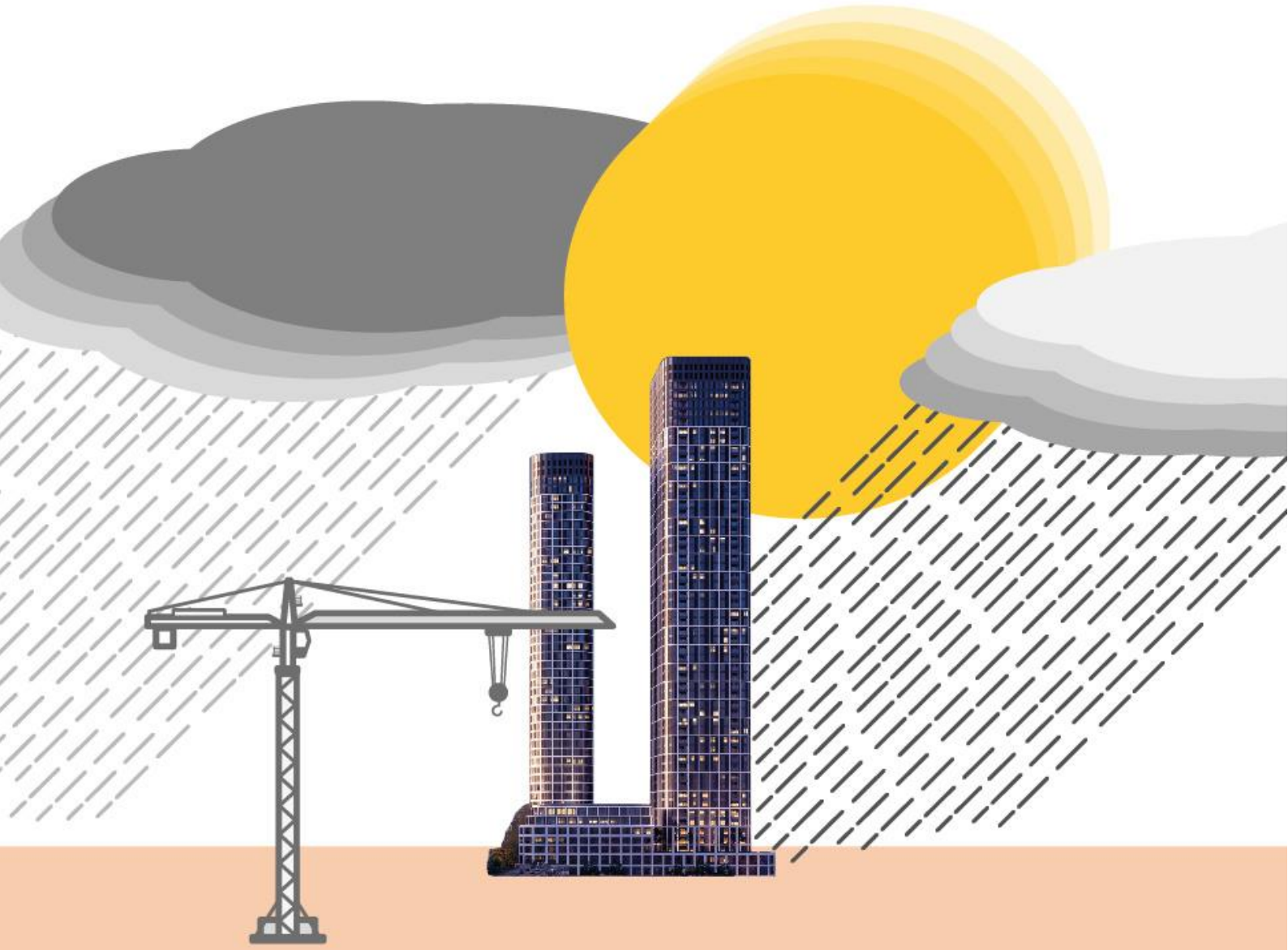
Towards a better understanding of mediation in the construction sector: a grounded theory approach

Explorative and qualitative research on contributing factors to mediation processes in Dutch construction projects



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Abstract

Context

Projects in the construction sector are known for their high complexity. Due to this complexity, disputes in construction are close to inevitable. While these disputes can lead to major project delays and financial costs, they demand for a resolution. Juridical resolution methods like litigation and arbitration have found to be unfavourable in terms of time, money and business relationship costs. Alternative Dispute Resolution (ADR) methods like mediation are viewed to score better on these points.

Problem

Unfortunately, still a big amount of escalated disputes in the construction sector are resolved by traditional juridical methods, where the parties fight each other to win. This results in major expenses, time investments and relational damage.

Purpose

This research aims to gain a better understanding of mediation processes in the construction industry. This could lead to less use of juridical procedures and maybe less escalated disputes in general. This could save disputing parties in the construction sector money, time and business relational damage.

Method

A grounded theory approach has been used in this research, because no research has yet been conducted on factors that influence the mediation process, nor on the course of its process in practice. Four case studies have been carried out in a qualitative fashion, conducting in-depth interviews with the involved disputing parties and the mediator(s). The resulting transcripts have been analysed on contributing factors, allocating quotations to closed and open coding. Furthermore, the cases have been analysed on their course of the mediation process.

Findings

A substantial amount of influencing factors have been found to be influencing the mediation process in practice: a few from academic literature and the majority from the case studies, consisting of internal moderators, external moderators, mediator's interventions and the action of bartering. Therefrom, conclusions have been drawn which have been discussed with a validation panel to value them and add a level of depth. Furthermore, an enhanced framework of the mediation process has been constructed where these factors have been added to. Since this research has a limited scope and is based on the grounded theory approach, a substantial amount of limitations and recommendations for future research have been given.

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1. Introduction

1.1. Problem statement

Large projects in the construction industry are known for their expansive scale and complexity wherein the large number of stakeholders have contradictory objectives and perceptions (Harmon, 2003a; Ismail et al., 2010; Cakmak & Cakmak, 2013; Pétursson, 2015; Alaloul et al., 2018; Alaloul et al., 2019). Due to this complexity and contractions, the occurrence of disputes in any stage of the project lifecycle is almost inevitable (Ismail et al., 2010; Pétursson, 2015; Alaloul et al., 2019). These disputes can lead to heavy time and cost overruns, and damage team unity and relationships (Cheung & Suen, 2002; Harmon, 2003a). Hence, these disputes demand for a resolution. Where traditional dispute resolution methods have a juridical nature and result in a judgement, the use of strategies towards more efficient and less costly dispute resolution has grown significantly during the last decade of the 20th century (Harmon, 2003a; Stipanowich, 2004; Alaloul et al., 2019). These strategies include mediation and other Alternative Dispute Resolution (ADR) methods. The goal of these ADR methods is to provide the disputing parties with an alternative to solve the dispute in mutual agreement, instead of fighting each other to win the case (Alaloul et al., 2019).

The existing literature states clearly that the use of ADR methods results in less time related, financial and business relationship costs than juridical counterparts (Harmon, 2003; Stipanowich, 2004; Alaloul et al., 2019). In addition, Richbell mentions the following: "Principled [needs-based—what the parties need to agree a settlement] negotiation is more effective than positional [rights-based—their legal rights under the law] negotiation. Better deals come from co-operating than from fighting" (Richbell, 2014, p. 13).

Still, severe disputes occur in 10-30% of the construction project cases. From these, 25% ends in a lawsuit which is 3-7% of the total amount of construction projects (Stipanowich, 1998; Hughes et al., 2015; Alaloul et al., 2017).

In addition, research by Arcadis in 2019 and 2020, the average dispute value in Europe increased substantially from €24.5 million to €54.4 million respectively. The average dispute duration however decreased marginally from 15.6 months to 14 (Pancoast et al., 2021). Data from the RvA (Raad van Arbitrage in bouwgeschillen) in the Netherlands show that there are still quite some disputes that reach arbitration in the Dutch construction sector each year. These numbers show a growing number of disputes in the construction sector in the Netherlands from 491 in 2016 to 645 in 2020 (RvA, 2021). However, we must be careful. As Tazelaar & Snijders (2010) adequately point out, one should look at these numbers relatively to the total number of transactions in the construction industry. The numbers by EIB show the growth of the construction sector in the Netherlands (Koning & Schep, 2020),

which explains the rising number of arbitrary disputes or disputes in general. Still, the number of arbitrary cases by the RvA show no percentual decrease over 2014-2020.

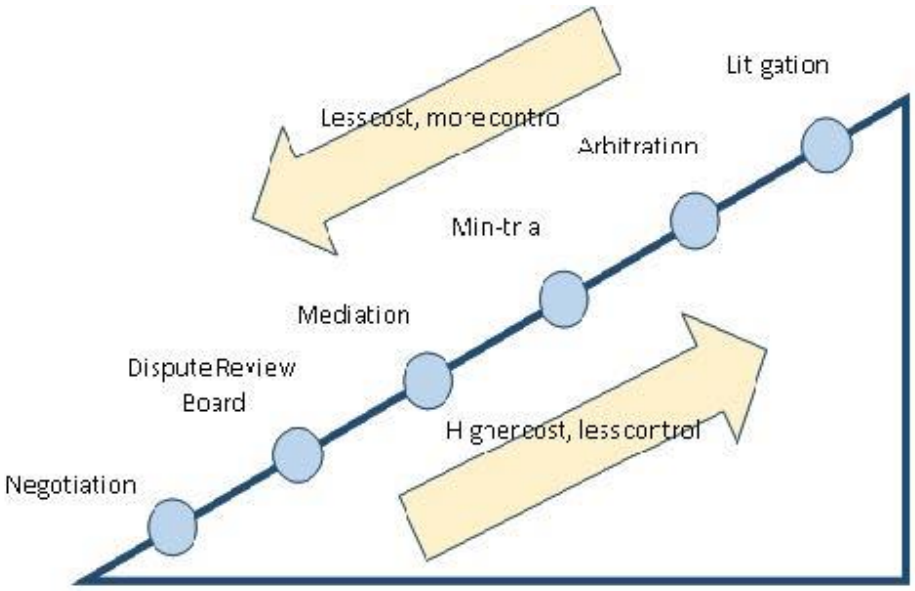

Figure 1. Six dispute resolution methods on the dispute resolution slope. Alaloul et al., 2019

Evidently, the decrease of these numbers could benefit the construction sectors by having more successful projects, where less costs are made in terms of money, time and business relational damage. A better understanding of the ADR processes could be a foundation for this.

Figure 1 shows the six main types of dispute resolution methods that are explained in academic literature. These will later be elaborated in more detail. As can be seen, these six main groups are placed subsequently on a slope. This slope represents increase in hostilities and costs, and decrease in control of outcome the further up the 'Dispute Resolution slope' a method group is placed (Cheung, 1999; Koolwijk, 2006; Alaloul et al., 2019).

From these six, mediation is found to be the most important and fastest growing ADR method (Alaloul et al., 2019). In addition, mediation gains increasing attention in the Dutch construction sector. For example, the Dutch Arbitration Board for the Building Industry (RvA) is exploring the possibilities to add mediation to their services (RvA, 2022).

