/or age
- Email addresses and/or other addresses for digital communication

Job title,, employer, work experience, education background.

11. Please list the categories of data subjects

Professionals in the civil engineering industry in the Netherlands, such as project managers, stakeholder managers, contractors, municipalities and government organisations

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

- No

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

- Informed consent

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

I will adhere to the template for an informed consent form as provided by the HREC.
All study participants will be asked for their written consent for taking part in the study and for data processing before the start of the interview. I will send & received digital consent forms via email.

17. Where will you store the signed consent forms?

- Same storage solutions as explained in question 6

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

If the processing of the personal data results in a high risk to the data subjects, it is required to perform [Data Protection Impact Assessment \(DPIA\)](#). In order to determine if there is a high risk for the data subjects, please check if any of the options below that are applicable to the processing of the personal data during your research (check all that apply).

If two or more of the options listed below apply, you will have to [complete the DPIA](#). Please get in touch with the privacy team: privacy-tud@tudelft.nl to receive support with DPIA.

If only one of the options listed below applies, your project might need a DPIA. Please get in touch with the privacy team: privacy-tud@tudelft.nl to get advice as to whether DPIA is necessary.

If you have any additional comments, please add them in the box below.

- None of the above applies

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

- No

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

- Anonymised or aggregated data will be shared with others
- Personal research data will be destroyed after the end of the research project

The data will be shared in the MSc Thesis Report, which will be uploaded to the TU Delft Repository. Any personal data stored on the Project drive or OneDrive will be destroyed after the end of the research project. anonymous quotes will be shared in the thesis.

23. How long will (pseudonymised) personal data be stored for?

- Other - please state the duration and explain the rationale below

All personal data will be deleted at the end of the project.

24. What is the purpose of sharing personal data?

- Other - please explain below

The data included in my thesis will be anonymized or aggregated. For example, statements such as 'four project managers were interviewed' will be made, without providing any other information about the individuals in this group. Therefore, no personal data is shared.

25. Will your study participants be asked for their consent for data sharing?

- Yes, in consent form - please explain below what you will do with data from participants who did not consent to data sharing

They will be informed of the fact that only aggregated data will be shared in the form of my Master Thesis Report on the TU Delft Repository.

There is no need for the individual full transcript to be shared.

If someone does not agree that I share their data I have two options:

first approach would be to anonymize the data of those who do not agree to share it, ensuring that their identities remain confidential while still allowing you to share aggregated or anonymized insights from the data.

second would be that if someone does not agree to share their data, their information will be excluded from any shared datasets or reports to maintain their privacy. Their data will be deleted.

V. Data sharing and long-term preservation

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

- All other non-personal data (and code) produced in the project

As mentioned previously, it will be shared in MSc Thesis Report, which will be uploaded in the TU Delft Repository.

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

- My data will be shared in a different way - please explain below

I will share data in my Master Thesis report

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

- < 100 GB

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

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

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

- Other - Please explain

I will be sharing the data in my Master Thesis report

VI. Data management responsibilities and resources

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

- Yes, leading the collaboration - please provide details of the type of collaboration and the involved parties below

I have a graduation agreement with the company Dutch process innovators

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

Graduation Chair for this Master Thesis research: Marian Bosch-Rekvelde, M.G.C.Bosch-Rekvelde@tudelft.nl

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

I will do the data management in the project myself. Therefore, there are no costs associated with data sharing, because the data are shared in the Master Thesis Report.

Appendix C : Notable changes new Environmental Act

The table 6 below provides a general overview comparing the new Environmental Act with the previous legislation.

Table 6 - Comparison new Environmental Act with previous legislation

Aspect	Old Situation	New Situation
Permit and Decision-Making Process	Multiple separate decisions were required (e.g., zoning plans, environmental permits, water permits), often causing delays and contradictions.	The project decision replaces multiple individual permits. A single integrated decision covers all necessary permits and modifies the environmental plan, speeding up the process.
Participation Requirements	Participation was not always mandatory and was often introduced in later project phases.	Early participation is now mandatory. Contractors must engage with stakeholders during the preparation phase.
Regulatory Flexibility	Strict legal rules made deviations complex and time-consuming.	The project decision allows for certain regulations to be set aside if they hinder implementation, giving contractors more flexibility.
Coordination Between Authorities	Decision-making was fragmented across municipalities, provinces, and the national government, leading to conflicts and delays.	The Minister of Infrastructure and Water Management can establish project decisions for nationally significant projects, improving coordination and reducing bureaucracy.
Enforcement and Supervision	Various enforcement agencies and unclear compliance requirements led to additional inspections and legal disputes.	The project decision includes clear assessment criteria and environmental requirements, reducing legal uncertainty and providing clearer guidelines for contractors.
Environmental Impact Assessment (EIA)	Required separate decision-making processes, sometimes late in the project, causing potential delays.	EIA and other environmental assessments are integrated into the project decision, saving time and ensuring early clarity.
Impact on Contracts and Procurement	Lengthy procedures and unclear permit processes created uncertainty for contractors regarding project feasibility.	Since the project decision directly addresses permits and spatial planning, contractors gain earlier certainty about project feasibility.

Appendix D: Additional information MIRT and HWBP

MIRT

MIRT follows a cyclical annual agenda with several key moments. Each spring, the Administrative Consultations on the Living Environment (BOL) take place under the leadership of the Minister of the Interior and Kingdom Relations. During this period, the Minister and the State Secretary for Infrastructure and Water Management visit the MIRT regions to establish process agreements.

Before the summer recess, the MIRT Committee Debate takes place in the House of Representatives, supported by a parliamentary letter detailing the progress of projects. On Budget Day, the MIRT Overview is presented. In the autumn, the Administrative Consultations on MIRT are held with regional administrators to discuss investments. At the end of the year, the Minister discusses progress with the House of Representatives during the MIRT Policy Debate, preceded by a parliamentary letter (Rijksoverheid, n.d.-a).

The financing of projects within the MIRT program primarily comes from two funds: the Infrastructure Fund and the Delta Fund. The Infrastructure Fund is designated for accessibility-related challenges such as roads, railways, public transport, and traffic safety. The Delta Fund focuses on issues related to water safety, freshwater supply, and water quality. Additionally, MIRT projects often involve co-financing, meaning regional authorities, private parties, or societal organizations can contribute financially to a project. This includes programs like the Flood Protection Program (HWBP), which is funded through a collaboration between Rijkswaterstaat and water boards, with costs distributed based on responsibilities.

In the MIRT program, the national government collaborates with regional authorities, societal organizations, and businesses to develop the Netherlands sustainably. The focus is on sustainable, ecological, socially, and economically responsible investments that consider future developments. Parties can support each other's ambitions by utilizing shared goals, decisiveness, and knowledge, aiming to achieve better solutions. The program covers the entire process, from identifying challenges to implementation, and for large-scale tasks, it also includes management, maintenance, replacement, and renovation (Ministerie van Infrastructuur en Milieu, 2016).

The MIRT Programme outlines four stages of decision-making:

1. Initiation phase
2. Exploratory study
3. Project study
4. Realization phase

HWBP

Within MIRT, the Flood Protection Program (HWBP) is also included. HWBP encompasses large-scale infrastructure and water safety projects, including dike reinforcement and water management. Additionally, HWBP projects are largely funded by the Delta Fund, which is part of MIRT (Ministerie van Infrastructuur en Milieu, 2016).

Like other MIRT projects, HWBP projects also go through various planning and decision-making phases. HWBP defines three project phases (Alliantie Hoogwaterbeschermingsprogramma, n.d.):

1. Exploratory phase (and possibly pre-exploration)
2. Plan Development Phase
3. Realization Phase: During the realization phase in HWBP, the tendering and execution of the project take place, ensuring that the deliverables align with the defined objectives and standards.

One of the pioneers for public participation in the Netherlands is the flood protection programs (HWBP). Within HWBP, participation is broadly defined as activities to involve citizens and stakeholders (Fliervoet et al., 2019). In this study, five levels are discussed. These levels start with "knowing along," where participants are informed, up to the highest level, "participating," where part of the project's execution and process is carried out by the participant.

Appendix E: Interview protocol Exploratory interviews

Objective

The purpose of the interviews is to clarify the current situation of the contractor regarding public participation and the Environment and Planning Act, in order to identify the challenges we are currently facing as a contractor.

Funnel Questions

General: Company, role, work experience, number of projects, responsibilities, experience in civil engineering, and educational background.

1. Which company do you work for?
2. What is your position? → Environmental Manager
3. How long have you been working in this role?
4. How many projects have you managed as an Environmental Manager?
5. What are your responsibilities in this role?
6. What is your experience in civil engineering?
7. What is your educational background?

Current Practices

1. How would you broadly define public participation? (broad concept)
2. How is public participation perceived within your organisation as a contractor?
3. How does the contractor currently implement public participation?
4. What are key points of attention for the contractor in this regard?
5. Where would you place the contractor on the participation ladder?

Realization phase

1. What is the contractor's objective during the realization phase of a project?
2. Which aspects of public participation are you involved with during the realization phase?
3. What do you do with the information (complaints, compliments, concerns) you receive during the implementation phase?
4. What do you organise to involve the local community, stakeholders or target groups in a project? What is your approach (e.g., informal coffee meetings, neighbourhood gatherings)?
5. How often do you communicate with the surrounding community? In what form do you engage with the target group? Is there a way for them to submit complaints or compliments?
6. How do you deal with the diversity of interests and opinions among stakeholders during a participation process?
7. How much room for influence is there during the realization phase? Have there been any changes made during implementation to relieve the local environment? What can still be adapted during the realization phase of a project?
8. Can you give examples of challenges you've encountered in implementing public participation in previous projects, and how you addressed them?

New Environmental Act: What do you know about what's coming?

1. Can you broadly describe what you know about the new Environmental Act?
2. What do you think is the objective of this new Environmental Act?
3. What kind of impact do you expect this new Environmental Act will have?
4. In what way have you prepared for the introduction of this Act?

How do you think this will affect your current work

1. Has public participation become more prominent due to the new Environmental Act? If so, how do you notice that? If not, why (not yet)?
2. Have you noticed a change in the client's expectations regarding public participation since 2024? If so, since when and what key themes have you had to take into account?
3. In your view, who holds the responsibility for public participation? Is it the permit applicant or the project initiator?

Ideal scenario

1. What would the ideal public participation process look like for you?
 - a. At what point would you be involved in that process?
 - b. How would you like to be involved?
 - c. What strategy would you apply?

Appendix F: Analysis Exploratory Interviews

Information Respondents

	Function	Company	Working in the role of environmental manager (years)	Projects (quantity)	Education	Working CT (years)
OM1	Senior advisor environmental manager	Con	8	100	Environmental technologist	29
OM2	Senior advisor environmental manager	Con & ON	2,5 dpi and 10 ON	70	Small business retail management	17
OM3	Environmental manager	ON	12	25	Structural hydraulic engineering	18
OM4	Environmental manager	ON	10		Civil engineering	15
OM5	Environmental manager	Con	7	20	Geography and spatial planning	13
OM6	Environmental manager	ON	2	30	Hotel and event management	2
OM7	Environmental manager	OG	9	50	TPM followed by Architecture	25
OM8	Environmental manager	ON	8	20	Civil engineering	20
OM9	Environmental manager	ON +OG	10	50	BSc in Civil Engineering (Applied Sciences)	25

Table 7 - Respondent information exploratory interviews

Top 10 most frequent codes

	Frequency	Codes
1.	36	Impact of the new Environmental Act
2.	27	Participation by the contractor
3.	22	Levels of influence - participation
4.	20	Balancing interests and costs
5.	18	Communication strategy implementation
6.	18	Handling external information during implementation
7.	17	Key considerations for public participation
8.	17	Flexibility for adjustments
9.	17	Innovative contract forms
10.	16	Definition of participation

Table 8 - Top 10 most frequent quotes

Clustering and Containerization

To systematically analyse the data, 85 codes were grouped into 11 clusters based on thematic connections (table 9). This process involved focused coding, where the top 10 most significant codes

were first compared to identify common themes. By continuously analysing and cross-referencing the coded quotes, these top 10 codes were distributed into clusters.