1.2. Research gaps

The existing literature is mainly written in the context of international construction industries in countries like Iceland, Malaysia, Hongkong, Nepal, The United States. In addition, there has not been found literature about mediation processes in the Dutch construction sector. Since this research will be carried out in the context of the Dutch construction sector, this gap will be somewhat filled.

As mentioned before, mediation is found to be the fastest growing and most important ADR method. However, no academic research has been conducted on mediation processes in the Dutch construction sector. Hence, this research will focus on mediation processes that were used to resolve construction disputes in the Dutch context.

Literature mentions using ADR methods like mediation instead of traditional dispute resolution methods should lead to less costs in terms of time, money and relational damage. It could be that the choice for these methods itself leads to this success. However, it would be better imaginable that specific factors play role in these processes that influence the outcome of these method's success or failure.

Existing literature mentions some factors that influence ADR procedures and mediation in specific. However, minimal research has been conducted on mediation processes in practice and how these factors, and possibly additional factors, affect these processes.

In this research, mediation processes in the Dutch construction sector are explored further. The mediation process will be approached with the Input, Process, Output model. To the process, contributing factors are sought to be found by analysing varying mediation procedures from an open and overarching perspective, objectively searching for all possible influencing factors to these mediation processes. The coherence of these contributing factors is also investigated.

Besides 'classic' mediation that is described in the existing literature, some Dutch ADR professionals use the term 'active mediation' to describe a mediation process where the mediator gives its expert opinion about the discussed content. These mediators are not fond of classic mediation and only conduct active mediations. In addition, these two mediation types will be analysed in this research as well.

1.3. Research questions

The previously mentioned research gaps lead to the following research question to gather more information about – and analyse mediation processes in the construction sector, this research will inquire the following main research question:

How do influencing factors affect the mediation processes in the construction sector?

The following sub-questions will help to answer the main question:

1. Which factors influence the mediation process?
2. How do these factors influence the mediation process?
3. How does the course of the mediation process enfold?
4. How can the initial structured theoretical framework be enhanced, extended and specified to be more in line with the mediation processes in practice?

1.4. Societal and scientific relevance

As mentioned in part 1.1., the main academic research in the field of alternative dispute resolution (ADR) methods has been performed outside the Dutch construction sector. An increase in the successful use of ADR methods in construction will lead to less costs in terms of time, money and damaged business relationships. While still quite a lot of large Dutch construction cases reach the court over disputes, the involved parties might profit from the findings of this research. Furthermore, large construction projects are of such complexity that disputes are nearly inevitable. Therefore, all stakeholders that are involved in large construction projects in the Dutch context could benefit from this research.

1.5. Research goal

This research's goal is to gain more practically based insights into mediation processes in the construction sector. This knowledge could lead to less use of juridical resolution methods and to fewer future disputes in general. Because when that is the case, it could lead to fewer costs in terms of money, project delays and business relational damage for contracting parties in the construction sector.

2. Literature review and professionals' opinions

To gain a good basis for this research, a literature review is carried out to cover as much of the existing literature about dispute resolution methods as possible. First, the theoretical framework will be elaborated which will be the basis of this research. Second, the ADR methods within this framework themselves, their characteristics and their advantages and disadvantages will be individually elaborated. In addition, the professional opinions of Dutch ADR professionals are taken into account as well, to see if any gaps or mismatches can be discovered between the existing literature and the practical experiences of dispute resolution professionals in the Dutch construction sector.

2.1. Dispute definition

The difference between dispute and conflict is debated by professionals in the field. They are used interdependently with one another in the existing literature (Cakmak & Cakmak, 2013; Alaloul et al., 2019). Therefore in this research, the possible differences between conflict and dispute are neglected. Which of the two definitions is used does not matter for the theoretical framework in Figure 1 (Alaloul et al., 2019) in part 1.1., because it is a generic framework that states dispute resolution methods from negotiation to litigation. As will be pointed out later in this thesis, negotiation is used almost directly when a disagreement escalates so the terms 'dispute' and 'conflict' will be covered by only using the term dispute. However, a dispute is still not immediately present and has a certain starting point (Cheung et al., 2002; Alaloul et al., 2019). This starting point is a disagreement between two parties. If a party confronts the other with their problem, this is still no dispute if they can directly work it out together. If the other party reacts defensively, however, the disagreement can escalate into a dispute (Cheung et al., 2002). Moore (2014, p. 6) describes conflict quite broadly and full:

"Conflict is a competition or struggle between two or more people initiated to settle perceived or actual significant differences or views, or allocate resources that are perceived to be limited. It involves the use of a variety of approaches, procedures and strategies by opposing parties to compel or encourage each other to meet and satisfy their interests and needs. Parties in conflict generally have strong feelings about the people, issues and desirable outcomes; and often engage in assertive, if not outright aggressive, behaviour to achieve desired ends."

To conclude, this research does not address any differences between dispute and conflict. The definition of 'dispute' will be used to describe an escalated disagreement between two parties.

2.2. Dispute: Escalation of a disagreement

As explained before, disagreements are the starting point of disputes. If not properly managed, a disagreement can escalate quickly, leading to a dispute (Cheung et al., 2002). This is also underlined by Dutch construction dispute expert Paul Janssen, who states that a dispute in large construction projects occur from a disagreement. "By the means of negligence, this disagreement transforms into a dispute, which if not managed or discussed quickly enough can and will escalate" (Van Wassenaer, 2021, 11:44). This can be the cause for the choice and use of mediation further down the project line, see Figure 2.

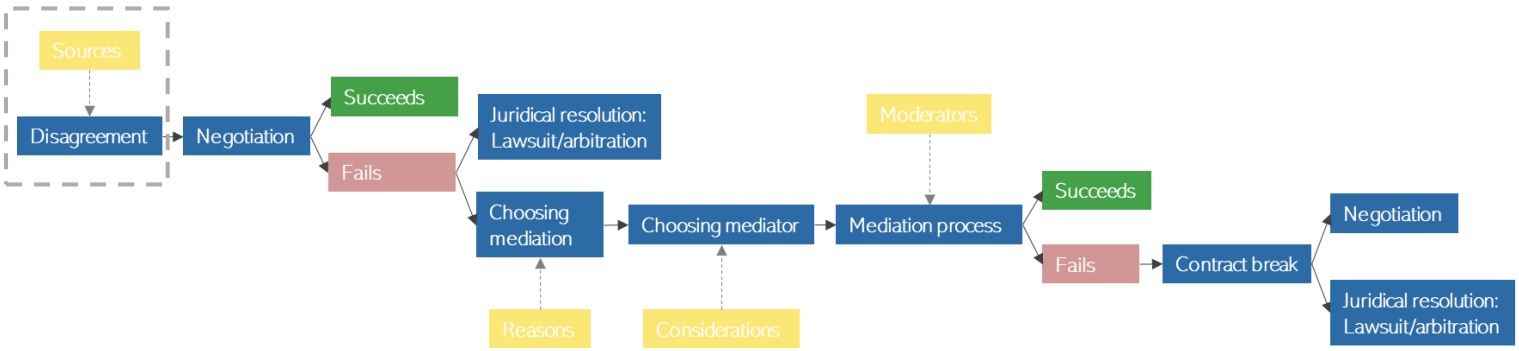

Figure 2. Disagreement in the full mediation process chart. Own figure.

Robbins & Judge (2013, p. 450-451) present three conditions that create the opportunity for disagreement to arise that are the main sources of disputes in construction projects. These academics state that at least one of them is necessary for a dispute to arise:

- Communication. Communication difficulties are a dispute source, which may originate in "word connotations, jargon, insufficient exchange of information and noise in the communication channel." (Robbins & Judge, 2013, p. 450)
- Structure. Parties with conflicting objectives are a dispute source, because it will stimulate them to fight each other.
- Personal variables. Collaborating with people that do not like each other because of their personality, also is a direct potential for dispute development.

These three dispute sources will be used in the theoretical framework in paragraph 2.9 as input, while at least one of them is needed for a dispute to arise in a construction project.

Sarat (1984) describes the different stages that lead the disputing parties to traditional dispute resolutions like arbitration or litigation. This can be seen in Figure 3. What stands out, is that this pyramid does not include any ADR form. By following this pyramid from the bottom upwards, the different dispute stages escalate into legal steps. Hence, this is what can happen if a disagreement escalates, and ADR is neglected.

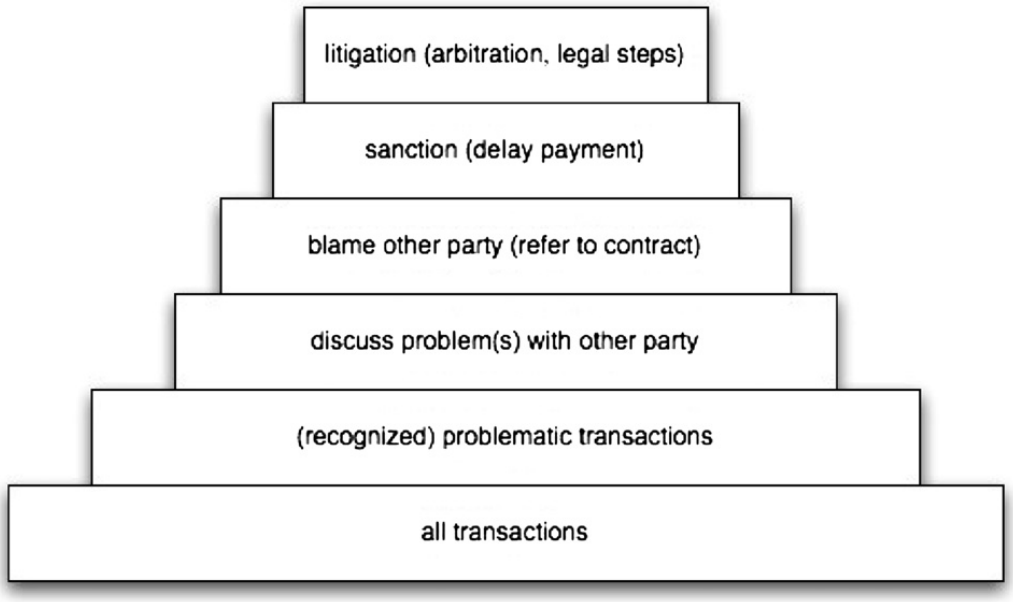

Figure 3. The dispute pyramid. Sarat (1984).

2.3. Traditional or alternative dispute resolution methods

Dispute resolution is described by Moore (2014) as follows: "Conflict resolution involves the use of a range of procedures to settle or reconcile seemingly incompatible desires or wishes of opposing parties, and to satisfy their interests or needs. It may be collaborative in nature, such as occurs in negotiation or mediation; involve a third-party decision maker, such as a judge; or utilize coercion such as psychological pressure. Conflict resolution may focus exclusively on the resolution of substantive or procedural issues, and/or focus on restoring, reconciling or redefining existing relationships; or establish new ones."

In the existing academic literature, six main types of dispute resolution methods are mentioned: Negotiation, dispute review board, mediation, mini-trial, arbitration and litigation (Cheung, 1999; Harmon, 2003; Koolwijk, 2006; Alaloul et al., 2019). To better understand these types and the differences between them, they are first explained from academic literature. In addition, their regularly mentioned advantages and disadvantages from academic literature are pointed out. Furthermore, success factors of the resolution methods are added for the four ADR main methods. These are omitted for arbitration and litigation, while the disputing parties have little to no control over the outcome because it is juridically based.

Arbitration and litigation are procedures with the outcome of a juridical judgement and are mentioned in literature as traditional dispute resolution methods (Koolwijk, 2006; Alaloul et al., 2019). Other dispute resolution methods do not have an outcome in the form of a juridical judgement and are called alternative dispute resolution (ADR) methods. While in

some research arbitration is mentioned as an ADR method (Alaloul et al., 2019), for this research it will be seen as a traditional dispute resolution method while it has a judgement as the outcome and is recognised in the literature as the last resort that is similar to litigation (Treacy, 1995; Cheung, 2002; Koolwijk, 2006). In addition, Cheung et al. (2002) point out that arbitration and litigation are different from ADR because they are regulated by law, hence are excluded from their ADR research.

Literature indicates that ADR methods should bring the opposing parties together. Currie and Robey (1988) state that dispute resolution by the means of non-hostile processes is preferable if business relationships are to be preserved and high sunk costs are to be prevented. Litigation and arbitration are more about fighting each other to win. As Dutch ADR professional Paul Smeets mentions: "Settlement like arbitration is out of the hands of the opposing parties and resolution is between the opposing parties whereby the parties play a more active role than with an arbitration procedure." (Van Wassenaer, 2020, 8:09).

So these traditional dispute resolution methods are found to be the least favourable concerning costs in time, financials and business relationships. However, both the existing literature and ADR practitioners state that sometimes these are the only remaining possibility, but they should be stored as ultimate solutions. "In some cases, arbitration is the only way to resolve a dispute." (Arent Van Wassenaer, personal communication).

2.4. Prior to a neutral third: direct negotiation

Despite intensive preparation and dispute prevention processes at the start of a project, disagreements still occur frequently during the project lifecycle. These parties should first try to resolve these issues by themselves. Before consulting a third party to aid in resolving their issues, parties use direct negotiations. Therefore, most disputes in construction are resolved in this way (Alaloul et al., 2019).

Direct negotiation is viewed as the simplest form of ADR (Alaloul et al., 2019). The objective of this method is to seek an immediate resolution that has the least cost in terms of time, finance and relational damage (Cheung et al., 2002). This is in line with recent research done by Arcadis, which underlines that direct negotiation is the most commonly used ADR method of 2020 in construction disputes in Europe (Pancoast et al., 2021, p. 21).

The outcome of a negotiation process is between the parties themselves and a non-juridical, non-binding and fully revisable agreement (Alaloul et al., 2019).

Direct negotiations can only be successful if the parties have the intentions and intrinsic motivation to resolve the dispute (Cheung, 1999). In addition, Dutch project manager and mediator Jaap Wierema points out that for negotiations to be successful, a clear common project goal has to be agreed upon between the two contracting parties. (Wierema, 2021, personal communication).

2.5. Mediation: Choosing for mediation & the mediator

Mediation is a process wherein disputing parties voluntarily participate to settle their issues. This process is guided by a neutral third party or group (the mediator/mediators) to help the conflicting parties to reach a consensus over their disagreements to resolve their dispute (Moore, 2014).

If the direct negotiations fail, the parties need other measures to resolve their dispute (Alaloul et al., 2019). Mediation is one of multiple possible dispute resolution methods which parties can choose from. If mediation is chosen, the parties must then agree upon a specific mediator to guide the process. This phase can be seen in the mediation process chart in Figure 4.

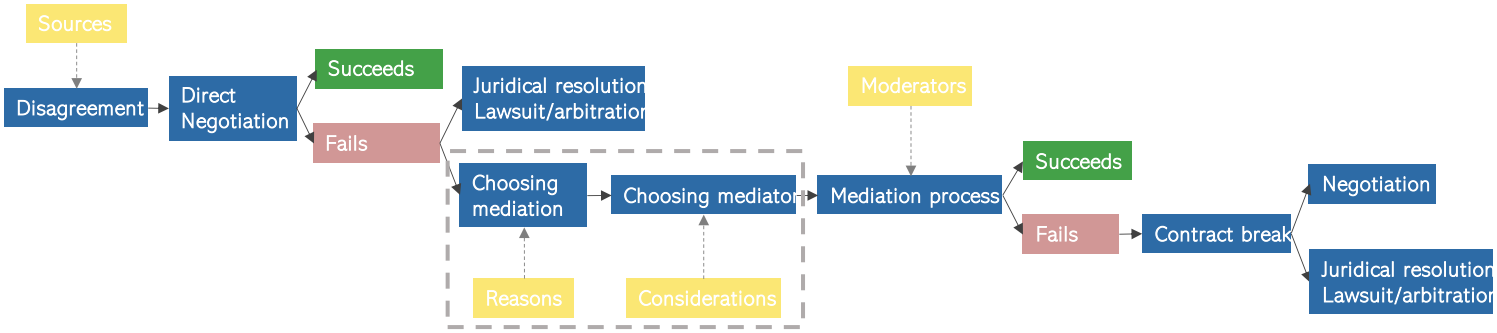

Figure 4. Choosing for mediation & the mediator in the full mediation process chart. Own figure.

Both parties have to agree on choosing mediation as a means to solve their dispute since it is the parties' free choice (Cheung, 2010). The decision for the use of mediation can have three origins: obligatory if laid down in the construction contract, voluntarily by the choice of both parties or voluntarily after the court suggests it during litigation. This process is shown in Figure 5. However, the outcome of mediation is nonbinding and non-juridical which means the dispute will only be resolved when the disputing parties unanimously agree with it (Phillips, 1997).

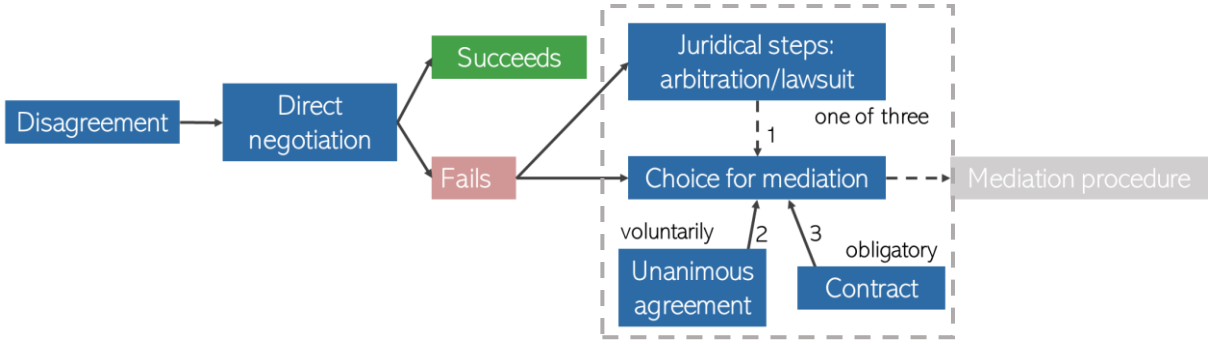

Figure 5. The possible origins for the choice of mediation. Own figure.

Six reasons **not** to choose for mediation (Cheung, 2010):

1. The subject matter is appropriate;
2. A party holds an unreasonable belief about the merits of their cases;
3. A party has unreasonably refused other methods;
4. The costs of mediating are disproportionate to the value of the dispute;
5. Mediation would delay a trial and increase cost; and
6. A party reasonably believes that there is no prospect of mediation succeeding.

Table 1. Advantages and disadvantages of mediation. Own figure.

Advantage	Disadvantage
Speed Affordable dispute resolution method that is faster and less costly than litigation (Gillie, 1991; Stipanowich, 1996; Robbins & Judge, 2013, p. 474).	*Non-binding outcome* If no agreement can be reached between the disputing parties, nothing can enforce a resolution for the dispute. (Moore, 2014).
Confidentiality The contents of mediation processes remain confidential (Gillie, 1991).	*Potential sunk costs* Due to the nonbinding outcome, the process might be suddenly stopped by one party which results in sunk costs in terms of money and time (Goodkind, 1988).
Retaining good relationship Provides a satisfying dispute resolution (Gillie, 1991) where the disturbed business relationship is alleviated (Moore, 2014).	*Failing to satisfy all* In delivered project cases, the mediator potentially cannot bring the parties to an agreement that satisfies both parties (Gillie, 1991).
Control Due to the personal nature and informality of the meetings, the parties have the feeling to be in more control of the process (Bush & Folger, 2004).	
Future collaboration	

Mediation is highly suggested when the disputing parties will likely be working together in the future, because of its ability to recover trust (Moore, 2014).	

Table 1 gives a good overview of the in literature described pros and cons of mediation, but literature does not specifically mention which considerations parties take into account for choosing mediation in practice.

After the parties have agreed upon using mediation as a means to resolve their dispute, the mediator will to be chosen and agreed upon. The mediator is an independent, objective and agreed upon by both parties. Hence they should not play part in the dispute in any way. In addition, the mediator is not authorised to bring to the table a binding decision as an outcome of the process (Moore, 2014).

2.6. Mediation: Process

Once the parties have chosen mediation, the mediation process can start. This process is the scope of this research, which is visualised in Figure 6.

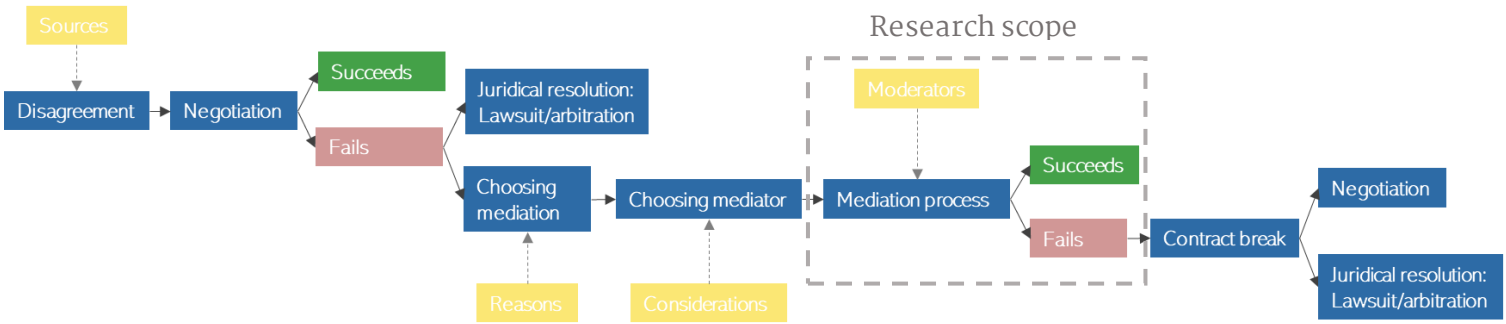

Figure 6. This research's scope: the mediation process. Own figure.