During this process, some codes were merged to enhance clarity and coherence. Specifically:

- Codes 4 and 8 were combined into Cluster 4 – Managing Multiple Stakeholder Interests for Contractors
- Codes 2 and 7 were merged into Cluster 2 – Participation Opportunities for Contractors in the Realization Phase

Clusters 7 and 8 were not among the top ten most frequently used codes. Since codes ranked 7 and 8 in the top ten were assigned to Cluster 4, these clusters initially remained unused. However, they were subsequently given content and purpose based on related themes.

Table 9 - Overview Clusters

Cluster	Titel	Explanation
1	Expected impact of the new Environmental Act	The most frequently used code is 'impact of the new Environmental Act'. This code refers to quotes from respondents who provide an assessment of their expectations regarding the potential effects of the new Act. The focus lies on perceived risks and whether the legislation is viewed in a positive, negative, or neutral light.
2	Opportunities for contractor-led participation during the realization phase	The second most frequently used code was 'contractor-led participation'. This category includes quotes reflecting perceived benefits, opportunities, and agreements related to participation from the contractor's perspective. Code number 7 from the top ten 'key considerations for public participation' was also included, as it similarly addresses opportunities for participation during the realization phase. Since the interviews specifically focused on the realization phase, only quotes referring to the realization or preparatory phases were selected.
3	Public participation: Influence	This cluster reflects how the level of influence granted to stakeholders is managed within a project. Since the aim is to understand the definition of public participation from the contractor's perspective, it is important to analyse this specific aspect of participation.
4	Managing multiple interests by the contractor	This cluster combines two of the top ten codes, as both relate to either the causes or consequences of weighing multiple, often conflicting, interests. Additional codes included in this cluster also reflect this dynamic of balancing diverse stakeholder interests.
5	Public participation: Communication	Literature consistently highlights that communication plays a crucial role in any participation process. The choice and application of communication strategies depend on various factors. It is therefore important to explore what these factors are and how they are addressed during the realization phase of a project.

6	Dealing with stakeholders	This cluster illustrates how external stakeholders are approached during the realization phase of a project. It represents a component of stakeholder management and helps to clarify the contractor's approach to engagement during this phase.
7	The environmental manager	The environmental manager serves as the key link between the surrounding environment, the client, and the contractor within a project. Their responsibilities typically involve managing environmental interests and the associated permitting processes. To create a clear picture of the environmental manager's role and objectives during the realization phase, relevant codes have been grouped under cluster 7.
8	Stakeholder analysis	A key tool for environmental managers, and the project team as a whole, is the stakeholder analysis. All respondents mentioned the use of stakeholder analyses to identify and map interests, often describing it as a standard part of their daily work. For this reason, all codes related to stakeholder analysis have been grouped under cluster 8.
9	Barriers	Cluster 9 brings together codes related to potential obstacles identified by contractors in the context of public participation. Codes with a negative connotation were grouped under this cluster to allow for a focused analysis of quotes in which contractors express challenges or limitations regarding participation.
10	Public participation: Definition	Understanding how public participation is defined is essential to assess whether there is a shared understanding of the concept. In the literature, public participation is often described as an umbrella term, and if not, it is important to identify where definitions diverge or align.
11	Content and knowledge of the new Environmental Act	To properly assess Cluster 1, it is important to analyse whether environmental managers possess sufficient knowledge of the new Environmental Act. This is essential to determine whether the risks they anticipate are based on a realistic understanding of the legislation.

To create a structured framework for analysis, these clusters were further organized into four overarching containers:

1. Public Participation

This container includes topics such as levels of influence, definitions of public participation, and communication. Communication is included here because the chapter literature study highlights it as a fundamental aspect of participation.

2. The New Environmental Act

This container focuses on the knowledge and perceptions of environmental managers regarding the Omgevingswet. It covers the objectives, motivations, and expected impacts of the new law, as well as interviewees' opinions and expectations regarding its implementation.

3. Current state of public participation from the contractor's perspective

Since this study examines public participation during the realization phase, this container includes the challenges, opportunities, and key considerations identified. The themes explored here provide insight into how participation might be shaped under the Omgevingswet.

4. Environmental Management

This container reflects the perspectives of environmental managers, highlighting their daily responsibilities, the stakeholder interests they balance, and their approach to managing participation.

These four containers provide a structured approach to organizing and analysing the data. The clusters within each container are interlinked and informed by the literature review, ensuring a strong connection between empirical findings and theoretical foundations.

By structuring the data in this way, the study creates a clear analytical framework that facilitates a systematic and manageable approach to examining the role of public participation in the realization phase under the Omgevingswet.

Table 10 - Overview Clusters and containers exploratory interviews

New Environmental Act	Cluster 1 - Expected impact of the new Environmental Act	Codes: 5
		Quotes: 47
	Cluster 11 - Content and knowledge of the new Environmental Act	Codes: 3
		Quotes: 20
Public Participation	Cluster 5 - Communication in public participation	Codes: 4
		Quotes: 21
	Cluster 10 - Definition of public participation	Codes: 4
		Quotes: 19
	Cluster 3 - Influence of public participation	Codes: 4
		Quotes: 31
Current situation of public participation from the contractors perspective	Cluster 2 - Opportunities for contractor-led participation during the realization phase	Codes: 12
		Quotes: 61
	Cluster 9- Barriers	Codes: 24
		Quotes: 168
	Cluster 4 - Managing multiple interests by the contractor	Codes: 10
		Quotes: 72
Environmental Mangement	Cluster 7 - The Environmental manager	Codes: 4
		Quotes: 22
	Cluster 8 - Stakeholder analysis	Codes: 5
		Quotes: 28
	Cluster 6 - Dealing with stakeholders	Codes: 6
		Quotes: 26

Appendix G: Interview protocol Case studies

Introduction (5 min)

Thank the interviewee and explain the purpose of the interview. Ask for permission to record the conversation. Emphasise that there are no right or wrong answers; the aim is to develop a clear understanding of real-world practices and link them to as many project examples as possible.

The purpose of this interview is twofold:

First, I aim to understand current practice by asking questions about how public participation is currently organised and experienced during the realization phase of infrastructure projects. Second, the interview focuses on the hypothetical impact of the new Environmental Act. I want to understand what contractors and clients expect would change if similar projects were to fall under the new Act.

Interviewee's role and experience:

- Could you briefly describe your role in project X?
- How much experience do you have with public participation in infrastructure projects?

Theme 1: Current practice (10 min)

1. **Using project X as an example, could you explain how public participation was organised during the realization phase?**

Prompt: What are the main constraints you experienced (for example, contractual or budgetary limitations)?

Prompt: Why were these particular participation objectives chosen?

Prompt: How did you experience the participation process? Did you see it as an added value, or more as a risk in terms of delays, costs, or planning issues?

2. **What changes during the realization phase of the project had an impact on stakeholders?**

Prompt: How do you deal with last-minute changes in the schedule that affect previously made agreements with stakeholders?

Prompt: Can you give an example of a situation where legal liability played a role in the participation process?

Prompt: In your view, what are the risks associated with public participation during the realization phase? Do you have any concrete examples?

3. **What impact did the participation process have on the course of the permitting procedure?**

Prompt: What were the expectations regarding objections and appeals? How were these handled, especially considering that stakeholders had already been involved in discussions beforehand?

Theme 2: Hypothetical impact (25–30 min)

4. **What do you know about the public participation requirements under the new Environmental Act? What is your opinion on the increased emphasis on public participation?**

Prompt: What risks do you expect? (e.g., reduced control, legal liability, increased costs, longer lead times, shifting expectations, unforeseen resistance)

5. **What new responsibilities do you expect during the realization phase regarding public participation under the new Environmental Act?**

Prompt: Were new responsibilities introduced in this project as a result of the participation process?

Prompt: Do you think the legal or financial risks are changing? Is more flexibility or transparency expected? How should participation requirements be safeguarded?

Prompt: What obligations do you expect will be added in the realization phase due to the Environmental Act?

Prompt: What new opportunities do you see for public participation under the Act?

Prompt: How would that influence your approach in this project?

Prompt: Why would that have been the right approach, even under the current Environmental Act?

Prompt: What has public support contributed to the realization phase?

6. If this project had fallen under the new Environmental Act, what do you think would have been organised differently regarding public participation?

Prompt: How do you think the new legal requirements would change the way you communicate and collaborate with stakeholders?

Prompt: Would any other aspects of the project have been organised differently?

Prompt: What elements of public participation would have been structured differently? (elements: transparency, communication, information, documentation, satisfaction, trust, public support)

Prompt: What challenges or opportunities do you foresee if this project had been subject to the new legislation?

7. How do you expect the collaboration between contractor and client to change as a result of the Environmental Act?

Prompt: How is the collaboration between you and the client currently going?

Prompt: What challenges do you experience in the collaboration with clients/contractors in the context of public participation?

Theme 3: Reflection and recommendations (15 min)

8. What would be your main recommendation for other contractors who will be dealing with public participation under the new Environmental Act?

Prompt: What lessons from this project could be valuable for contractors working under the Environmental Act?

9. What is the most important insight you have gained regarding public participation in practice?

10. In your view, what opportunities does the Environmental Act offer to improve or strengthen public participation that you also encountered in this project?

Prompt: Are there elements from this project that could serve as a good example?

Appendix H: Cross case analysis Matrix

(In Dutch)

case study
persoon
vragen

1. Kunt u aan de hand van project X toelichten hoe publieke participatie is georganiseerd tijdens de realisatiefase?
2. Wat zijn wijzigingen tijdens de realisatiefase van het project die van invloed waren voor belanghebbende?
3. Welke impact heeft het participatie traject op de loop van het vergunningsproces gehad?
4. Wat weet u over de publieke participatie-eisen (verplichtingen) binnen de Omgevingswet? Wat vindt u van de nieuwe nadruk op publieke participatie?
5. Welke nieuwe verantwoordelijkheden verwacht u in de realisatie fase van publieke participatie onder de Omgevingswet? En hoe zou dit de aanpak van dit project beïnvloeden?

Samenvatting	OM -OG	Quotes	Voorbeeld
Publieke participatie in de realisatiefase was minimaal omdat het grootste deel van de participatie voorafgaand aan de realisatie al had plaatsgevonden. De focus lag in deze fase meer op communicatie dan op daadwerkelijke participatie. Het doel was om de omgeving goed te blijven informeren over de voortgang van de werkzaamheden en eventuele impact. Deze uitgebreide participatie zorgde ervoor dat de meeste issues al vooraf waren besproken en vastgelegd, waardoor in de realisatiefase weinig aanpassingen nodig waren. Noodzaak van de dijkversterking is bij veel stakeholders ook duidelijk waardoor je al veel draagvlak behoud.		"De grootste participatie is voor de realisatiefase al gedaan. Tijdens de realisatie is het meer een kwestie van informeren en communiceren." " Hier in Zwolle, in de dijk. (7:43) We vertellen gewoon het eerlijke verhaal."	Er werden reguliere updates gedeeld met de omgeving en belanghebbenden. Dit hielp om begrip en draagvlak te behouden en de hinderervaring te minimaliseren. Er werd wekelijks gecommuniceerd met stakeholders over de voortgang en eventuele overlast. Participatie in de realisatiefase bestond vooral uit opvolgen van eerdere afspraken en zorgen dat de omgeving goed op de hoogte bleef.
Tijdens de realisatiefase werd er nauwelijks afgeweken van de oorspronkelijke plannen, omdat de uitvoeringsafspraken vooraf zeer gedetailleerd waren vastgelegd . Dit beperkte de impact van onverwachte wijzigingen op belanghebbenden.		"Wij willen zo min mogelijk afwijken van wat we hebben afgesproken met de stakeholders. Wijzigingen proberen we binnen planning en budget op te lossen."	Als er kleine wijzigingen waren, probeerde het projectteam deze direct op te lossen zonder dat het extra kosten of verträgen veroorzaakte. Als er modder op een erf lag, werd dit direct opgelost zonder dat het grote impact had. Werkzaamheden werden zoveel mogelijk gepland volgens het uitvoeringsplan, zodat belanghebbenden wisten waar ze aan toe waren.
Het uitgebreide participatietraject voorafgaand aan de realisatie zorgde ervoor dat er minder bezwaren en juridische procedures waren . Door belanghebbenden vroegtijdig te betrekken en afspraken helder vast te leggen, verliep het vergunningstraject relatief soepel.		"Omdat we zo'n uitvoerig participatietraject hebben gehad, hebben we maar drie bezwaren en twee beroepsprocedures gehad. Normaal zouden dat er zestig of meer zijn." "(22:16) Het is ook vanuit efficiëntie. (22:18) Het is heel fijn. (22:20) Dat we maar twee zinswijzer hadden."	Door vroegtijdige participatie en afstemming met stakeholders werd het planuitwerkingsproces goed onderbouwd, waardoor vergunningen sneller werden goedgekeurd en er minder juridische verträgen waren. Draagvlak onder stakeholders zorgde ervoor dat er weinig bezwaar werd gemaakt tegen vergunningaanvragen. Er waren maar drie bezwaren en twee beroepsprocedures, wat uitzonderlijk weinig is voor een project van deze omvang. goed geteet op de bomenkappen en grondeigenaren die compensatie ervoor kregen.
De Omgevingswet verplicht participatie voorafgaand aan projecten, maar de manier waarop dit wordt gedaan blijft vormvrij . Dit betekent dat projectorganisaties meer vrijheid hebben om participatie naar eigen inzicht in te richten.		"De Omgevingswet verplicht participatie aan de voorkant, maar hoe je dat doet is vormvrij. Je moet een kruisje zetten: 'heeft u geparticipeerd?' Maar hoe, dat mag je zelf bepalen."	In sommige projecten zal dit leiden tot meer documentatie en een sterkere verantwoordingsplicht richting belanghebbenden.
Er wordt verwacht dat participatie in de toekomst meer aantoonbaar moet worden vastgelegd. Dit betekent dat opdrachtne­mers en opdrachtgevers explicieter moeten documenteren hoe belanghebbenden betrokken zijn en welke input is meegenomen in de besluitvorming.		"In de toekomst zul je bewuster contactmomenten moeten vastleggen. Wij doen dat hier al, maar in andere projecten zal dat meer nodig zijn."	Dit kan betekenen dat omgevingsmanagers vaker schriftelijke verslagen moeten maken en dat er strengere controle komt op hoe participatie is georganiseerd. Toekomstige projecten zullen waarschijnlijk een meer gestructureerd participatieplan moeten maken dat formeel wordt vastgelegd.