During the mediation process, the opposing parties are guided by a neutral third called the mediator. This individual listens to both parties about the dispute and facilitates negotiations between the opposing parties (Harmon, 2006; Moore, 2014; Ashworth & Perera, 2018). The goal of a mediation process is to find a financially fitting and workable settlement, upon which the two disputing parties both agree (Gould et al., 2010). A mediation process generally exists of three stages (Gould et al., 2010):

1) Pre-mediation phase. Where the parties agree in using mediation and prepare for the process.
2) The negotiation phase. Where the parties negotiate their disputes, guided by the mediator. This can be either direct or indirect.
3) Post-mediation. The parties deal with the reached agreement or take juridical steps.

1. **Pre-mediation phase**

The most important stage of mediation is the initial phase, where the disputing parties present their perceived core of the dispute. Then the mediator will try to establish a relationship with them and between the disputing parties, where the differences are sought to be minimised to bring the parties closer to each other and resolve the dispute in unanimous agreement (Harmon, 2002; Moore, 2014).

A contract is generally written to make clear arrangements about the mediation rules, - terms and - conditions between the parties and the mediator. This contract includes arrangements about the mediation's financial agreements, - confidentiality, - objective character, - rules for reaching a settlement and - planning (Gould et al., 2010).

During this initial stage, the central issues are collected from both parties, after which they are allocated to a specific party's interest (Moore, 2014).

2. **Negotiation phase**

This phase is also known as the mediation phase. During this phase, the mediator manages the mediation process by supervising the negotiations about the issues as they are written down (Moore, 2014).

During this first joint meeting, the mediator will establish the ground rules and invite each party to make an opening statement (Gould et al., 2010). The mediation process is flexible: after the parties shared their opening statements, the mediator can choose how to guide the process further, proposing to discuss specific issues collectively or with the parties individually (Gould et al., 2010).

Most commercial mediations, like mediations in construction, are conducted in a single day. However, this is not always the case since they can be extended to days, weeks or even months (Gould et al., 2010).

3. **Post-mediation**

After the mediation process has been conducted, there are two possible outcomes: A mediation procedure is found to be successful if the disputing parties come to an agreement afterwards and it is found to be unsuccessful if no agreement is reached (Gould et al., 2010; Saleh, 2019). Hence, when the mediation process has come to an end, there are two possible scenarios:

1) The parties reach a settlement and will execute its contents; what they have agreed upon. Or;
2) The parties were not able to reach a settlement and juridical procedures will follow in the form of arbitration or litigation (Gould et al., 2010).

2.7. Mediation: Input values

As previously elaborated, direct negotiations must have failed and the dispute must have escalated in order for the parties to choose mediation as a resolution method for their issues.

Project characteristics: Contract type and deviation of obligations

Most of the time, contracting parties start building a contract from widely used standard contract forms. If the used contract forms already have ADR methods in their general clauses, it becomes easier for parties to use them (Hendriksen & Bruijn, 2018). Some of the standard contracts currently have mediation implemented in their clauses, but most of the standard contracts do not include them as standard clauses. In addition, the contracting parties must comply with the obligations and agreements that are laid down in the contract. In other words, the type of contract and the agreements and obligations could be of influence the outcome of a mediation process in construction.

Since this is a given factor, it will be used as 'Input' in the initial theoretical framework in part 2.9.

Mediator: Mediation style

Gould et al. (2010) point out that mediation processes are flexible after the parties shared their opening statements. From that moment on, the mediator can guide the negotiation how he or she likes, with the use of the mediation tools of his or her choice, within the used mediation rules and guidelines. Therefore, the mediator's mediation style could be of importance to the process.

For example, there is some discussion about the role of the mediator in mediation processes. Some studies suggest that the mediator should always be objective, which means they should never give their opinion during the mediation (Gillie et al., 1988; Goodkind, 1988). Others suggest that the mediator can give their professional opinion to the parties if they ask for it (Stipanowich, 1996; Alaloul et al., 2019).

Dutch ADR professional Paul Smeets goes even further and states that a professional opinion should be delivered to parties to provoke them a little to come to the essence of a case. He calls this 'active mediation' (Van Wassenaer, 2020, 9:24). This would help the parties to open up quicker and it would hereby be easier to come to the essence of the case. This difference in the mediator's approach to the process could also influence the process.

Mediator: Abilities

To reach the highest potential of resolving disputes in the construction sector with mediation, mediators should train extensively to develop professional mediation skills. Even though the disputing parties have to negotiate towards a settlement themselves, the mediator plays the central role of directing the process and guiding the parties to move towards each other and find an agreement (Saleh, 2019). Hence, the mediator's abilities could be of importance to achieve the process' primary goal of reaching settlement.

Research by Bucklow (2007) lays down mediators' opinions on what abilities they think are most important to the process. These are then compared with mediating parties' opinions: what they think is the most important mediator's abilities. Both are compared in a top 6:

The mediator's opinion:

1. Listening;
2. Building rapport with people;
3. Having empathy;
4. Being patient;
5. Having a sense of humour;
6. Having stamina /persistence.

The mediation client's opinion:

1. Communicating with clarity;
2. Building rapport with people;
3. Inspiring trust;
4. Having empathy;
5. Being incisive;
6. Being professional.

Since these are given factors, they will be used as 'Input' in the initial theoretical framework in part 2.9.

2.8. Mediation process: Influencing factors

Academic literature presents a number of factors that are of influence to the mediation process. These are stated and described below.

Mediator: Showing objectivity (c+)

As mentioned before: during the mediation process, the mediator is not authorised to propose a binding decision as an outcome of the process (Moore, 2014).

Mediator: Using a caucus (c+)

The mediator might use a caucus, which is an individual meeting with one of the two parties. This might influence the mediation process positively, because Gould et al. (2010) describe the following advantages:

1) The party can express underlying emotions
2) The party might share information that was withhold earlier
3) Adds to the relationship and trust between the mediator and the party
4) The mediator could identify relevant settlement opportunities

Mediator: Forcing parties to settle (c-)

The mediator that reached the highest number of settlements in cases is generally found to be the best (Harmon, 2010). Therefore, some academics mention that the mediator's reliance on settlement rates could drive him to force the parties into settlement which is against mediation norms and rules (Brazil, 2002; Sander, 1995). This way, the mediator decides what is fair instead of the disputing parties, which goes against mediation's voluntarily nature and damages the process (Williams, 1996).

Parties: Trust in the mediator and process (c+)

In combination with objectivity, trust is a very important factor in the process of dispute resolution between disputing parties. In order for a mediation process to be successful, the disputing parties must trust both the mediator and the mediation process (Harmon, 2010). In addition, parties lose and gain trust fairly easily; it is a fragile component in the mediation process (Harmon, 2010).

Parties: Intentions to resolve issues (c+)

As with other ADR methods, mediation will only work out when the disputing party's objective is to find a resolution together (Gillie, 1991; Moore, 2014).
In addition, when parties are proposed a mediation procedure as an alternative to the ongoing litigation by the court, the parties can participate to only show their willingness to the court and not participate in the process towards mutual agreement. In addition, a

mediation process can also be disturbed if parties are information is not openly shared and being withheld from the other party (Van Wassenaer, 2021, personal communication).

Parties: Realising uncertain juridical position (c+)

Parties are considering their juridical position in the case, far before the mediation has started. During the mediation they are frequently reflecting what the Best Alternative To a Negotiated Agreement (BATNA) would be. This alternative normally includes juridical steps, in which case the juridical position of the party is important. If the party has a clear juridical advantage, chances are higher to win a lawsuit or arbitration process. If none of the two parties is in clear juridical advantage, meeting in the middle through mediation might be the best option (Gould et al., 2010).

Parties: Positional play (c-)

If one of the disputing parties defends their position and plays positional play, they will only be interested in their financial benefit of the outcome of the process, if they are willing to participate in the first place (Saleh, 2019). Hence, this will drive the parties away from each other and negatively influence the mediation process.

External: Lawyers' roles (c-)

The existing literature states that attorneys are trained to be adversarial, so will drive the opposing parties against each other to win the case instead of towards each other to find the best resolution (Burger, 1982; Burger, 1984; Bristow and Vasilopoulos 1995; Rendell 2000). The often important business relationship between the disputing parties in construction must be of second interest to the attorney (Harmon, 2003). In addition, attorneys nor judges are using ADR methods extensively when it is not mandatory to use them (Kakalik et al., 1996).

ADR professional Paul Smeets shares his opinion about this: "construction attorneys are very capable of starting a dispute, but not to resolve one successfully". (Van Wassenaer, 2020, 12:18).

Dutch project manager and mediator Jaap Wierema shares their opinion: "The attorney will not likely be open to mediation, and choose to advise against ADR methods because of their own objective to make hours". (Jaap Wierema, 2021, personal communication). The attorneys of construction businesses are often house attorneys that are in service of these organisations for years (Van Wassenaer, 2021, personal communication).

However, one of the directors of the RvA in the Netherlands states that a good (house) attorney would do what is best for their client, including propositions for use of ADR

methods when demanded. Before mentioned opportunistic behaviour would be worrying (Van Luik, 2021, personal communication).

2.9. Mediation process: Initial theoretical framework

From the closed information from the existing literature in combination with the opinions and statements of Dutch ADR professionals, a framework has been constructed for the mediation process. This framework can be seen in Figure 7.

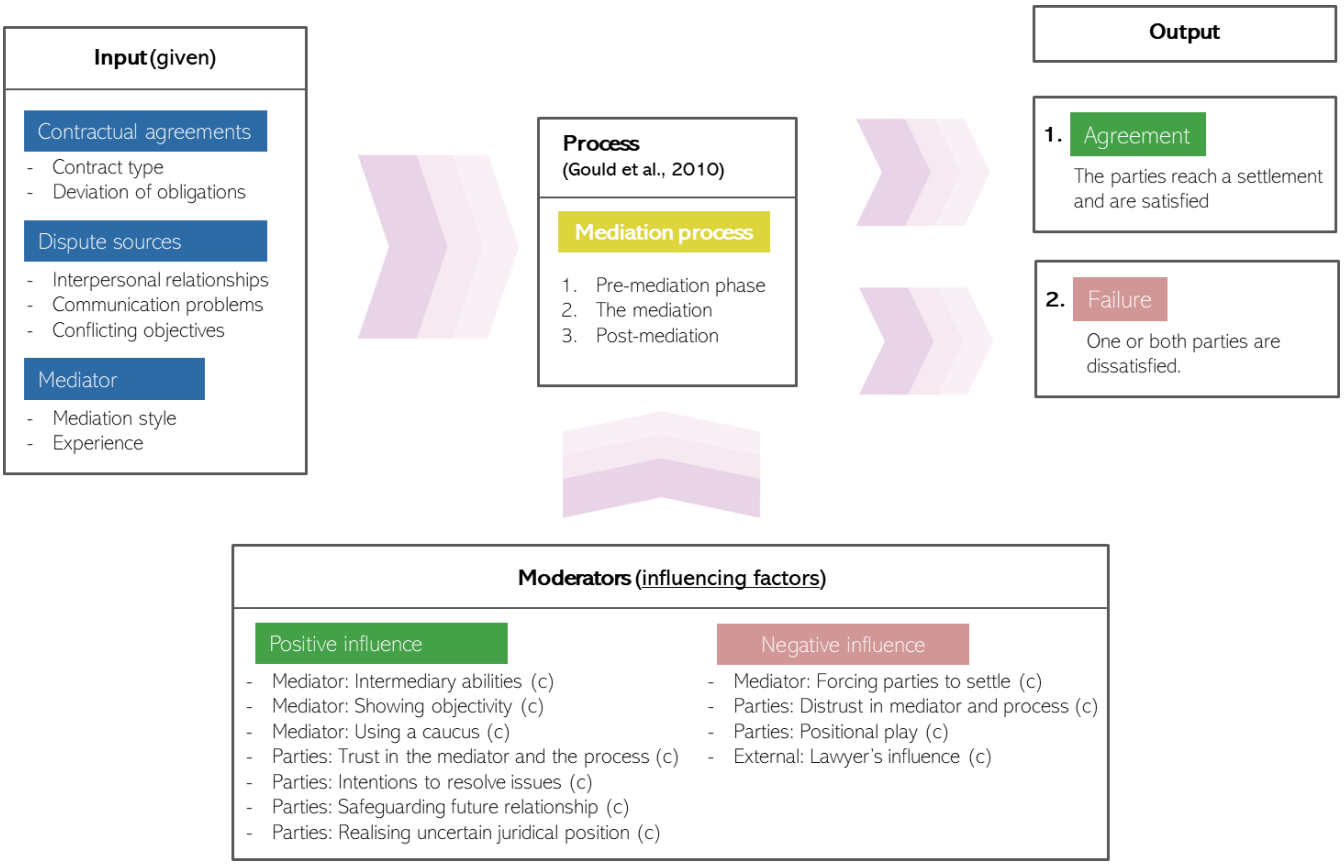

Figure 7. Initial theoretical framework for the mediation process in construction projects. This framework is based on closed information from academic literature. Own figure.

The initial theoretical framework in Figure 7 contains a high number of moderators. The relationships between these factors are not yet inquired in academic research. This research will focus on these influencing factors, inquire if other factors apply and how they cohere. In addition, the mediation process might entail more detail than this initial framework implies. Therefore, this research also inquires the mediation process in practice and attempts to gain a more detailed insight in this process.

3. Method

This research both has explorative and qualitative characteristics. The overall research is explorative, because there has not been conducted much research on mediation processes in the construction sector and related contributing factors in practice. To fill this gap, a grounded theory approach is chosen, because there has not been conducted research on the influencing factors of mediation processes and the specification of the process itself. This approach entails that the mediation process will analysed with a broad approach, wherein every found component that is possibly valuable will be added to the to-be-developed theory.

3.1. Grounded theory approach

The approach of this research is the grounded theory approach, as has been described and elaborated by Charmaz (2008). This research approach is qualitative of nature, where a process or a phenomenon can be inquired to develop new theories that come from data that have been gathered from real life cases. In this research these are four mediation cases.

With this method, all steps are conducted in an iterative way: the gathering of data, the data analysis and the development of theory. To come to new theory, data collection and analysis will be iteratively carried out, up until the point where new data do not give new insights to the developed theory (Chamaz, 2008).

3.2. Sampling: case studies

During consultations with several Dutch ADR professionals, the possibilities for case studies were discussed. The experts mentioned that the disputing parties would be very unlikely to participate in this research if the mediation had failed and turned into an arbitrary process or litigation. In addition, the field of ADR is still quite small in the Netherlands. This results in a minor amount of available recent cases. It is difficult to find Dutch mediation cases that resulted in a lawsuit or arbitration. However, a few were found by inquiring the RvA database on mediation cases. After contacting the related lawyers, sending participation invitations to their clients resulted in zero cooperation. The lawyers warned for this beforehand: “You can always try, but your chances are low.”

Therefore, convenience sampling was used to select case studies which resulted in the acquisition of four cases. These four cases can be divided into two sample groups: one group where the mediations procedures were successful and resulted in settlement, the other

group where the mediation did not result in settlement and therefore was unsuccessful. The deviation of the four cases:

- Case study 1: Construction of dwelling blocks – Successful
- Case study 2: Renovation of tram depot's electrical circuits - Unsuccessful
- Case study 3: Construction of semi-public cultural building - Successful
- Case study 4: Renovation and fit-out of hospital towers - Successful

The mediators of case study 3 and 4 do not call themselves mediator, but intermediaries. In this research however, to preserve clarity in the line of thought and to make a clear comparison between these neutral third parties, these individuals are called mediator as well. The possible differences are further inquired in the cases.

3.3. Data collection

The data from the in-depth interviews are acquired with the following characteristics:

- The duration of the interviews is aimed to be around one hour
- The interviews are conducted online via MS Teams software
- The spoken language in the interviews is Dutch, which is the native language of all participants and the spoken language during the related construction project cases.
- The interviews are recorded in video and audio
- A built in MS Teams auto transcription tool is used to generate raw transcriptions.
- The raw transcripts are manually adjusted and refined by listening to the recordings. This is done by a technique called intelligent verbatim transcription. This transcription method deviates from exact transcription by omitting expressions of colloquial language and fillers like 'um', 'ah', laughter and pauses.
- All names of individuals, businesses and projects in the refined transcripts are anonymised, to safeguard the participants' privacy.
- In total, fifteen participants have been interviewed from four cases.
- The interview protocol (in Dutch) can be seen in Appendix 1 on page 105.

As mentioned earlier, the case studies are inquired by doing interviews with the in mediation involved individuals from the disputing parties as well as the mediator. Hereby, information is gathered from all perspectives to reconstruct the stories as objective and realistically as possible. The interviews are conducted in a semi structured and in-depth way. The following open questions were asked to all participants:

- What kind of project was it?
- What were the causes for disagreement to arise?
- How did the disagreement escalate?
- Why did you chose for mediation?

- How did you come to this mediator?
- How did the mediation process unfold?
- What did you think of the outcome?

Based on the answers on these questions, in-depth questions were asked as follow-ups. Intelligent verbatim transcription is used to make an accurate repetition of the recorded interviews. This transcription method deviates from exact transcription by omitting expressions of colloquial language and fillers like 'um', 'ah', laughter and pauses.

Table 2. In-depth interviews: participant's roles and durations. Own figure.

CASE STUDY INTERVIEWS		
	Interviewee's role	**Interview duration** (hh:mm:ss)
Case 1		
1	**Mediator**	01:15:32
2	**Contractor: Director (Director A)**	00:51:01
3	**Client: Director (Director O)**	00:41:03
Case 2		
1	**Mediator**	01:06:54
2	**Contractor: Director (Director A)**	01:00:02
3	**Contractor: Projectleader (Projectleader A)**	01:12:20
4	**Client: Director (Director O)**	00:41:17
5	**Client: Projectleader (Projectleader O)**	00:34:20
Case 3		
1	**Mediator 1**	00:47:19
2	**Mediator 2**	00:52:36
3	**Contractor: Director (Director A)**	01:00:38
4	**Client delegate: Project manager (Project manager O)**	00:44:36
Case 4		
1	**Mediator**	00:54:06
2	**Contractor: Director (Director A)**	00:45:51
3	**Client delegate: Project manager (Project manager O)**	01:05:46

The interview participant's roles per case study and interview durations can be seen in Table 2.

3.4. Data analysis

The interview transcript will be analysed with the qualitative data analyse software Atlas TI. The transcripts are analysed by allocating quotes to generated topics. In this way, quotes about one specific topic can be presented from all perspectives at the same time. This makes the comparison easier. Based on these analysis, detailed reconstructions of the mediation processes in the case studies are made on basis of all perspectives: from participating individuals of the client, the contractor and the mediator(s). From the literature, closed coding is drawn to analyse mediation in practice in the case studies. These are divided into

three code groups, as can be seen in Table 3. The codes that are marked with (+) positively influence the mediation process, and those marked with (-) have negatively influence the process.

The term 'parties' is used to describe the representatives of the client or contractor who are present during the mediation sessions.

The term 'external' is used to label concepts or processes outside of the mediation meetings, because the mediation process is the scope of this research. Representatives of the disputing parties and the mediator are present during mediation meetings, which means they are internal in the mediation process.

Table 3. Closed coding: positive and negative factors influencing the mediation process. Own figure.

Code group	Code
Mediator's interventions	Mediation abilities (+)
	Showing objectivity (+)
	Using a caucus (+)
	Forcing parties to settle (-)
Moderators	Parties' trust in mediator and process (+)
	Parties' intentions to resolve issues (+)
	Parties realising uncertain juridical position (+)
	Parties' distrust in mediator and process (-)
	Parties' positional play (-)
	External: Lawyer's influence (-)

3.5. Ethical considerations

The privacy of the interviewees will be sought to be safeguarded by all means necessary in this research. Especially in the case of disputes, where the demand for anonymity is high. Therefore, the identity of the interviewees, their businesses, the mediators and the inquired projects have been anonymised in the transcripts. Contrary, the interviewees names of the explorative interview participants, will be used since they agreed upon it. The use of these names gives additional body to the theoretical background in the Dutch construction context.

4. Case descriptions

As mentioned before, four case studies are conducted to analyse their mediation processes. Per case, a detailed reconstruction will be made. The reconstructions are structured as follows: General characteristics; case description; the development and the escalation of the dispute; the mediator; the mediation process & contributing factors; the mediation outcome; concluded by the case study conclusions. The influencing factors toe the mediation process are tagged as follows:

- Positive influence: +
- Negative influence: -
- Factor from academic literature (closed coding): c
- New factor from the case studies (open coding): o

For example, an influencing factor from existing literature that is of positive influence will receive the following tag: (c+); an influencing factor that is newly found in the case studies and is of negative influence will be tagged with: (o-).

4.1. Case study 1: Construction of dwelling blocks

This project concerns the demolition of old dwellings, the renovation of existing blocks and construction of new dwelling blocks which add up to a total number of 170 houses. The project was put onto the market by tender by the client, which is a Dutch social housing association. Local contractors were invited to participate in the tender in 2019, whereby the project was awarded to a local contractor in the same year.

General characteristics

- Contract type: Integrated / UAV-GC
- Start mediation: 2020
- Duration mediation: A few weeks
- Number of mediation meetings: 3
- Project phase during mediation: Construction
- Mediation was successful: settlement was reached
- Mediator's style: Classic mediation (same mediator as Case 2)
- Individuals gathering around the mediation table:
    - Client: Director
    - Client: Project director (on a few occasions)
    - Contractor: Director
    - Contractor: Project director (on a few occasions)

- Mediator (same mediator as in Case 2)

Context & storyline

The project was tendered in 2019 and it was finally delivered in Q3/Q4 of 2021 after a major amount of delays and issues. The collaboration in this project was on basis of a standard UAV-GC contract, which is an integrated contract form. Hereby, the contractor is both responsible for the design and the construction of the work. Both parties were not very experienced with the UAV-GC integrated contract form. For the contractor, it was the first time working with this type of contract. Both the client and the contractor had more experience in working with traditional contract forms.