Samenvatting	Stadsdijken Zwolle OM- ON Quotes
De publieke participatie tijdens de realisatiefase was vooral gericht op communicatie en afstemming met belanghebbenden , aangezien de grote participatiemomenten al in de planfase hadden plaatsgevonden. De opdrachtnemer had hierin een uitvoerende rol, terwijl de opdrachtgever verantwoordelijk was voor de daadwerkelijke participatieprocessen. Tijdens de realisatiefase werd er regelmatig contact onderhouden met omwonenden, bedrijven en andere stakeholders om hen te informeren over de voortgang van de werkzaamheden en eventuele impact. Dit gebeurde via: Werkbezoeken en fysieke bijeenkomsten met belangrijke stakeholders Nieuwsbrieven en e-mails naar bewoners en bedrijven Specifieke overleggen met bijvoorbeeld bedrijven die afhankelijk waren van een goede bereikbaarheid. De participatie vond grotendeels plaats in de planfase en werd in de realisatiefase vooral opgevolgd met communicatie en afstemming. Er was een sterk gedocumenteerd proces met tien participatiemomenten, wat leidde tot minder weerstand en juridische bezwaren. In de realisatiefase werd participatie grotendeels vervangen door communicatie. Dit werd ervaren als een overgang van tweezijdige interactie (participatie) naar een meer eenzijdige informatiestroom (communicatie).	"De grote participatie was eigenlijk al afgerond voordat wij begonnen, maar wij zorgen ervoor dat de afspraken die gemaakt zijn worden nageleefd en dat de omgeving goed op de hoogte blijft." "Wij hebben in de planuitwerkingsfase tien participatiemomenten gehad, wat heel zorgvuldig is gedaan. Maar op een gegeven moment zelden stakeholders: 'Wanneer gaan jullie beginnen?'" "Participatie is tweezijdig, communicatie is eenzijdig. Wij zijn in de realisatiefase vooral bezig met informeren en hinderbeperking."
Hoewel het project grotendeels volgens plan verliep, waren er enkele wijzigingen in de planning en fasering van het werk , die directe impact hadden op belanghebbenden. Vooral omwonenden en bedrijven merkten dit, bijvoorbeeld door tijdelijke verkeersomleidingen en beperkte toegang tot bepaalde gebieden.	"Sommige planningen moesten aangepast worden door onvoorziene omstandigheden, maar we hebben altijd geprobeerd dit goed af te stemmen met de betrokken partijen."
Omdat het participatietraject in een vroeg stadium goed was geregeld , verliep het vergunningsproces relatief soepel. Er was weinig verzet vanuit de omgeving, waardoor juridische procedures tot een minimum beperkt bleven.	"We hebben weinig weerstand ervaren, omdat de meeste bezwaren al in een eerdere fase zijn besproken en opgelost."
Er is bekendheid met de participatieverplichting onder de Omgevingswet, maar er is ook nog veel onduidelijkheid over hoe streng dit gehandhaafd wordt . De algemene verwachting is dat publieke participatie een grotere rol gaat spelen en dat er meer aandacht zal zijn voor verantwoording en verslaglegging . De Omgevingswet introduceert een participatieverplichting, maar hoe streng dit gehandhaafd wordt, is nog onduidelijk. Het belang van documentatie en aantoonbaarheid neemt toe.	"We weten dat participatie verplicht wordt, maar hoe het precies gecontroleerd gaat worden is nog afwachten."
Opdrachtnemers verwachten dat ze in de toekomst actiever betrokken worden bij participatie en niet alleen verantwoordelijk zijn voor de uitvoering. Er zal waarschijnlijk meer aandacht zijn voor het documenteren en terugkoppelen van participatie-inspanningen. De Omgevingswet verplicht publieke participatie aan de voorkant van het project, maar hoe dit wordt gecontroleerd en gehandhaafd is nog onduidelijk. De verwachting is dat opdrachtne­mers in de realisatiefase meer verantwoordelijkheid zullen krijgen om participatie te verantwoorden en beter te documenteren. Dit kan leiden tot extra rapportageverplichtingen en een sterkere focus op aantoonbaarheid van participatie-inspanningen. Daarnaast is het belangrijk voor de opdrachtnemer om te gaan realiseren dat je ookde opdrachtgever moet gaan controleren op hoe zij het participatie proces hebben aangepakt en zo nodig er op aanspreken.	<i>"Waarschijnlijk zullen opdrachtne­mers meer verantwoordelijkheid krijgen om aan te tonen hoe ze met participatie zijn omgegaan."</i> <i>"Ik denk wel dat je in de toekomst misschien veel meer aantoonbaar de dingen moet gaan doen. Maar dat deden wij eigenlijk al."</i> <i>"Nou kritische vragen stellen natuurlijk. De opdrachtgever moet ook zijn rol als opdrachtgever uitvoeren. Als je dat niet goed doet moet je dat ook zeggen."</i>

Voorbeeld	Samenvatting	PM -OG Quotes	Voorbeeld
<p>Dijkdenkers (bewoners die actief meedachten) werden tijdens de realisatiefase nog steeds betrokken bij ontwerpkeuzes. Scania (vrachtwagenfabrikant) werd intensief meegenomen, omdat hun productie afhankelijk was van bereikbaarheid. Regelmatige nieuwsbrieven en updates aan belanghebbenden over de voortgang en hinder.</p>	<p>Publieke participatie in de realisatiefase was grotendeels een voortzetting van eerder gemaakte afspraken. De belangrijkste participatiemomenten vonden plaats in de planfase, maar tijdens de uitvoering was het cruciaal om de omgeving goed op de hoogte te houden. Dit gebeurde via: Regelmatige nieuwsbrieven en updates aan belanghebbenden Overlegmomenten met specifieke stakeholders die direct door het project geraakt werden Bewonersbijeenkomsten om hinder en eventuele aanpassingen te bespreken De rol van de projectmanager OG was voornamelijk om te zorgen dat de gemaakte afspraken uit de participatiefase werden nagekomen en dat er geen escalaties ontstonden. De projectaanpak was gebaseerd op strategisch omgevingsmanagement, waarbij belanghebbenden werden ingedeeld in meebeslissers, meewerkers, meedenkers en meeweters. Dit zorgde voor een gerichte participatieaanpak per stakeholdergroep. Meebeslissers (bijv. gemeente Zwolle, provincie Overijssel, Rijkswaterstaat) zaten direct aan tafel in begeleidingsgroepen. Meedenkers (zoals bewoners, bedrijven en dijkdenkers) werden intensief betrokken in de planuitwerkingsfase. Meeweters (de bredere gemeenschap) werden op de hoogte gehouden via nieuwsbrieven en andere communicatiekanalen.</p>	<p>“Je merkt dat mensen vooral gerustgesteld willen worden. Als ze weten waar ze aan toe zijn, accepteren ze de situatie veel makkelijker.” “We werken met strategisch omgevingsmanagement. We hebben meebeslissers, meewerkers, meedenkers en meeweters. Die ga je allemaal op een andere manier benaderen.”</p>	<p>Er waren aparte overleggen met ondernemers in de regio om hinder door afsluitingen te minimaliseren. Voorbeeld: De Scania-fabriek werd nauw betrokken om versterking van hun productieproces te minimaliseren. Door slim in te spelen op hun zomersluiting konden werkzaamheden worden gepland zonder economische schade.</p>
<p>Verkeersomleiding: Een geplande afsluiting van een kruispunt moest twee weken worden uitgesteld vanwege onverwachte ondergrondse kabels. Dit had invloed op het verkeer en leverde overlast op voor bedrijven en omwonenden.</p>	<p>Hoewel het project grotendeels volgens plan verliep, waren er enkele onverwachte wijzigingen die invloed hadden op de omgeving. Een belangrijke uitdaging was het vinden van een goede balans tussen planning en flexibiliteit bij wijzigingen. De realisatiefase kende enkele onvoorziene uitdagingen, zoals technische complicaties en extra veiligheidsmaatregelen. Belangrijk was het snel schakelen met stakeholders om overlast en weerstand te minimaliseren.</p>	<p><i>“Je hebt altijd te maken met onverwachte dingen in de uitvoering, maar het gaat erom hoe je dat communiceert naar de omgeving.</i></p>	<p>Een bepaalde wegafsluiting moest worden verlengd vanwege technische complicaties, wat tot onvrede leidde bij omwonenden. Dit werd opgelost door een extra informatieavond te organiseren en de klachten serieus te nemen.</p>
<p>Minder bezwaren: Doordat bewoners en bedrijven al in een vroeg stadium betrokken waren, waren er weinig formele klachten of juridische procedures tijdens de uitvoering. Door de zorgvuldige participatie aan de voorkant waren er slechts drie bezwaren en twee beroepsprocedures bij de Raad van State, wat uitzonderlijk laag is voor een project van deze omvang.</p>	<p>De vroege en gestructureerde participatie in de planfase had een positief effect op het vergunningstraject. Omdat belanghebbenden al in een vroeg stadium betrokken waren en hun zorgen konden uiten, waren er minder formele bezwaren.</p>	<p>“Doordat we al veel participatiemomenten in een eerder stadium hadden, werd het vergunningstraject een stuk soepeler.” Ja twee beroep en één zinswijze. Dat is een aparte smaak. Dat is een heel groot voordeel.</p> <p>En dat we ongestoord doorgaan zonder protesten. Nul zinswijze op de bomenkap. Wat echt heel bijzonder is vind ik.</p> <p>En weinig tot zeer weinig klachten. En heel weinig ongevallen”Dus op basis van haar expertise hebben we het zoveel mogelijk proberen in te richten als omzevineswet proef.”</p>	<p>Bomenkap: Er werd een QR-code systeem opgezet waarmee bewoners konden zien wat er met elke boom gebeurde. Dit zorgde voor begrip en acceptatie. Onteigeningen: Waar nodig werd goed afgestemd met eigenaren, zodat juridische procedures werden voorkomen. Bij een eerder project zonder uitgebreide participatie waren er veel bezwaren en juridische procedures. Hier was dat beperkt tot een klein aantal bezwaren.</p>
<p>In toekomstige projecten zou er waarschijnlijk een verplichte rapportage moeten komen waarin opdrachtnemers laten zien hoe participatie heeft plaatsgevonden.</p>	<p>Er is bekendheid met de participatie-eisen onder de Omgevingswet, maar er is nog onzekerheid over hoe dit in de praktijk zal werken. De extra nadruk op participatie wordt als positief gezien, mits er duidelijke richtlijnen komen over de uitvoering en verantwoording. De Omgevingswet zal naar verwachting participatie formeler maken en zorgen voor meer verantwoording en documentatie. De praktijk van participatie zal niet per se veranderen, maar de aan toonbaarheid van participatie-inspanningen wordt belangrijker.</p>	<p>“Participatie is belangrijk, maar het moet niet een checklist worden zonder echte impact.” “We zouden waarschijnlijk meer moeten aantonen hoe participatie is uitgevoerd, maar inhoudelijk zou onze aanpak niet veel veranderen.”</p>	<p>Een risico is dat participatie formeel wordt afgevat, zonder dat het echt iets toevoegt. Daarom is het belangrijk om participatie goed te organiseren en niet te zien als een verplichting zonder inhoud.</p>
<p>In toekomstige projecten zouden aannemers mogelijk verplicht worden om een participatieverslag aan te leveren bij de oplevering.</p>	<p>De verwachting is dat er meer formele vastlegging van participatie nodig zal zijn, inclusief documentatie van alle contactmomenten en hoe er met feedback is omgegaan. Dit kan extra administratieve lasten opleveren voor projectteams.</p>	<p>“Het vastleggen van participatie wordt waarschijnlijk veel belangrijker. Dat betekent meer rapportages en verantwoording.”</p>	<p>In toekomstige projecten zou er mogelijk een verplicht participatiedossier moeten komen dat bij de oplevering wordt ingediend.</p>