The project was put onto the market by a tender with a ceiling budget. This tender was not conducted via European tender guidelines. Alternatively, the client asked a small group of familiar local contractors to participate. This was allowed because the client is a housing association which is a semi-public institution in the Netherlands. Therefore, tendering via European guidelines is not mandatory by Dutch law.

During the tender procedure, all participants offered a financial budget that exceeded the ceiling budget which resulted in it being unsuccessful. Afterwards, one contractor made some adjustments to the project brief to decrease costs and offer a plan within the client's budget. Hence, lawyers were hired to negotiate about the contract's contents and the project requirements. This was found to be already damaging the business relationship.

A specific concept called 'around the block' was used to make the construction phase of this project as efficient as possible. Current residents were required to move out of their homes for 35 days, while the old dwelling blocks were demolished and renovated, and the new dwelling bocks were constructed. After these 35 days, they would be able to return to their renovated houses. Because of the high construction speed of this project, the project was highly technical and included the use of a lot of prefabricated elements. Planning and logistics are found by the parties to be high in complexity.

Development and escalation of the dispute

With integrated contract forms like UAV-GC, only a descriptive brief with design and delivery criteria is used. In other words, the functional requirements of the final product are stated in the project brief. The contractor may design freely if the outcome matches these functional criteria. However, the contractor produced designs that the client does not agree with. This resulted in major discussions.

The contractor's director elaborates: "For example, with this integrated contract form, there is a requirement that states: 'The light fixture needs to be attached to the ceiling, where the distribution boxes are placed.' It doesn't say what shape the distribution box should have. It is a functional requirement. So we delivered a certain type of distribution box. [...] Then the client's supervisor said: 'Now, we're not used to that. I want it differently.' We argued: 'But is it functional? It doesn't matter if it's shape is round or square.' [...] It is like buying a car and expecting the fuel cap to be located on the right side, where it is commonly placed. Then you receive a car with the fuel cap on the left side and don't agree with it. Those kinds of issues continuously emerged." (Contractor: Director)

The mediator adds that the main source of the disputes in this case was rooted in the contract form and the renegotiations about contract requirements: "There is discussion is about: 'What is most valid: the offer by the contractor, the changes in agreements or the project requirements?' " (Mediator)

The client was not only in search for a one-time contractor for this project, but also one to collaborate with in future projects. Because the client was in search for this sustainable relationship, it expected the contractor to be involved with their needs and to be flexible in adjusting the project design to the client's needs. Contrarily, the contractor experienced the project budget to be low. It had already done some adjustments to the project brief to reduce construction costs. Therefore, it did not saw any flexibility in being adaptive and flexible to any extra or specific demands of the client. The client and contractor were not aware of their positions and expectations in the beginning of the project. The contractor mentions: "Everything the client wants besides our plan will be paid for by the client." (Contractor: Director)

The client had made promises to the existing occupants, which the contractor was uninformed about. An example of this is the promise to a tenant that lived in a dwelling that was to be demolished, that it would be able to retain his garage. Some of these promises were found not to be impossible to be fulfilled by the contractor. This led to incomprehension at the side of the contractor who responded: "Why didn't we know this?" (Contractor: Director). In addition, it resulted in the occupant's irritation towards the contractor's executives. The tenant's emotions rose to such levels that they threatened some of the contractor's employees at a certain moment.

After these escalations, the disputing parties hired lawyers to work for them. The opposing lawyers communicated well, retaining a respectful dialogue. However, the emotions with the opposing parties' on-site individuals rose to such levels that the parties' executive

project teams could no longer communicate with each other. To resolve these issues, on-site executives from both sides got replaced.

After the escalation of several disputes, the contractor proposed to appoint a specific collaboration coach to help them resolve the issues. This individual previously helped the contractor with improving internal collaboration. After three sessions, the existing issues between the two parties were not settled and the process was discontinued. At least during one session, the executive manager of the client was too late or did not show up. The contractor experienced this as an act of distrust and disrespect: "This is not done." (Contractor, Project director)

During the start of construction of the work, a building block was assessed by the local municipality to be placed deviating from the drawings. This led to major discussions that resulted in the discontinuity of construction. Again, lawyers were appointed to handle these negotiations which resulted in the disputing parties sending threats and claims towards each other. Eventually, it appeared that the municipality was using a drawing that had some errors. The building block was positioned adequately. However, the question remained who would pay for the arisen financial costs. The project buffer was now gone, and the project budget was already exceeded by 1M euros in this early stage of construction.

The parties tried to find settlement through direct negotiations, without reaching it. This led to further escalation, but the parties' directors retained a respectful dialogue.

At this moment during the finalisation of construction, the parties concluded that the project could not continue in this way. The contractor proposed a lawsuit. He said: "I'm done with this, let's go to the judge." However, the client proposed mediation as an alternative to resolve the dispute which the contractor's director accepted, on the condition that it should have knowledge of the construction industry. The director of the contractor eventually proposed a mediator with whom it had good previous experiences. After introductions, the client agreed upon this mediator.

The mediator

The mediator in this case has more than 25 years of mediation experience, and has a juridical background. He studied law whereafter it became a construction lawyer which it remains to be until today. "Currently, 70% of my work contains work as a lawyer, and 30% contains of mediations." (Mediator)

The mediator is a practitioner of a classic form of mediation, so he does not give its opinion. He works in line with the mediation rules as prescribed by the Dutch mediation institute MFN (Mediatorsfederatie Nederland) where it is registered as a mediator. The MFN follows the guidelines of classic mediation. "Before the initial meeting, I send to parties that I'm bound to the mediation rules of the MFN." (Mediator)

Sometimes however, the mediator sometimes deviates from the strict mediation rules, where he proposes to the parties a way of looking at the issue. He explains: "In the world of traditional and strict mediation, they say you have to act ignorant, but also to be lazy and sit back. You're only moderator in the discussion. In the construction sector that generally doesn't work, while the parties want someone that takes control. I'm such a mediator, and I think that is part of mediation, but the modernist views to mediation from the very strict mediators don't agree with me. They think I am interfering too much with the dispute." (Mediator)

The mediator explicitly mentions that making a decision is out of his scope: "Being a mediator, you cannot make a decision in the process. This allows you to also speak to the parties in private, which deviates from an arbitrary board or a judge." (Mediator)

This mediator charges both parties for half of the financial mediation costs which has to be agreed upon before the mediation process starts.

The mediation process & contributing factors

The relationship between the executive project directors had deteriorated. The mediator states: "We agreed upon starting the mediation process with both directors, because the collaborative relation between the project directors was disturbed in a way that they were not on speaking terms anymore." (Mediator)

In the introductory session, the mediator hears both parties separately. He asks them what their position in their dispute is, and how it came to be. The contractor's director explains: "Then we had an introductory meeting, to get acquainted: 'Who is the mediator?' I already knew him of course, but the client's director did not. During these meetings we explained to him who we were, what happened and what our positions were." (Contractor: director) In addition, both party's interests are defined and written down in consultation. Furthermore, the mediator explains to the parties that the mediation process is flexible so they will shape the process in dialogue together.

During this session, the mediator also tried to put the disputing parties into "mediation stance", to make them aware of the fact that meeting in the middle is required, and will be done for each individual disputing point. "Cherry picking is out of the question."

(Mediator) In addition, the mediator proposed for the parties' directors to agree upon collaboratively presenting the outcome of the mediation procedure to both organisation's boards of directors.

At the end of these individual meetings, both parties decided to continue with the actual mediation process to resolve their dispute.

The negotiation part of the mediation consists of plenary sessions. Three mediation sessions were conducted in total. Two wherein the parties negotiated about individual issues subsequently, and one wherein the executive project directors joined the table to share what was going on in the workspace.

Mediator's interventions: Showing objectivity (c+)

The mediator explains the importance of being open and sharing all information with the parties, in order to show objectivity. "But in such a discussion -and that is the mediator's role- is to be able to create such an atmosphere that you show to people what will be done: to sketch an image of the process on which they reply: 'All right, fair enough, we're going to try.' In the second meeting, I build on this, to have the parties think: 'All right, I see that the mediator really is in a neutral position; That he is critical of both parties and I am being heard enough. I also see progression, because we're moving ahead on issues in the discussion.' That is often why the process continues." (Mediator).

During the individual introductory meetings with the parties' directors, the mediator explains the nature of the mediation process, explicitly mentions his objective role as mediator and states that "any party can retreat from the mediation process at any desired moment during the process" (Mediator).

Both parties' interests and all issues are written down during the initial meeting. This is done "in order to be as objective as possible." (Mediator)

The mediator mentions different tools he uses to show his objectivity: "[...] the letter of engagement that I normally sent to the parties. In this letter, I confirm that I've been asked to be mediator in the case, and I lay down possible conflicts of interest." He adds: "In this letter, I also explain what mediation entails, and I dive into certain important aspects of voluntariness and confidentiality: that parties always enter the process voluntarily, and I also mention that the parties can retreat at any time during the process. [...] I also refer the parties to that I am bound to the rules of conduct of the MFN." (Mediator)

Mediator's interventions: Using a caucus: (c+)

The mediator only conducts the first inventory interviews with the parties separately, but does not use a caucus during the mediation itself. The contractor's director explains: "[…] the first meeting was with us and the client separately, to explore the dispute he asked us: 'What is your opinion and what's your stance in the dispute?' etcetera.' After those two introductory meetings, he asked for additional dossier information after which we entered into the collective part of the mediation process." (Contractor: Director) The mediator adds: "A mediator does not have to conduct every meeting plenary, so he may consult with the parties individually which makes him a shuttle diplomat. That did not happen during the negotiation process in this case, but standalone during the introductory meetings." (Mediator)

Mediator's interventions: Additional interventions (o+)

The mediator uses different interventions during the process in order to guide the process and make it run more smoothly.

For example, some issues are during the mediation sessions the points of dispute are being settled individually and subsequently. Some issues were easily settled, and more challenging ones were what the mediator calls "parked" to be solved at the end of the negotiations. The mediator explains: "[…] sometimes you say: 'At this moment, we're not reaching settlement about this issue. We'll let this rest and we'll continue with other issues first.' " (Mediator)

The mediator invites the executive project directors to join a mediation session: "Then we conducted a plenary debate with myself and the two directors, in which we agreed that during the following mediation meeting, the executive project directors should join the table." (Mediator)

The mediator mentions that this helped the mediation process: "[…] and that is also beneficial to the process because at that moment, both parties could hear what was additionally going on. That way, we could determine per issue: 'Yes, this is fair enough, this is realistic.' " (Mediator)

Mediator's interventions: Steering parties with open questions (o+)

The mediator often asks open questions to guide the parties into a certain direction. These questions are often based on its juridical expertise, to make the parties more aware of their legal positions. He explains: "I use my juridical knowledge, because I always think: 'If the parties don't find agreement, you will litigate.' […] So the parties' legal position should play role in the reviewing their case in the mediation process. […] Those are elements I try to

bring to the table in order to emotionally sober up the parties." As mentioned before, this deviates from the beliefs of strict classical mediators.

The mediator explains: "[…] sometimes you throw something at the parties and say: 'Couldn't you view this issue from this perspective? Couldn't you find each other in that way?' " (Mediator)

Internal moderator: Parties' trust in the mediator and process (c+)

The client's director explains that he values the mediator: "[…] I have to be frank: we first wanted to get more acquainted, but that did not disappoint us. In fact, I am very enthusiastic about this mediator. […] At the one hand I like it that he is sincere and objective and on the other hand he has a clear goal: to make sure that we will resolve the issues. In addition, I value that he is knowledgeable, his seniority, his ability to stand above the parties and that he really listens to what is being said by the parties." (Client: Director)

Internal moderator: Parties' intention to resolve issues (c+)

Both parties want to try mediation as an alternative to taking long and costly juridical steps. The contractor's director explains: "I said: 'Let's try it, because it is a way to search for a resolution to the problem.' If you go to the judge, then it may cost months or years to come to a solution, with a lot of additional costs." (Contractor: Director)

The client's contractor agrees: "You know, you don't want to enter litigation in such a case, where a lot has happened. Those processes become very lengthy with a lot of costs." (Client: Director)

Internal moderator: Parties realising uncertain juridical position (c+)

The mediator explains that the parties will always think about their juridical positions regarding the issues: "We have a difference of opinion and we don't find agreement. All parties will always think: 'If we don't resolve the issue, how am I going to prove that during litigation or arbitration? Do I have enough files and arguments to convincingly bring that confidently during a lawsuit.' That helped in the mediation process for parties to negotiate more easily." (Mediator)

Internal moderator: Parties safeguarding relationship (o+)

The parties and mediator think differently about the influence of safeguarding the relationship for future collaborations.

The mediator thinks that safeguarding their relationship for future collaborations plays a role for them: "[…] you show the parties this to give them insights in: 'Why are we doing this?' That you say: 'Safeguarding the business relationship.' And that also applies to

these parties, especially when maintenance is part of the contract, but maybe also for other projects: that they want collaborate together in the future." (Mediator)

The client's opinion deviates from the mediator: "Do I trust that the contractor also feels bad about what happened? Yes I do. They did not want this to happen. But do I trust this to evolve into a sustainable collaboration? That I do not. That has not been developed. I also don't think that was the goal. The goal was to complete this project. The goal was not to develop a sustainable relationship." (Client, Director)

The contractor seems to have had in mind future collaborations with the client: "[…] then I think: 'Well, you could also have invited us to that tender.' But in some way or another, that didn't happen. They can say: 'Yes, we want to collaborate together in the future, but is that for real or not?'" (Contractor: Director)

Internal moderator: Parties' representatives' good communication (o+)

Throughout the full mediation procedure, the opposing directors retained to have an open dialogue, where the parties were found to be truthful and to share their opinion in a respectful manner. The mediator explains: "At first we had agreed upon starting the mediation, because the relationship between the project directors was so disturbed that we said: 'Let's start the mediation process with both directors first, because they are on speaking terms.' […] During the project, both the client's and the contractor's director have contact, and that is good." (Mediator)

Internal moderator: Client's lacking technical project knowledge (o-)

The mediation sessions ran quite smoothly. However, individuals at the side of the director were more aware of the technical specificities of the project than individuals from the client, which led to some misunderstandings in the discussions. This made the negotiations harder.

The mediator elaborates: "[…] that also shows the difference between the client's director who mainly wants to focus on the main elements, and the contractor's director who's on the level of: 'Where should this light switch be placed?' He knew a lot of technical details. This reflects in the discussions in the mediation process: sometimes this results in a misunderstanding and the parties not understanding each other well." (Mediator)

The contractor's director elaborates that he experienced it to be hard to have discussion with the client's lawyer: "The lawyer of the client, he didn't even know the difference between site preparation and preparation for habitation. […] If you don't even know those terms, that leads to a lot of discussion and misunderstanding." (Contractor: Director)

Action: Parties bartering / Horse-trading (o+)

After a few mediation sessions, most of the issues are resolved and settled. Subsequently, the disputing parties take a look at the remaining unresolved disputing points. These are often found to be most difficult to resolve. A 'back and forth' process takes place, where propositions are presented from both sides in a back and forth fashion to try and reach a settlement. The contractor's director explains: "Because at a certain point, you end up in a yes or no game. Then we argue: 'All right, then we'll just bargain and use horse-trading." (Contractor, Project director)

The mediator explains this is important in the negotiation phase of the mediation: "Sometimes, the parties argue towards the opposition: 'In this issue we're not willing to move towards the other party. I will leave it at that, but then I want you to be more flexible at other issues.' So it partly is about sensing, you could use the term horse-trading." (Mediator)

Mediation outcome

The outcome of the mediation procedure was a settlement, after which the construction continued. The project was delivered in the third or fourth quarter of 2021.

The mediator explains that he makes the parties aware that agreeing with the settlement means that both parties are satisfied. "[...] that is how we came to a result on which both parties agreed upon to be satisfied with this outcome." (Mediator)

The client and contractor is satisfied with the outcome, but is dissatisfied with some parts of the process: "Yes, I am satisfied because the fact that we have come to an agreement. I'm not satisfied on certain points where I had to give in." (Client, Director)

The client's director agrees: "I think that the mediation has resulted in not negatively saying goodbye from the project. We both created a nice innovative process. The result is a nice neighbourhood with beautiful dwellings where only a few rounding issues remain, but all is fine." (Client: Director)

For the client's director, it doesn't feel like a future relationship has been developed: "Of course we have developed an understanding for their point of view, but was a connection made? That doesn't feel that way. [...] And I don't think that was the goal of the process. The goal was not to develop a sustainable relationship." (Client: Director)

The client's director adds: "Finally, the final price comes out of the mediation, and then it's either acceptable or not. We learned a lot from that. I think it has been a very expensive course for a lot of people, but it has been successful." (Client: Director)

4.2. Case study 2: Renovating electrical circuit of two tram depots

Part of the electrical circuit of two tram depot buildings had reached end-of-life status and needed to be replaced. This building is property of a municipal public transport organisation. The project is put onto the market via tender, to allocate a party that will design and realise the new electric circuits.

General characteristics

- Contract type: Integrated / UAV-GC or UAV-TI (contractor not responsible for design)?
- Start mediation: January 2019 – May 2021
- Duration mediation: 1,5 years
- Number of mediation consultations: 18+
- Project phase during mediation: Design phase
- Mediation was unsuccessful: No settlement was reached
- Mediator's style: Classic mediation (same mediator as Case 1)
- Client is public institution: a public transport organisation, part of a municipality
- Individuals gathering around the mediation table:
    - Client: Director (only the first meeting)
    - Client: Project director (most of the meetings)
    - Client: Project executives
    - Contractor: Director (only the first meeting)
    - Contractor: Project director (most of the meetings)
    - Contractor: Project executives
    - Mediator (same mediator as in Case 1)

Context & storyline

This project's brief contains the renovation of the electrical circuit of two tram depots. The project was put out to tender by European tender guidelines in 2019, on basis of three awarding criteria:

1. Selectivity. Short-circuit in the new tram depot's circuits should not result in problems in other parts of the city's electrical system or vice versa.
2. Short-circuit resistance. If a short-circuit occurs, the fuses should blow and not burn.
3. Best 'MEAT' value (Most Economically Advantageous Tender), which means the most economical value based on: lowest price; lowest delivery value; and best value for money.

The project was put out to tender on the market on the basis of a UAV-GC (integrated) contract. Hence, both the design of the renewed electrical system and the construction are the contractor's obligations. As is the case with case study 1, due to the integrated contact form the project brief describes functional requirements of the design, but does not state specifically how these requirements are to be technically met. Hence, the client leaves the answer to the design question to the creativity and capability of market parties. Since there are not many parties in the Netherlands that are able to design and construct tram electrification circuits like these, the familiar parties in this niche participate the tender.

The winning contractor is part of an energy business, and conducts technical service and – construction in this project.

Part of the MEAT value awarding criterion, was the ability for the bidding parties to fit the new electrification into the existing old electrical cabinets. The winning contractor stated in his bidding that they would be able to meet this criterion. Also included in the MEAT value, the design should be 'fail safe' for employees. The tram depots must be safe for employees to work in the tram depots at all times, also if a short-circuit occurs.

The functional criteria in the project brief were written by a stand-alone technician, who was employed by the client. After awarding the project, this technician is also allocated to review and assess the contractor's designs proposals in the design phase. This technician is an expert in his field and is specialised in electrical circuits for trams.

The project concerns the redesign of a deprived electrical circuit in the tram depots. Such electrical systems involve high voltage and electricity levels. Hence, safety measures and requirements play an extremely important role in the assessment of the new design.

The client and contractor are both respected market parties in their field. Hence, they initially have confidence in resolving the issues and finishing the project.

Development and escalation of the dispute

As mentioned in the case description, the standalone technician who wrote the project brief is also allocated as the technical assessor of the contractor's circuit designs. Because the project was based on a UAV-GC contract, mainly functional requirements were written down in the project brief. This gives participating parties flexibility in their technical solution to the design problem.

The contractor comes up with out-of-the-box design solutions to the problem, which deviates from the ideas of the client and the technical assessor. The contractor then argues: "Those technical requirements are not specifically mentioned in the project brief". From that point on the discussion arises.

Another of the contractor's design solutions, was retaining safety by installing hundreds of meters of electricity wire underground instead of installing high-safety plugs in the electrical cabinets of the circuit. The technician assessed this as an old-fashioned solution, and again unfitting.

A few designs are handed in by the contractor, which are all negatively reviewed and handed back. This leads to major discussions about technicalities requirements of the design and what is and what is not within brief requirements boundaries. The discussion escalates to a point where the opposing parties employ lawyers to start writing formal juridical letters to each other. The lawyer of the client even advises on breaking up the partnership: "if the contractor does not fulfil the requirements of this project, we will remove them from it".

The contractor's director thinks that both parties are responsible for the start of disputes: "Both parties must have played part in the rise of design related issues: It is based in our lacking abilities to develop a good design, which probably contained some errors. The client also played part in this, while they constantly changed the design requirements. I think that is because the project brief was not written very well." (Contractor: Director) The client also mentions the latter: "Maybe we have made errors in writing the project brief" (Client: Project director).

The contractor's designs were negatively reviewed on so many points, that the technical assessor stopped the assessment after the first few pages. On basis of the notes, the contractor made an adjusted design which was then negatively reviewed as well. This happened a few times over, after which the conclusion was drawn that the collaboration did not work in this way. "On a certain moment we said: If the technical assessor keep to stop reviewing the design proposal after a few pages and give it back, this won't work." (Contractor: Project director)

During a work related conference, the client's and contractor's directors meet each other where they discuss the issues of this project and ask themselves how it is possible that this project runs so badly, while collaborations in the past were successful. They agree upon trying mediation to resolve the escalated disagreements and to come to a design that both parties agree to.