6. Als dit project onder de Omgevingswet zou vallen, wat denkt u dat er in dit project anders georganiseerd zou worden op het gebied van publieke participatie?	Er zou waarschijnlijk nog meer nadruk liggen op het documenteren van participatiemomenten en er zou een formele participatieverantwoording moeten worden opgesteld. Dit project had echter al een zeer uitgebreid participatietraject, waardoor de impact van de Omgevingswet relatief beperkt zou zijn.	"Wij hebben nu al een hoge mate van vastlegging. Op kleinere projecten zou dit een grotere verandering zijn dan bij ons."	Bij andere projecten met minder participatie zou de Omgevingswet dwingen om participatie structureler en formeler in te richten.	De opdrachtgever zou waarschijnlijk meer verplichtingen krijgen om te laten zien hoe belanghebbenden bij het project zijn betrokken. Dit kan betekenen dat er meer formele participatiemomenten komen, zelfs in de realisatiefase.
7. Hoe verwacht u dat de samenwerkingen tussen aannemer en opdrachtgever verandert als gevolg van de Omgevingswet?	De samenwerking zal waarschijnlijk formeler en transparanter worden, met meer nadruk op overdracht van participatie-informatie van opdrachtgever naar opdrachtnemer.	"Als een opdrachtgever participatie goed vormgeeft en goed overdraagt aan de opdrachtnemer, dan gaat er minder informatie verloren."	Een duidelijke overdracht van participatiedocumenten en afspraken zal essentieel worden om misverstanden en juridische complicaties te voorkomen.	De samenwerking zal waarschijnlijk formeler en gestructureerder worden, met meer nadruk op het overdragen van participatie-informatie tussen opdrachtgever en opdrachtnemer. De samenwerking tussen opdrachtgever en aannemer zou formeler en meer gestructureerd kunnen worden, met meer nadruk op het overdragen van participatie-informatie. Dit kan betekenen dat opdrachtnemers in een eerder stadium betrokken moeten worden om risico's beter te managen en participatie-inspanningen te verantwoorden. Aannemers moeten zich vroegtijdig verdiepen in het participatietraject en ervoor zorgen dat ze actief betrokken worden bij de besluitvorming. Daarnaast is het belangrijk om documentatie goed op orde te hebben en te zorgen voor een sterke overdracht van informatie tussen opdrachtgever en opdrachtnemer.
1. Wat zou u als belangrijkste aanbeveling geven aan andere aannemers die te maken krijgen met publieke participatie onder de Omgevingswet?	Aannemers moeten vroegtijdig inzicht krijgen in het participatietraject en niet pas bij de uitvoering betrokken worden. Dit voorkomt verrassingen en vergemakkelijkt de samenwerking met belanghebbenden.	"Begin vroeg met het opbouwen van relaties en documenteer alles zorgvuldig."	Het projectteam gebruikte een systematische aanpak met participatielussen en heldere verslaglegging, wat bijdroeg aan een soepelere uitvoering.	Het is belangrijk dat aannemers vroegtijdig betrokken worden bij participatieprocessen , zodat zij hier in de uitvoering beter op kunnen inspelen.
2. Wat is volgens u het belangrijkste inzicht dat u heeft opgedaan m.b.t. publieke participatie in de praktijk?	Participatie draait niet alleen om inspraak, maar vooral om verwachtingsmanagement en het voorkomen van weerstand door heldere communicatie.	"Als mensen goed geïnformeerd zijn, accepteren ze overlast veel makkelijker."	Bij omlleidingen en afsluitingen werd duidelijk gecommuniceerd wat belanghebbenden konden verwachten, wat de hinderervaring verminderde.	Participatie werkt het beste als het in een vroeg stadium goed wordt geregeld. Dit voorkomt weerstand en juridische complicaties later in het proces. Participatie draait niet alleen om het vragen om input , maar vooral om het verwachtingen goed managen , zodat belanghebbenden realistische verwachtingen hebben over hun invloed.
3. Welke kansen biedt de Omgevingswet volgens u om publieke participatie te verbeteren of te versterken die u in dit project ook heeft ondervonden?	De Omgevingswet biedt de kans om participatie structureler en beter aantoonbaar te maken, waardoor projecten soepeler kunnen verlopen en juridische bezwaren afnemen.	"Als je participatie goed regelt aan de voorkant, scheelt dat enorm veel problemen in de uitvoering."	Dankzij de uitgebreide participatie vooraf waren er in dit project slechts drie bezwaren, terwijl dat er normaal tientallen zouden zijn.	De Omgevingswet biedt de kans om participatie duidelijker en gestructureerder te maken, zodat stakeholders beter begrijpen hoe en wanneer ze inspraak hebben. De Omgevingswet biedt de kans om participatie gestructureerder en transparanter te maken, zodat stakeholders beter begrijpen hoe en wanneer ze inspraak hebben. Daarnaast kan het helpen om een gelijk speelveld te creëren tussen verschillende projecten, waarbij participatie niet vrijblijvend is maar een vast onderdeel van het proces

<p>"Ik denk dat we meer moeten rapporteren over hoe participatie heeft plaatsgevonden, zelfs tijdens de uitvoering." ""Wij hebben een hoge mate van vastleggingen en alles. Dat gebeurde hier al, maar ik kan me voorstellen dat dit bij andere projecten nog strikter wordt."</p>	<p>Leidingenbrug-oplossing; Dit was een van de grootste risico's in het project. Dankzij vroegtijdige participatie met bedrijven kon een alternatieve oplossing worden bedacht. Onder de Omgevingswet zou er mogelijk een formeel rapport zijn vereist waarin deze participatie wordt vastgelegd en verantwoord.</p> <p>Bedrijven buiten de dijk plaatsen: Een andere oplossing waarbij bedrijven zelf bijdroegen aan de kosten en zo verzekeringsvoordelen kregen. Dit soort stakeholderparticipatie zou onder de Omgevingswet waarschijnlijk nog explicieter moeten worden onderbouwd.</p>	<p>De aanpak zou grotendeels hetzelfde blijven, maar er zou meer nadruk liggen op het documenteren en verantwoorden van participatie-inspanningen.</p>	<p>"We zouden waarschijnlijk meer moeten aantonen hoe participatie is uitgevoerd, maar inhoudelijk zou onze aanpak niet veel veranderen."</p>
<p>"We zullen waarschijnlijk vaker in gesprek moeten over hoe participatie wordt opgezet en uitgevoerd." "De eerste vraag, waren wij samen in alliantie? Dus opdrachtgever en opdrachtnemer is één team. Dus wij zijn één. Dus we spreken ook vanuit één mond. Dus dit is niet de opdrachtgever of de opdrachtnemer. Wij zijn het dijkteam. En op een gegeven moment als we in uitvoering zijn, zijn we gestart. Dan pas hebben we de rol. Ik ben nu de opdrachtgever en jij bent nu de opdrachtnemer. Toen zijn we pas uit elkaar gegaan." "Dan denk ik ja. Dan in ieder geval dat er een goed dossier wordt overgedragen. En in de basis begint het dossier altijd bij een opdrachtgever."</p>	<p>We hebben alles nu in onze afspraken, in onze plannen verwerkt. En we moeten nu gewoon uitvoeren wat we in onze plannen hebben neergezet. En zorgen dat we zo hoog mogelijk het werk maken. De opdrachtnemer moet kritischer kijken naar de participatie die de opdrachtgever heeft uitgevoerd en daarover rapporteren.</p> <p>Er kunnen contractuele verplichtingen ontstaan waarbij opdrachtnemers moeten aantonen hoe ze participatie voortzetten tijdens de uitvoering.</p>	<p>De samenwerking tussen OG en ON zal waarschijnlijk formeler en gestructureerder worden, met duidelijke afspraken over wie verantwoordelijk is voor participatie en de rapportage ervan. Contracten zullen waarschijnlijk meer ruimte bieden voor flexibiliteit, zodat aannemers beter kunnen inspelen op onvoorziene omstandigheden.</p>	<p><i>"De samenwerking zal meer vastgelegd worden, zodat iedereen precies weet wat er van hen wordt verwacht." "Geef opdrachtnemers vrijheid in gebondenheid. Wij hadden alleen een einddatum in het contract, en dat gaf ruimte om slim te plannen." "Ja dat vind ik een lastige. Kijk als je goed samenwerkt. Dan denk je daar heel erg over na hoe je dat slim doet.</i></p> <p><i>Ja dat verandert niet door de omgevingswet. Ik denk wel dat door de omgevingswet. Dat mensen die het niet slim deden wat eerder gedwongen worden om er beter over na te denken.</i></p>
<p>"Hoe eerder je als aannemer weet wat de omgeving verwacht, hoe minder verrassingen je krijgt tijdens de uitvoering." "Heel vaak is het eindproduct van de opdrachtgever. Want een participatietrack, dat is een vragenspecificatie met eisen. In de omgeving komen dan wel eisen en wensen. Opdrachtgevers die gaan er iets mee doen. Die gaan het vertaalbaar aan eisen zetten. En die geven dat mee aan de opdrachtnemer. Wij winnen het contract, on l'adieu. En we gaan aan de slag. Hier staat eis, dit moeten wij doen. We gaan letterlijk doen wat daar staat. Maar we kunnen wel hoe we het gaan doen. We kunnen het op verschillende manieren doen. En dat weten we beter. Op het moment dat wij weten waar die eis goed vandaan komt. En wat de achtergrond is. Heel vaak hebben we de tijd daar niet eens voor. Omdat we gewoon aan de slag moeten. Omdat we gewoon door moeten.</p> <p>En hoe meer tijd je ervoor krijgt. Destoe beter zal de uitvoering zijn."</p> <p>"Dus je wil eigenlijk zo goed mogelijk. Dat die historie helder is. Zodat je er zelf ook iets mee kan doen."</p>	<p>In dit project was er een uitgebreide participatieplanning, wat resulteerde in minder weerstand en juridische procedures. Aannemers die pas laat betrokken worden, moeten extra tijd investeren in het achterhalen van de verwachtingen van stakeholders en de eerdere participatie-inspanningen van de opdrachtgever kritisch beoordelen.</p>	<p>Aannemers moeten vroegtijdig inzicht krijgen in het participatieproces en niet alleen als uitvoerende partij betrokken worden.</p> <p>De mensen van de uitvoering die komen mee. Die doen beloftes, maar die komen dus ook tot het gaatje toena. En wat ik voor opdrachtgevers dan als tip heb...</p> <p>"Ja, en dat vinden de professionele opdrachtgevers ook heel prettig. Want dan kunnen ze hun ding doen. En mensen vinden het ook leuk om hun werk goed te doen.</p> <p>Ik ken eigenlijk helemaal niemand die naar zijn werk gaat... en dan denkt van, ik ga er een potje van maken. Dus je moet vooral in zo'n project, als die mensen uitdagen om hun expertise er volop te benutten. En vrijheid te nemen om de betere dingen te doen. Dat zou ik wel echt als tip mee willen geven."</p> <p>Geef de partij vrijheid in gebondenheid. Wij hebben bijvoorbeeld in het contract alleen een einddatum staan. En dat geeft de opdrachtnemer de gelegenheid. "</p>	<p>Door al tijdens de aanbesteding contact te leggen met wijkorganisaties kon de communicatie in de uitvoering beter verlopen.</p> <p>Mensen accepteren veel als je maar duidelijk bent en ze tijdig informeert." "Wij kwamen als groot waterschap de wijk in, maar we bereikten de mensen niet. Travers hielp ons echt de brug te slaan."</p> <p>De samenwerking met welzijnsorganisatie Travers hielp om participatie beter af te stemmen op de behoeften van bewoners.</p>
<p>"Participatie werkt het beste als je eerlijk bent over wat mensen wel en niet kunnen beïnvloeden."</p> <p>"Als participatie verplicht wordt, kan dat helpen om een gelijk speelveld te creëren tussen verschillende projecten."</p>	<p>Het participatietraject in dit project heeft ervoor gezorgd dat er slechts drie bezwaren en twee beroepsprocedures waren bij de Raad van State, terwijl dit bij vergelijkbare projecten vaak tientallen bezwaren zijn. Dit laat zien dat een zorgvuldige participatie-aanpak juridische risico's kan beperken.</p> <p>Dit project laat zien dat een grondige participatie-aanpak voordelen oplevert, zoals minder weerstand en soepelere vergunningstrajecten. De Omgevingswet kan ervoor zorgen dat deze aanpak breder wordt toegepast en niet afhankelijk is van de mate waarin een projectteam participatie belangrijk vindt.</p>	<p>Participatie draait vooral om duidelijke communicatie en verwachtingsmanagement. Veel problemen kunnen voorkomen worden door belanghebbenden goed te informeren over wat ze kunnen verwachten. Kennis van lokale gemeenschappen is essentieel voor succesvolle participatie.</p> <p>De Omgevingswet kan participatie structuur en consistentie geven, mits het goed wordt toegepast en niet alleen een bureaucratische verplichting wordt.</p> <p>"Als participatie goed wordt geïntegreerd, kan het echt bijdragen aan een soepeler proces." "Ja, de wet is in principe een stok achter de deur. Dus ja, biedt het kansen. Als je het belang van participatie inzet...</p> <p>dan doe je dat toch wel natuurlijk. Dus het is meer een soort bodempje wat het legt."</p>	

case study persoon	OM- OG			N211 - Wippolder		
vragen	Samenvatting	Quotes	Voorbeeld	Samenvatting	Quotes	Voorbeeld
1. Kunt u aan de hand van project X toelichten hoe publieke participatie is georganiseerd tijdens de realisatiefase?	<p>De publieke participatie in de realisatiefase van het N211-project was vooral gericht op het informeren van belanghebbenden en het minimaliseren van overlast. De grote participatiemomenten vonden al plaats in de planfase, maar in de uitvoering was het belangrijk om bewoners en bedrijven betrokken te houden. De opdrachtgever hield nauw contact met stakeholders door middel van:</p> <p>Periodieke bijeenkomsten met omwonenden en bedrijven Directe communicatiekanalen zoals e-mails en nieuwsbrieven Omgevingsmanagers die als aanspreekpunt fungeerden</p> <p>De opdrachtnemer had minder directe invloed op participatie, maar moest ervoor zorgen dat de communicatie vanuit de opdrachtgever correct werd uitgevoerd en dat gemaakte afspraken werden nageleefd. Maak expliciet dat informeren niet automatisch betekent dat stakeholders invloed hebben, wat voor sommigen een beperkende factor is in participatie.</p>	<p><i>“Want hoe eerder je in een traject zit, hoe meer je te beïnvloeden wordt. Dus echt zeker in de uitvoering, dan heb je het eigenlijk over inpassing. Over welke bomen ga je plaatsen. Dus de ruimte is heel beperkt voor participatie. Als je kijkt naar beïnvloeding, want informeren is ook participatie. Ben ik het niet mee eens. Informeren vind ik heel anders, ja. Maar dat is de meest voorkomende vorm van participatie in een uitvoeringsfase.”</i></p>	<p>Logistieke afstemming met bedrijven om te zorgen dat leveringen konden doorgaan ondanks afsluitingen.</p> <p>Omleidingsroutes besproken met transporteurs om verkeersdrukte in woonwijken te voorkomen.</p>	<p>Bij N211 lag de nadruk op informeren en betrekken, met name over omleidingsroutes en fasering.</p> <p>Informeren: Via bewonersbrieven, een bouw-app, projectwebsite en geofencing voor forenzen.</p> <p>Betrekken: Gemeenten werden uitgenodigd om mee te denken over de omleidingsroutes.</p>	<p>“In de realisatiefase is het vooral informeren richting omgeving.”</p> <p>“Heb je de verschillende gemeentes niet betrokken aan de voorkant? Dan krijg je dat vinkje ook niet.”</p>	<p>Geofencing: Bestuurders kregen meldingen over wegafsluitingen.</p> <p>Overleg met Flora Holland: Om de fasering af te stemmen op piekperiodes in de bloemenhandel.</p>
2. Wat zijn wijzigingen tijdens de realisatiefase van het project die van invloed waren voor belanghebbende?	<p>Er waren enkele wijzigingen in de uitvoering die impact hadden op de omgeving, voornamelijk vanwege onvoorzienne omstandigheden zoals ondergrondse kabels en weersomstandigheden.</p>	<p><i>“Soms moet je schuiven in de planning, maar als je het goed uitlegt, is er vaak begrip.”</i></p>	<p>Een wegafsluiting moest met twee weken verlengd worden, wat leidde tot extra communicatie met bewoners en bedrijven om de impact te minimaliseren.</p>	<p>Onvoorzienne veranderingen in planning en fasering hadden impact op stakeholders.</p> <p>Bedrijventerreinen: Een bedrijf met grote kranen kon niet omrijden via de omleidingsroutes.</p> <p>Recreatie & toerisme: Vertragingen beïnvloedden campings en vakantieaaners.</p>	<p>“Binnen het bedrijventerrein zit een planchaat met hele grote kranen, die passen niet door een omleiding heen.”</p> <p>“Stel dat de vertraging doorschuift naar het voorjaar, dan ga je in overleg omdat dat hun belang schaadt.”</p>	<p>Aanpassing omleidingen: Om rekening te houden met groot transport.</p> <p>Campingbeheer: Extra overleg bij vertragingen die in het hoogseizoen vielen.</p>
3. Welke impact heeft het participatie traject op de loop van het vergunningsproces gehad?	<p>Het participatietraject heeft ervoor gezorgd dat er minder bezwaren en juridische procedures waren, omdat stakeholders al vroeg werden meegenomen in de besluitvorming. Participatie vermindert juridische procedures, maar garandeert niet dat alle bezwaren worden weggenomen.</p>	<p>“Doordat we vooraf participatie goed hebben geregeld, hebben we tijdens de uitvoering weinig problemen gehad met vergunningen.”</p> <p>“En die omgevingsvergunning is wel al in procedure, helemaal. Alleen we hebben er twee bezwaren op gehad. Dus hij is nog niet onherroepelijk. Nog steeds niet. En we zijn dus gewoon gaan werken.”</p> <p>“Het is een afweging ja. Want anders zouden wij heel veel geld per maand moeten gaan betalen aan de aannemer. Want die heeft niet gecontracteerd. Die stond al klaar om te gaan werken. En de Raad van State heeft zich niet gehouden aan. We zouden binnen een half jaar een uitspraak krijgen.</p> <p>Nou het is nu nog steeds niet. Het is al denk ik twee jaar bijna. Dus zij vertragen”</p>		<p>Participatie hielp bij de goedkeuring van verkeersmaatregelen, maar had minder invloed op technische vergunningen.</p> <p>Vergunningen voor omleidingen: Gemeenten moesten instemmen met de verkeersaanpassingen.</p> <p>Technische vergunningen: Werden door de provincie geregeld zonder veel invloed van participatie.</p>	<p>“Wij dienen de omleiding in bij de provincie. En die gaat het toetsen bij de gemeentes. Zijn jullie allemaal akkoord?”</p> <p>“Als je participatie niet goed doet, loop je risico's bij het verkrijgen van vergunningen.”</p>	<p>Snelle goedkeuring van omleidingen door voorafgaande afstemming met gemeentes.</p> <p>Geen vertragingen in realisatie dankzij goed gecoördineerde vergunningaanvragen.</p>
4. Wat weet u over de publieke participatie-eisen (verplichtingen) binnen de Omgevingswet? Wat vindt u van de nieuwe nadruk op publieke participatie?	<p>De Omgevingswet maakt participatie verplicht, maar laat veel ruimte voor eigen invulling. Dit kan zowel kansen als uitdagingen opleveren.</p>	<p>“Participatie wordt verplicht, maar hoe je het precies moet doen, blijft nog steeds vormvrij.”</p>	<p>In de toekomst moeten projecten waarschijnlijk beter documenteren hoe participatie is georganiseerd en hoe de input van belanghebbenden is verwerkt.</p>	<p>De Omgevingswet introduceert 5 treden van participatie, maar biedt ruimte in de mate van inspraak.</p> <p>Participatie wordt verplicht, maar niet altijd diepgaand. Duidelijkere verwachtingen over welke participatietreden een aannemer moet volgen.</p> <p>Er wordt vooral meer nadruk gelegd op documentatie en verantwoording.</p> <p>Meer verplichting om participatie-uitkomsten vast te leggen. Extra tijd nodig voor communicatiestrategie vanwege uitgebreide stakeholderanalyses.</p>	<p>“Je hebt vijf treden van participatie, van informeren tot meebesluten. Die eisen worden nu meegegeven in nieuwe werken.”</p> <p>“Het moet duidelijk zijn: waarover mag je participeren? Verwachtingsmanagement is cruciaal.”</p>	<p>Informeren vs. inspraak: Bij N211 mochten bewoners niet meepraten over het ontwerp, maar wel over uitvoeringsaspecten zoals verkeersroutes.</p> <p>Bewonersverwachtingen managen: Door van tevoren duidelijk te maken waarover inspraak mogelijk was.</p>
5. Welke nieuwe verantwoordelijkheden verwacht u in de realisatie fase van publieke participatie onder de Omgevingswet? En hoe zou dit de aanpak van dit project beïnvloeden?	<p>Naar verwachting moeten opdrachtnemers en opdrachtgevers meer verantwoording afleggen over hoe participatie is verlopen en welke maatregelen zijn genomen om rekening te houden met belanghebbenden. Belangrijk is om transparant te blijven en dta je het process goed inricht. Focus van de ON is nog steeds heel erg op de technische oplossing terwijl je ook kan kijken hoe dit andersom is.</p>	<p>“We zullen waarschijnlijk veel meer moeten vastleggen en kunnen aantonen wat we met de input van stakeholders hebben gedaan.”</p> <p>“Ik vind dat nog steeds binnen aannemers... ik weet niet of dat dan specifiek voor deze aannemers is... maar dat er wel heel erg vanuit de techniek wordt gekeken. Dus je verzint een oplossing die is technisch... en dan ga je kijken wat is de impact op de omgeving... terwijl je natuurlijk ook zou kunnen kijken hoe het andersom is.”</p> <p>“maar er wordt heel erg vanuit de techniek geredeneerd dan naar de andere consequenties voor de omgeving.”</p> <p>“We verzinnen een technische oplossing en kijken daarna wat de impact is op de omgeving... terwijl je ook andersom zou kunnen redeneren.”</p>	<p>Er zou een formele participatierapportage moeten komen, waarin alle contactmomenten en afspraken worden vastgelegd. Voor de verdiepte ligging moet de weg dicht maar wat betekend dit voor de omgeving en de bedrijven daar. Je kan een techniek toepassen waarbij de weg 10 dagen dicht gaat of misschien is er wel een oplossing voor 5 dagen.</p>		<p><i>“Wij hebben participatie verwerkt in ons projectbesluit, inclusief hoe we zijn omgegaan met zienswijzen en inbreng van belanghebbenden. ”</i></p> <p><i>“Je moet de hele analyse aan de voorkant heel goed doen: wie zijn de belanghebbenden, wat speelt er?”</i></p>	<p>Extra rapportage-eisen: Aannemers moeten participatie-inzichten expliciet verantwoorden.</p> <p>Meer strategische planning: Om stakeholders beter te categoriseren en gericht te benaderen.</p>

	PM-OG	
Samenvatting	Quotes	Voorbeeld
<p>Publieke participatie in de realisatiefase was voornamelijk gericht op het nakomen van eerder gemaakte afspraken en het voorkomen van escalaties. In deze fase lag de focus niet meer op het verzamelen van input, maar op heldere communicatie en verwachttingsmanagement.</p> <p>Belangrijke middelen die werden ingezet:</p> <p>Regelmatige overleggen met de belangrijkste stakeholders Nieuwsbrieven en updates om bewoners en bedrijven op de hoogte te houden Omgevingsmanagers als vast aanspreekpunt voor vragen en klachten</p>	<p>"Tijdens de uitvoering moet je vooral zorgen dat wat eerder is afgesproken, wordt nageleefd. Dat voorkomt gedoe." "Ja, want je merkt vooral ook in deze fase, ja, mensen zijn ook gewoon nieuwsgierig, maar ook benieuwd naar wat gebeurt er of waarom is die afsluiting. Dus het is informeren en wat ik altijd ook maar zeg, het is ook eigenlijk draagvlak behouden voor je project. "</p>	<p>Bij een wijziging in de fasering van het werk werd er extra overleg gepland met bedrijven, zodat zij tijdig konden anticiperen op de impact.</p>
<p>Er waren enkele wijzigingen in de uitvoeringsplanning, voornamelijk als gevolg van technische complicaties. Dit had invloed op de bereikbaarheid van bepaalde gebieden en leidde tot extra afstemming met belanghebbenden.</p>	<p>"Planningen moeten soms aangepast worden, maar het belangrijkste is hoe je dat communiceert naar de omgeving."</p>	<p>Een afsluiting werd verlengd met twee weken door onverwachte ondergrondse obstakels. Dit werd opgelost door extra communicatie en het aanbieden van alternatieve routes. Nou ja, wat we wel eens zien is, we hebben meer weekenden nodig. En de Greenport is een economisch gebied, dus er zit heel veel transport. Ja, we zien dat we daar een beroep op gaan doen, dus dat vraagt meer afstemming.</p>
<p>Omdat participatie al vroeg in het project structureel was ingezet, verliep het vergunningsproces soepeler. De meeste mogelijke bezwaren waren al vooraf besproken en opgelost.</p>	<p>"Omdat we de omgeving vroegtijdig hebben meegenomen, waren er minder bezwaren en juridische stappen." "Dat wel, ja. En je weet wat de bezwaren zijn, je weet ook dat je dat heel veel hebt onderzocht, hè? En wat altijd goed is, maar daar kijken de rechter niet heel erg naar, maar je weet ook van, ja, je hebt informatie gedeeld, mensen weten hoe het zit, snap je aan besluitvorming."</p>	<p>Vergunningen werden sneller verleend, omdat belanghebbenden al eerder waren meegenomen in de besluitvorming.</p>
<p>De Omgevingswet stelt participatie verplicht, maar de manier waarop dit moet gebeuren blijft vormvrij. Dit betekent dat er meer verantwoording moet worden afgelegd over hoe participatie is uitgevoerd.</p>	<p>"Het wordt verplicht, maar hoe streng dat gecontroleerd gaat worden, moeten we nog zien." "Ja, het is eigenlijk samengevoegd, terwijl je eigenlijk dan denkt, ja, nee, dan moet je het eigenlijk ook versimpelen. Dan moet je gewoon zeggen, nou ja, goed, als we dit doorlopen, dan betekent het ook dat je dat krijgt." "Omdat die kijkt naar het maatschappelijk belang. En dat is het algemene belang. En dan moet je ook afweging maken tussen wat kost het, wat mag het kosten, en wat mag de overlast zijn.</p> <p>En ik denk wel, ja, als je dan heel vroeg gaat participeren, ja, hoe moet ik dat zeggen, borg je dan nog wel een uitvoerbaarheid van project, zeg maar."</p> <p>"We moeten straks waarschijnlijk alles beter documenteren, zodat we kunnen aantonen wat we met de input hebben gedaan." "En los van de techniek, moeten we dit ook behalen. Ja, en dan kun je dat niet denk ik alleen een EMVI doen, maar dan zul je ook toch een grote zorg- of brengplicht hebben richting ON." "Ja, en ik denk dat er nog wel een grote winst te behalen is, en dat zal Sander misschien heel wat mij in dankbaarheid afnemen, maar omgevingsmanagement en vooral dan participatie, dat doet de aannemer over het algemeen erbij. Het is geen hoofdtaak. Terwijl ik denk, daar is ook nog wel heel veel taak." Maar als je naar een aannemer kijkt, die is echt, dat noem je eigenlijk een bezem. En dat is eigenlijk allemaal techniek. En dan gaat er een stil omhoog, en dan zit de management per week bezig, en dan zit de omgevingsmanager.</p>	<p>Toekomstige projecten zullen waarschijnlijk een formele participatieverstaglegging moeten opleveren.</p>
<p>Opdrachtgevers en opdrachtnemers zullen meer moeten vastleggen over hoe ze met participatie omgaan, en er zal waarschijnlijk een verplichting komen om te laten zien wat er met de input van belanghebbenden is gedaan. Dus de informatie overdracht van een langdurend plan en verkenningfase is heel belangrijker voor de OG en dus voor de ON om de contract eisen juist te vertalen.</p>		<p>Een gestructureerde participatieverantwoording zou onderdeel kunnen worden van het opleveringsdossier.</p>

6. Als dit project onder de Omgevingswet zou vallen, wat denkt u dat er in dit project anders georganiseerd zou worden op het gebied van publieke participatie?	De aanpak zou grotendeels hetzelfde blijven, maar er zou waarschijnlijk meer nadruk liggen op gestructureerde verslaglegging en formele verantwoording . Er wordt vaak te veel gedacht vanuit techniek en pas later naar de impact op de omgeving gekeken. dat technische afwegingen nog steeds dominant zijn en dat participatie hierin niet altijd een volwaardige rol speelt.	<i>"Wij doen nu al veel aan participatie, maar in de toekomst zal er nog meer nadruk liggen op documentatie." "Kijk, in de uitvoering, hoe de provincie zijn infraprojecten altijd deed. Er wordt een uitvoeringsbesluit genomen. En dan weet je dus wat je moet gaan maken. Maar dan kun je nog wel technisch uitwerken. Je kunt ruimtebeslagen allemaal. Daar heb je de inpassing, daar heb je allemaal nog ruimte voor. Uiteindelijk kwam je altijd in de bestemmingsplanprocedure. En als je daar heel veel bezwaren in kreeg... dan leverde dat best wel veel tijd, geld, alles op. Want dan moest je allemaal aanpassingen gaan doen. Dus wat wij altijd al deden bij infrastructuur is voor die formele participatie een soort informele participatie doen. En dat is eigenlijk wat ze nu ook zeggen. Ga zo vroeg mogelijk natuurlijk kijken."</i>	Om bezwaren en andere vertraging voor vergunningen te voorkomen werd er al veel gekeken naar hoe stakeholders en belanghebbende naar het infrastructuur project kijken.	Er zouden weinig fundamentele verschillen zijn, maar mogelijk extra inspraakmomenten. Participatieprocessen waren al goed ingebed. Extra ruimte voor bewonersinspraak over uitvoeringsdetails.	<i>"We hebben al gewerkt zoals de Omgevingswet het vraagt, inclusief een projectbesluit en participatieverplichtingen."</i> <i>"Participeren betekent ook tijd. En tijd betekent ook geld."</i>	Kleur vanrails of type geluidswand had mogelijk onderwerp van participatie kunnen zijn. Extra participatiebijeenkomsten voor bewoners over kleine ontwerpdetails.
7. Hoe verwacht u dat de samenwerkingen tussen aannemer en opdrachtgever verandert als gevolg van de Omgevingswet?	De samenwerking tussen OG en ON zal waarschijnlijk formeler worden , met meer focus op het overdragen van participatie-informatie en het aantonen van resultaten. Er wordt benoemd dat participatie in tenders vaak een grote rol speelt, maar dat in de praktijk aannemers meer op techniek focussen. In de tenderfase wordt omgeving zwaar ingezet als criterium, maar in de uitvoering wordt techniek vaak doorslaggevend.	<i>"Er zal meer nadruk komen op hoe informatie wordt gedeeld tussen opdrachtgever en opdrachtnemer." "We hebben ook nogmaals benadrukt... dat de omgeving heel erg belangrijk is. Dan zie je dat zo'n tenderfase. zo'n paar mensen binnen een bedrijf... van Gelder en Mobilis... die dan gaan schrijven om die opdracht binnen te krijgen. Dus die schrijven daar heel erg naar toe... met EMVI-eisen en al dat soort dingen. En in de praktijk komt er niet zo heel erg veel van terecht. En dat vind ik de een na de ander verval. Kan niet worden waargemaakt. En ik vind het wel jammer..."</i>	En die zouden zo ingeregeld worden... dat vrachtverkeer in één keer door kon rijden. En dat was dan stap 1 om de doorstroming te blijven garanderen. Dat is nooit gedaan. Volgens mij is het uiteindelijk ook niet nodig... want op zich blijft de capaciteit nog best wel goed. Een fietspad zou open blijven. Nou, die is al maanden dicht. Dat heeft dan te maken met dat het voor bouwverkeer makkelijker is... om dan die afsluiting te doen. Anders heb je de hele tijd dat je er mensen neer moet zetten...	De samenwerking zal intensiever worden, met meer transparantie en gedeelde verantwoordelijkheid. Meer nadruk op openheid over belangen. Regelmatische samenwerkingsdagen om misverstanden te voorkomen.	<i>"We hebben er bewust voor gekozen om één omgevingsmanagementteam te vormen, zodat we niet steeds hoeven te wijzen wie waarvoor verantwoordelijk is."</i> <i>"Daarom doen wij ook eens in het kwartaal een samenwerkingsdag om scheefgroei te benoemen en te verbeteren."</i>	Opdrachtgever en aannemer werken als één team om een gezamenlijke communicatiestrategie te hanteren. Meer openheid over financiële en technische belangen, zodat besluitvorming soepeler verloopt.
1. Wat zou u als belangrijkste aanbeveling geven aan andere aannemers die te maken krijgen met publieke participatie onder de Omgevingswet?	Aannemers moeten zich vroegtijdig verdiepen in participatieplannen en niet wachten tot de uitvoering begint. Meer naar buiten kijken en niet alleen intern gericht zijn.	<i>"Hoe eerder je als aannemer inzicht hebt in de participatieafspraken, hoe beter je kunt inspelen op de verwachtingen." "Nou, dat het nodig is om meer naar buiten te kijken. Niet dat intern gericht, maar dat we naar buiten gericht zijn. De geest van het contract had heel erg omgeving in zich. Bereikbaarheid. En hou dat ook vast. En zorg ook in je organisatie dat je... Het belang van die stakeholders is dat je dat ook in je organisatie... en in je processen goed regelt."</i>		Zorg voor een gedetailleerde stakeholderanalyse en wees transparant in communicatie.	<i>"Echt die analyse maken van: wat is de bedrijfsvoering van de omgeving waar je in zit?"</i> <i>"Als iets niet meer te veranderen is, zorg dat je daarin ook helder bent."</i>	Stakeholdermanagement als kernonderdeel van het project. Duidelijke grenzen stellen aan participatie, zodat verwachtingen realistisch blijven.
2. Wat is volgens u het belangrijkste inzicht dat u heeft opgedaan m.b.t. publieke participatie in de praktijk?	Durf transparant te zijn ook als het niet goed gaat. Gebruik de kennis uit de omgeving.	<i>"De angst om je open te stellen is niet altijd terecht."</i>		Participatie helpt bij draagvlak, maar moet goed worden gemanaged.	<i>"Je mag dus geen speeltuin ontwerpen. Nee, je mag kiezen tussen speeltuin A of speeltuin B."</i> <i>"Voorkom loze beloftes. Geef geen ruimte voor participatie als er geen echte keuze is."</i>	Duidelijke inspraakaders opstellen om teleurstelling te voorkomen. Participatie zien als communicatiemiddel, niet als onderhandelingsstool.
3. Welke kansen biedt de Omgevingswet volgens u om publieke participatie te verbeteren of te versterken die u in dit project ook heeft ondervonden?	Meer focus op omgeving en niet alleen de techniek.	<i>"En wij hebben te maken met een ontwerp... dat in de omgevingsvergunning is ingediend. Daar mag je geen centimeter buiten afwijken."</i> <i>Dus we hebben onszelf ook best wel vastgelegd... waardoor er gewoon beperkte ruimte voor inbreng is. Ja, alles ligt al best wel vast."</i> <i>Dus bij ons denk ik niet zo heel erg veel anders. Nee, ik zie dat niet zo heel erg."</i>		De wet kan samenwerking versterken en participatie systematiseren.	<i>"Participatie wordt minder vrijblijvend en er komt een stok achter de deur om het goed te doen."</i> <i>"Als je vroeg participeert, weet je wat de bezwaren zijn en kun je een weloverwogen keuze maken."</i>	Betere borging van participatie-uitkomsten in besluitvorming. Meer transparantie over inspraakmogelijkheden, wat weerstand vermindert.

<p>De aanpak zou grotendeels gelijk blijven, maar er zou waarschijnlijk meer nadruk liggen op gestructureerde verslaglegging en formele verantwoording. Financieel en qua tijd zal altijd in de afweging worden meegenomen.</p>	<p>"Wij doen nu al veel aan participatie, maar in de toekomst zal er nog meer nadruk liggen op documentatie." "Dat de opdrachtgever nog meer verplichting krijgt om hetzelfde voor een goede overdracht.</p> <p>En borging bij de opdrachtnemer, dat dat gaat plaatsvinden." "En dat heeft grote financiële gevolgen, ja, en dan moet je een afweging maken van, ja, ga ik toch de omgeving zwaarder belasten, door bijvoorbeeld van meerdere weekenden, langere weekenden, zodat het mijn kosten enigszins beheersbaar houdt. En dat, ja, dat probeer je binnen je IPM-model, probeer je zo goed mogelijk iedereen vanuit zijn rol, de bezwaren neer te leggen, voor bepaalde keuzes, en dan probeer je daar toch een integrale afweging in te maken."</p>
<p>De samenwerking zal waarschijnlijk formeler worden, met meer focus op het overdragen van participatie-informatie en het aantonen van resultaten. Samenwerking met de omgeving ook anders. Veel meer verklaren en uitleggen hebben we elkaar goed bergepen en dit is uiteindelijk wat er mogelijk is.</p>	<p>De samenwerking zal waarschijnlijk formeler worden, met meer focus op het overdragen van participatie-informatie en het aantonen van resultaten." "Het is niet alleen vertaald in de eisen in je contract, van je moet dit en dit. Maar ik denk wel dat er een grotere brengplicht komt. Dat hebben wij ook gedaan met de N211.</p> <p>Wij doen zo'n project, dit project loopt nu al twaalf jaar in, dus dat komt ergens vandaan. En je probeert heel goed uit te leggen, waarom hebben we het bedacht zoals het nu is. Dus dat hebben we ook heel intensief proberen over te dragen." "Beste bewoners, dit waren uw topzorgen, dit hebben we zo en zo vertaald. Nou, daarna kijkend, hebben wij deze technische oplossingen, maar rekening houden met uw bezwaar of uw aandachtspunten, kiezen we voor deze oplossing. Of deze bouwmethode, of deze facering, of, ja, dat is een heel andere..."</p>
<p>Aannemers moeten zich actief verdiepen in eerdere participatieprocessen en de uitkomsten daarvan niet alleen als vaststaand feit accepteren, maar ook begrijpen waarom bepaalde keuzes zijn gemaakt. Dit helpt om beter in te spelen op de verwachtingen en technische validatiestag te maken.</p>	<p><i>"Gewoon, verdiep je in wat er in de participatie heeft plaatsgevonden. Wat is daar uitgekomen? Beschouw het niet als een gegeven, maar probeer te begrijpen waarom bepaalde keuzes zijn gemaakt en wat dat betekent voor je technische proces."</i> <i>"Betekent dat een extra validatiestap, bijvoorbeeld? Je hebt een contract, hè, bestaat uit verificatie en validatie. Verificatie is gewoon dat je zegt, nou, je hebt allemaal eisen gesteld, en ik weet niet meer wat, het moet twee meter lang zijn, het moet één meter breed zijn, nou, dan zet je allemaal vinkjes.</i></p> <p><i>Maar validatie is dat je zegt, nou, ik heb al die eisen gedaan, wat voldoet het nou ook aan je verwachting?"</i></p>
<p>Participatie kan niet alleen weerstand verminderen, maar ook waarde toevoegen aan het project. Dit vereist wel dat participatie vanaf het begin goed wordt ingepland en parallel loopt aan andere processen, zoals ruimtelijke ordening en technisch ontwerp. Te late participatie kan leiden tot vertragingen en extra kosten.</p>	<p><i>"Beschouw participatie niet alleen als een last, maar ook als een kans. Zorg dat je in de ontwikkeling van je project vanaf het begin de tijd reserveert voor participatie. Vaak wordt daar geen rekening mee gehouden en dan kom je later in de knel met de planning."</i></p>
<p>De Omgevingswet maakt participatie een verplicht en structureel onderdeel van projecten. Hierdoor wordt participatie niet meer afhankelijk van de bereidheid van een projectmanager, maar wordt het juridisch vastgelegd en gecontroleerd. Dit zorgt voor meer consistentie en betere borging van participatie-uitkomsten.</p>	<p>"De Omgevingswet creëert een stok achter de deur. Participatie wordt niet meer overgelaten aan de projectmanager of de bestuurder, maar wordt een vast onderdeel van het proces. Het wordt meer geborgd."</p>

case study persoon	OM - OG			Dijkversterking Lauwersoog	OM- ON		
vragen	Samenvatting	Quotes	Voorbeeld	Samenvatting	Quotes	Voorbeeld	
1. Kunt u aan de hand van project X toelichten hoe publieke participatie is georganiseerd tijdens de realisatiefase?	<p>Bij de dijkversterking in Lauwersoog werd publieke participatie al vroeg in het proces opgezet met een sterke focus op samenwerking en koppelkansen.</p> <p>Vroegtijdige samenwerking met overheden, natuurorganisaties en bedrijven om naast de dijkversterking ook andere gebiedsontwikkelingen te realiseren.</p> <p>Omgevingswet-pilot uitgevoerd om te onderzoeken hoe participatie onder de nieuwe wet moest worden ingericht. Dit hielp bij het testen van de kennisgeving van participatie en de mate van inspraak, wat in lijn is met de Omgevingswet</p>	<p>"Vanuit het Hoogwaterbeschermingsprogramma zijn we in 2014 gestart met het project Overstulgende Verkenning Waddenzeedijken."</p> <p>"Als we met die dijk aan de gang gaan, wat kunnen we dan meenemen? Zijn er ontwikkelingen die we kunnen koppelen aan de dijkversterking?"</p>	<p>Natuurprojecten en extra infrastructuur werden aan de dijkversterking gekoppeld.</p> <p>Stakeholdergesprekken met ondernemers en defensie om hun belangen te inventariseren.</p>	<p>Bij de dijkversterking in Lauwersoog werd publieke participatie breed opgezet met een focus op stakeholdercommunicatie en transparantie.</p> <p>Vroege betrokkenheid van belanghebbenden om draagvlak te creëren.</p> <p>Diverse communicatiekanalen zoals bewonersbijeenkomsten, sociale media, flyers, en persoonlijke gesprekken. Dit project heeft veel aandacht besteed aan laagdrempelige communicatie en proactieve betrokkenheid, wat aansluit bij de eisen van de Omgevingswet. De nadruk lag niet alleen op informeren, maar ook op tweezijdige communicatie, bijvoorbeeld via keukentafelgesprekken en directe contactmomenten met stakeholders.</p>	<p>"Waardoor we eigenlijk vanaf het begin echt hebben ingestoken op het betrekken van iedereen en informeren."</p> <p>"We zeggen altijd: we zijn tijdelijke burens, en zo moeten we ze ook behandelen."</p>	<p>Dag van de Bouw en excursies over de dijk om belanghebbenden inzicht te geven in het project.</p> <p>Individuele gesprekken met bewoners en ondernemers om specifieke zorgen te adresseren.</p>	
2. Wat zijn wijzigingen tijdens de realisatiefase van het project die van invloed waren voor belanghebbende?	<p>Wijzigingen in planning en ontwerpkeuzes hadden directe impact op belanghebbenden.</p> <p>Vispassage aangepast vanwege visserijbeperkingen.</p> <p>Logistiek en planning moesten afgestemd worden met defensie en bedrijven in de haven.Deze afstemming past binnen de bredere verplichting van de Omgevingswet om stakeholders vroegtijdig te betrekken. Door deze aanpak waren er minder verrassingen tijdens de uitvoering.</p>	<p>"Er is beleid op de Waddenzee dat binnen een straal van 250 meter rondom een vispassage niet meer gevist mag worden. Dit leidde tot weerstand bij vissers."</p> <p>"Defensie heeft een groot militair oefenterrein en heeft veertien weken per jaar schietvergunningen. Onze dijkversterking is daarom om hun planning heen georganiseerd."</p>	<p>Transportbehoeften van bedrijven werden meegenomen in de werkplanning.</p> <p>Dijkversterking werd gepland rondom militaire schietoefeningen.</p>	<p>Onvoorziene omstandigheden leidden tot wijzigingen in fasering en toegankelijkheid.</p> <p>Fietspaden afgesloten op Defensieterrein, wat leidde tot klachten.</p> <p>Aanpassingen aan afsluitingen en bouwlogistiek om hinder voor bedrijven te minimaliseren. De snelle aanpassing van maatregelen en het continu in gesprek blijven met belanghebbenden is een voorbeeld van hoe de Omgevingswet verlangt dat participatie niet alleen een eenmalige verplichting is, maar een doorlopend proces.</p>	<p>"Toen we Defensieterrein afsloten, Nou, daar hebben we heel veel klachten over binnengekregen. En ik weet niet of het onderschat is, maar er waren zoveel mensen... die gewoon gebruik maakten van het gebied."</p> <p>"Een restaurant moest enkele dagen dicht vanwege trillingen door damwanden. Dat was een zware impact voor hen."</p>	<p>Heraanpassing van fietspaden na gesprekken met Defensie en bewoners.</p> <p>Aanpassingen in werkuren en transportplanningen om hinder voor bedrijven te beperken.</p>	
3. Welke impact heeft het participatie traject op de loop van het vergunningsproces gehad?	<p>Een uitgebreide participatieaanpak zorgde voor een soepel vergunningstraject.</p> <p>Geen beroepsprocedures door vroegtijdige betrokkenheid van belanghebbenden.</p> <p>Vergunningen werden sneller verleend door goed stakeholdermanagement. Onder de Omgevingswet zou deze werkwijze formeel verplicht zijn, wat betekent dat aannemers en opdrachtgevers expliciet moeten aantonen hoe participatie heeft plaatsgevonden en welke resultaten dit heeft opgeleverd.</p>	<p>"Er zijn drie zienswijzen ingediend, maar er is uiteindelijk geen beroep ingesteld tegen het project."</p> <p>"Ik had precies van tevoren een notitie geschreven van welke zienswijzen we konden verwachten. We kregen precies die drie."</p>	<p>Strategische afstemming met overheden om juridische problemen te voorkomen.</p> <p>Draagvlak creëren bij bewoners en ondernemers om bezwaren te beperken.</p>	<p>Dankzij goede participatie vooraf verliep het vergunningstraject soepel.</p> <p>Geen grote bezwaren of beroepsprocedures vanwege tijdige communicatie.</p> <p>Enkele zienswijzen, maar deze konden snel opgelost worden. Het proactief betrekken van belanghebbenden en de transparantie in de besluitvorming zorgden ervoor dat er nauwelijks juridische bezwaren waren. Dit past binnen de motiveringsplicht van de Omgevingswet, waarbij expliciet moet worden vastgelegd hoe participatie heeft bijgedragen aan het besluitvormingsproces.</p>	<p>"Tijdens de realisatiefase hebben we eigenlijk met vergunningen geen echte problemen gehad."</p> <p>"Ik had verwacht dat sommige vergunningen moeilijk zouden gaan, maar dat viel mee."</p>	<p>Vroegtijdige afstemming met bedrijven zorgde ervoor dat vergunningen zonder veel weerstand werden verleend.</p> <p>Minimale juridische vertragingen door een proactieve aanpak van participatie.</p>	
4. Wat weet u over de publieke participatie-eisen (verplichtingen) binnen de Omgevingswet? Wat vindt u van de nieuwe nadruk op publieke participatie?	<p>De Omgevingswet verplicht participatie, maar biedt ruimte in de invulling.</p> <p>Vroegtijdige participatie moet worden aangetoond bij vergunningaanvragen.</p> <p>Beperkte inspraak over technische eisen, maar wel over uitvoering en inrichting.</p>	<p>"Je hebt de kennisgeving participatie en de motiveringsplicht. Je moet uitleggen hoe je participatie organiseert en wat de ruimte is voor participatie."</p> <p>"Voor de dijkversterking zelf was participatie vooral informeren en betrekken, maar niet meebeslissen over de technische eisen."</p>	<p>Bewoners konden inspraak geven over uitvoeringsdetails zoals hekjes en opritten.</p> <p>Beperkte invloed op de dijkhoogte en constructie, vanwege wettelijke eisen.</p>	<p>De Omgevingswet verplicht participatie, maar laat ruimte voor interpretatie.</p> <p>Meer nadruk op vroegtijdige participatie, maar geen vaste kaders.</p> <p>Zorgt voor transparantie en gestructureerde aanpak, maar kan bureaucratische lasten verhogen. De mate van participatie wordt deels bepaald door de initiatiefnemer. Dit project laat zien dat een brede participatieaanpak, zoals hier is toegepast, niet alleen een verplichting is, maar ook praktische voordelen oplevert, zoals een soepeler vergunningstraject en minder weerstand vanuit de omgeving.</p>	<p>"Volgens de Omgevingswet moeten projecten eerder participatie opstarten en dit aantonen."</p> <p>"Het proces gaat daarna gewoon veel soepeler als er draagvlak is."</p>	<p>Betere verslaglegging van participatieprocessen, wat helpt bij vergunningstrajecten.</p> <p>Omgevingswet dwingt participatie af, maar zonder exacte richtlijnen, wat voor onzekerheid kan zorgen.</p>	
5. Welke nieuwe verantwoordelijkheden verwacht u in de realisatie fase van publieke participatie onder de Omgevingswet? En hoe zou dit de aanpak van dit project beïnvloeden?	<p>Er worden geen fundamentele nieuwe verantwoordelijkheden verwacht, maar meer nadruk op borging.</p> <p>Participatie moet beter worden vastgelegd en onderbouwd. Dit betekent dat aannemers formeel moeten kunnen aantonen hoe participatie heeft plaatsgevonden, bijvoorbeeld via een omgevingsmanagementplatform zoals in Lauwersoog is gebruikt. Dit kan een juridisch risico verkleinen en voorkomen dat participatie als een administratieve last wordt gezien.</p> <p>Meer aandacht voor communicatie en stakeholdermanagement in de realisatiefase. Wel moeten aannemers en opdrachtgevers expliciet vastleggen hoe</p>	<p>"Wij hebben participatie verwerkt in ons projectbesluit, inclusief hoe we zijn omgegaan met zienswijzen en inbreng van belanghebbenden."</p> <p>"Overdracht van participatie-informatie naar de aannemer moet goed gebeuren."</p>	<p>Duidelijke verslaglegging van participatie-inzichten in het projectbesluit.</p> <p>Overdracht van participatie-uitkomsten naar de aannemer om verwachtingen te managen.</p>	<p>Er wordt meer nadruk gelegd op documentatie en verantwoording.</p> <p>Striktere eisen voor verslaglegging van participatie.</p> <p>Meer samenwerking tussen aannemer en opdrachtgever om participatie-inzichten te borgen. In dit project wordt al gebruikgemaakt van een omgevingsmanagementplatform ("Dialogue") waarin alle contactmomenten, meldingen en klachten systematisch worden vastgelegd. Dit sluit direct aan bij de eisen van de Omgevingswet, die verlangt dat participatie aantoonbaar en navolgbaar is.</p>	<p>"We werken met Dialogue, een programma waarin we alle contactmomenten en meldingen vastleggen."</p> <p>"De Omgevingswet eist dat je kunt aantonen wat je hebt gedaan en hoe je dat hebt aangepakt."</p>	<p>Gebruik van software om participatie te documenteren, wat helpt bij juridische aantoonbaarheid.</p> <p>Extra tijd en middelen nodig voor administratie en communicatie.</p>	

6. Als dit project onder de Omgevingswet zou vallen, wat denkt u dat er in dit project anders georganiseerd zou worden op het gebied van publieke participatie?	<p>Het project werd al ingericht volgens de principes van de Omgevingswet, dus weinig zou veranderen.</p> <p>Participatie was al structureel ingebed in het proces. Eventueel extra formele eisen voor verslaglegging.</p>	<p>"We hebben al gewerkt zoals de Omgevingswet het vraagt, inclusief een projectbesluit en participatieverplichtingen."</p>	<p>Geen grote veranderingen in de aanpak, omdat participatie al systematisch was toegepast. Mogelijk meer formele rapportageverplichtingen over participatie-uitkomsten.</p>	<p>Niet veel zou veranderen, omdat participatie al goed gestructureerd was. De Omgevingswet legt de nadruk op gestructureerde participatie, maar in dit project was dit al integraal onderdeel van de aanpak. Wel zou er mogelijk extra aandacht moeten zijn voor de expliciete verantwoording van participatie-uitkomsten in rapportages.</p> <p>Extra formele verslaglegging zou nodig zijn. Mogelijk meer verplichtingen om participatie-uitkomsten expliciet te verwerken.</p>	<p>"We werken eigenlijk al zoals de Omgevingswet vereist."</p> <p>"Het vastleggen van participatie-inzichten wordt belangrijker, maar verder verandert er weinig.</p>	<p>Meer formele evaluaties van participatie-uitkomsten. Mogelijk extra participatiemomenten voor stakeholders.</p>
7. Hoe verwacht u dat de samenwerkingen tussen aannemer en opdrachtgever verandert als gevolg van de Omgevingswet?	<p>De samenwerking kan verbeteren door meer transparantie en gedeelde verantwoordelijkheid. Onder de Omgevingswet kan een gezamenlijke aanpak zoals in Lauwersoog voordelen opleveren, omdat het zorgt voor een heldere verdeling van taken en minder juridische risico's voor opdrachtnemers.</p> <p>Gezamenlijk omgevingsmanagementteam voorkomt miscommunicatie. Meer openheid over belangen en keuzes. De nieuwe wet dwingt partijen om participatie niet slechts af te vinken, maar ook aan te tonen hoe het de kwaliteit van het project heeft verbeterd. Dit sluit goed aan bij de aanpak in Lauwersoog.</p>	<p>"We hebben er bewust voor gekozen om één omgevingsmanagementteam te vormen, zodat we niet steeds hoeven te wijzen wie waarvoor verantwoordelijk is."</p> <p>"We hebben in de planuitwerking al gezamenlijk met de aannemer een omgevingsmanagementplan opgesteld."</p>	<p>Opdrachtgever en aannemer werken als één team om een gezamenlijke communicatiestrategie te hanteren. Meer afstemming over stakeholders en publieke communicatie.</p>	<p>De samenwerking kan intensiever en transparanter worden. Dit project toont aan dat nauwe samenwerking tussen opdrachtgever en opdrachtnemer een efficiëntere aanpak oplevert. De Omgevingswet stimuleert samenwerking, maar in de praktijk is dit nog sterk afhankelijk van hoe partijen ermee omgaan. Hier is gekozen voor een geïntegreerde aanpak met één team, wat het proces versnelt en transparanter maakt.</p> <p>Eén gezamenlijk omgevingsmanagementteam zorgt voor betere afstemming. Meer nadruk op gezamenlijke besluitvorming en communicatie.</p>	<p>"We werken in dit project al als één team, wat heel bijzonder is."</p> <p>"We communiceren als één stem naar buiten toe, wat zorgt voor meer vertrouwen."</p>	<p>Gezamenlijke communicatiestrategie voorkomt verwarring bij belanghebbenden. Meer samenwerking tussen techniek en participatie-experts binnen het projectteam.</p>
1. Wat zou u als belangrijkste aanbeveling geven aan andere aannemers die te maken krijgen met publieke participatie onder de Omgevingswet?	<p>Aannemers moeten participatie goed begrijpen en niet alleen als verplichting zien.</p>	<p>"Ja, ga met je opdrachtgever in gesprek over wat zij belangrijk vinden voor die participatie of hoe zij dat voor zich zien voor het specifieke project.</p> <p>Dus wat verder kijken dan misschien de eisen die worden gesteld maar ook echt vragen waarom jullie deze eisen vragen." "We hebben een omgevingsmanagementplatform waarin we vastleggen met wie we hebben gesproken en wat de afspraken zijn."</p>	<p>Stakeholdermanagement als kernonderdeel van het project. Duidelijke kaders stellen om onrealistische verwachtingen te voorkomen.</p>	<p>Een proactieve stakeholderaanpak en transparante communicatie zijn cruciaal. In de praktijk blijkt dat participatie verder gaat dan alleen voldoen aan juridische eisen. Dit project heeft laten zien dat intensieve betrokkenheid van de omgeving leidt tot minder weerstand, minder juridische complicaties en een soepeler verloop van het project.</p>	<p>"Geef de omgevingsmanager voldoende ruimte en tijd om participatie goed op te zetten."</p> <p>"Natuurlijk, het kost even tijd en moeite en ingewikkeld. Maar het proces gaat daarna gewoon veel soepeler..."</p>	<p>Stakeholdermanagement als kernonderdeel van het project. Zorg voor heldere communicatie, zodat verwachtingen realistisch blijven.</p>
2. Wat is volgens u het belangrijkste inzicht dat u heeft opgedaan m.b.t. publieke participatie in de praktijk?	<p>Door tijdslimiet geen antwoord op deze vragen.</p>			<p>Participatie moet niet onderschat worden; het gaat niet alleen om inspraak, maar ook om betrokkenheid en begrip. De Omgevingswet schrijft participatie voor, maar laat ruimte voor eigen invulling. Dit project laat zien dat een betrokken en proactieve benadering voordelen oplevert, zowel voor het draagvlak als voor de projectvoortgang.</p>	<p>"Je moet niet onderschatten hoeveel sentimentele waarde een gebied heeft voor mensen."</p> <p>"Draagvlak creëren voorkomt problemen en verbetert de samenwerking met stakeholders."</p>	<p>Bewustzijn dat participatie niet alleen functioneel is, maar ook emotioneel. Beter inspelen op specifieke zorgen van stakeholders.</p>
3. Welke kansen biedt de Omgevingswet volgens u om publieke participatie te verbeteren of te versterken die u in dit project ook heeft ondervonden?				<p>De Omgevingswet kan participatie systematiseren en transparanter maken. De formele eisen van de Omgevingswet kunnen ervoor zorgen dat participatie structureel wordt aangepakt in projecten die hier eerder minder aandacht aan besteedden. Dit project voldoet al grotendeels aan de eisen van de wet en kan als voorbeeld dienen voor andere infrastructuurprojecten.</p>	<p>"Participatie wordt nu verplicht en aantoonbaar, wat helpt om draagvlak structureel te borgen."</p> <p>"Ik ben benieuwd hoe de kaders zich gaan ontwikkelen, want nu is nog veel onduidelijk."</p>	<p>Meer uniformiteit in participatie-eisen, waardoor verwachtingen duidelijker worden. Beter gebruik van digitale tools om participatieprocessen te beheren en vast te leggen.</p>

Appendix I: Transcripts (in Dutch)

Can be found in a the sperate document 'Transcripts_Thesis_Report_Public participation in infrastructure_WvdMeer'