Both parties make a list of possible mediators to help resolve the issues. The lawyer of the client proposes the name of a specific mediator, because he knows him well and has good past experiences with him. On basis of experience and CV, this mediator is eventually chosen to mediate the project.

In mutual agreement, the parties' directors decide to allocate the project directors of this project to participate in the mediation sessions instead of them.

The mediator

This is the same mediator as in case study 1. See 'Case study 1 - The mediator' on page 105 for background information.

The mediation process & contributing factors

The mediation starts when the design is not yet agreed upon by both parties. The mediation process consists of negotiation sessions about the design and guided technical sessions with both parties' executives.

The mediation starts with a noncommittal first meeting with the directors, proposed by the mediator, where he introduces himself and the mediation process. At the end of this meeting, the directors agree upon continuing the mediation process. In mutual agreement, they allocate the project directors on the project to participate in the mediation process instead of them.

During the first meeting with the two project directors from both parties, the mediator introduces the mediation process again, sharing his objective position, emphasises the confidentiality of everything that will be said during the process and tells the parties representatives that self-reflection can help in the mediation process to move towards the other party. The mediator also explains to the parties the flexible nature of mediation. In addition, the parties compile an interests chart wherein they mapped: " 'Why are we doing this mediation?' Because this is a small niche, we must resolve the issues in collaboration." (Mediator). The mediator mentions: "I could see very quickly that these parties wanted to resolve the issues together." (Mediator)

During the second meeting with the project directors, the parties' deviating opinions about the technical design are brought to the table. The mediator specifies: "We tried to identify: 'Where specifically lies the difference in opinion about the design requirements?' " (Mediator) Hereby, it becomes clear that the client has distinct wishes for the design, upon which: the desire of not powering the system from outside the building, something that was

proposed by the contractor as an out-of-the-box design solution. The mediator tells: "The parties concluded: 'We're going to make sure that a new design will be made.' Then we also agreed upon conducting technical sessions to try and find a fitting design collaboratively." (Mediator) In addition, a new designer is allocated by the contractor to view the design problem from a new perspective. The client's director explains that the mediation should lead to the technical problems being solved first. The financial problems would be saved to resolve later: "The approach to the mediation, was first to figure out the technical issues of the design together, before discussing the related financial problems." (Director, Client)

During the technical sessions, the client and technical assessor mention criticising points to the design. The contractor then tries to resolve these points of criticism by adjusting the design and presenting it during the next meeting. "The client then replied: 'All right, a few issues have been resolved.', but they then present new critical points." (Mediator) This repeats a number times, resulting in a substantial amount of technical sessions that do not lead to mutual agreement about the design. Sometimes, the mediator joins the technical sessions to guide the technical design process, which is uncommon. The mediator explains: "During these technical sessions, I sometimes join. [...] I'm not there to mediate, but kind of a chairman of the technical discussions." (Mediator)

During the mediation sessions, trust was regained, but when the next revised design proposal led to disappointment. "[...] we thought: We understand each other better, and the contractor knows what to work on. Every time an adjusted design was brought to the table, led to disappointment." (Client: Project director)

The contractor mentions that they made assumptions about the project brief: "We have made some errors in the beginning as well [...] we made a few assumptions, like: They must have meant this in the project brief." (Contractor: Project director)

"We should have forced the client to talk about reaching agreement about the project scope." (Contractor: Project director). The client wanted the contractor to send them all technical details and deliverables, to assess the total design.

"To come to agreement about the technical design was a sort of ritual mating dance." (Contractor: Project director)

The contractor was bound to subcontractors, which it already made deals with. Because they were bound to these subcontractors, it was harder for the contractor to change the design towards the liking of the client. In order to make a concession to the client, the contractor made arrangements with the subcontractor partners to be able to attract other subcontractors that could deliver for the desired design wishes by the client.

This process of working towards a fitting design endured for around 1,5 years, in which the parties moved slowly towards each other. Because the design was adjusted on so many levels, it was impossible for the contractor to keep former promises like the electrical system fitting inside the existing cabinets. The contractor's director gives an example: "The 100% safety requirements that are part of the brief could not be met in the way the client wanted it, otherwise you have to rebuild the whole system which is not part of the project scope. Therefore, we choose for this design solution. The client replied: that is not how we want it, we want a different approach to the design. That very well may be, but then it is going to be more expensive and take more man-hours". (Contractor: Director)

Up until this point, the parties had mainly focused on finding a technical solutions to the design problem, so the financial settlement remained to be done. The mediator mentions: "The project delays had risen to be around 1 year, so it became unclear which party was going to pay the related financial costs."(Mediator)

When agreement about the technical design was almost reached, the mediator proposed to appoint an objective third party to do a final assessment on the design, because there were only a few remaining points of criticism. The contractor declined the offer. They stated that they wanted to retreat from the project, because they did not have faith in finding agreement with the client anymore. They did not want to execute the project after the design phase anymore. Especially because they thought that the assessment during construction would be conducted by the same technical assessor. Hence, the mediation did not result in mutual agreement about the technical design. The contract's project director explains: "The clients' project director and I said to our directors: 'We're not able to reach agreement. Including our best intentions, and the best intentions of the mediator. So please make the final decision, because we don't find resolution.' " (Contractor, Project director)

So this outcome was reflected to the companies' directors, after which a contract break took place. The financial juridical issues of the project remained, which were mediated by the same mediator. In a few sessions, both parties presented their statements about their financial settlement demands towards the other. Ultimately, the parties did not reach financial settlement either. The differences in demands were too big. The mediation procedure stopped and did not result in agreement.

As a last resource, the parties' directors asked the mediator to write a non-binding financial agreement based on what he finds legally feasible, including argumentation. The mediator proposes: "I am stopping the mediation, but on basis of everything I've heard I will offer you a guiding financial settlement." The mediator proposed this because of his background as a

construction lawyer, and he states it will be non-negotiable. Both parties agreed. The mediator shares the agreement with both parties. Only if both parties agree with the offer, settlement is reached. If one party does not agree, there will be no settlement. The parties responses will be kept confidential. This did not result in settlement either, after which the mediator declared the mediation to be unsuccessful and the mediator and the parties parted.

Half a year later, the mediator receives a mail from one of the directors, that they finally reached financial settlement, and to thank him for his effort and contribution to the process.

Eventually, the contractor even proposes the assessing technician to help them in designing the circuit. The technician does not accept this proposition.

Mediator's interventions: Showing objectivity (c+)

The mediator proposes a noncommittal first meeting with the directors, to introduce himself and the mediation process. "In this first meeting, the parties' directors observe how I present myself as a mediator. In that moment, trust is built on which the parties decide to continue the process." (Mediator)

The mediator tries to create an open atmosphere where the parties can be open: "[...] everything we say during the sessions is confidential. Let's try to be okay with saying something to each other along the lines of: "We did not handle that right." Which you then cannot use during litigation because of confidentiality. Being transparent and to be vulnerable can help with the parties starting to move towards each other." (Mediator)

Mediator's interventions: Using a caucus (c+)

The mediator made use of a caucus multiple times. He mentions: "[...] in the individual meetings that I conducted with the parties, I went into a separate room with them to discuss the issues even more openly. Hereby, I came to understand the parties issues better." (Mediator)

Mediator's interventions: Additional interventions (o+)

Mediator proposes to first reach settlement about a design that is technically approved, leaving the financials be to be discussed later. "The mediator mentioned: 'Let's first reach agreement about the technical issues, then we will tackle the financial problems later.' " (Contractor: Project director)

During the mediation process towards a financial settlement, the mediator used the 'revision method', which works as follows: "both parties write argumentation for their

demands, which they send to the mediator. When the mediator receives both pleas, they are sent to the opposing parties. Then both parties have the chance to reflect on the argumentation of the other, which is sent back to the mediator as well. When he receives both the reflections, they are sent back to the opposing parties." (Mediator) This way, enduring and escalating discussions that often occur in arbitration or litigation are avoided, and force parties to come to the point and share all relevant information.

The contractor's director mentions that the mediator maybe could have been more direct in the process: "The mediator could have steered more in the process. For example, he could have said to us in a caucus: if your party does not act soon and make a concession towards the other party, the mediation process will fail. Then it will be better to stop directly." (Contractor: Director)

Internal moderator: Parties' trust in mediator and process (c+)

The directors of both parties initiated mediation, and were emotionally distanced from the project. Therefore, they thought: "If this mediator is a good guy and objective enough, let him come." (Client, Director)

The Project director confirms this: "The condition for mediation, is that both parties agree to it and have trust in the mediator. That was the case." (Client: Project director)

In the end, the project director mentions that the parties lost the trust in the mediation process: "During the mediation process, it seemed that we moved towards a workable design so to mutual agreement, but in the end we were too far away from each other." (Contractor: Project director)

Internal moderator: Parties' intentions to resolve issues (c+)

Both parties believed in the other's intentions to come to an agreement. One of the motivations behind this, is the minor amount of active parties in this field of work. "The directors wanted to retain a good business relationship, for future collaborations.

Both parties had the best intentions to reach agreement: "During the first mediation session it became clear that the parties' executive project were on speaking terms with each other, and wanted to resolve the issues." (Mediator)

"We said: We want to resolve the issues. We are a renowned technical company that does not run away for its responsibilities." (Contractor: Project director)

"We both want to be a good client and contractor, and we both think that that is the case. We should be able to reach settlement." (Contractor: Project director).

In a conversation with the client's director, the contractor's director argues that it is odd that there they cannot figure this project out together: "It's strange, you are a big client, we are a big contractor in this field. You say that we don't have the expertise to do this project. Well, who is going to do it instead of us? If we can't do it, who can? He agreed: our teams should be able to work it out together." (Contractor: Director)

The contractor's director states the importance of being willing to resolve the problems: "It is very important to have the feeling that agreement will be reached together. Otherwise, I think it is better to stop the mediation process. If you don't want to come to agreement, you won't. Else you would have already solved the issues together." (Contractor: Director)

In the end, the client's project director mentions he lost trust in reaching a settlement: "When we came to one of the last disapproved designs, I lost trust in the possibility of reaching agreement about it". (Client: Project director)

Internal moderator: Parties realising uncertain juridical position (c+)

The mediator mentions that in a lawsuit, it could become hard for the contractor to prove that their design was made within the boundaries of the project brief. The contractor's project director explains: "If it had been clear that we had made an obvious mistake in the tender, or if it had been clear that the client had tendered a project with requirements that were impossible to realise, then it would have been a lot simpler: then one of the parties would have stepped to the judge to unbind the contract." (Contractor: Project director).

The client's project director adds: "During the mediation procedures, we would often reflect on what would be the alternative to the mediation procedure, which is taking juridical steps. Then you have to pay for the judge and the lawyer. And then it takes 2 to 3 years, costs a lot of money and the question remains if the judge is in favour of you. The mediator often asked that question.". (Client: Project director)

The contractor's director also agrees: "At a certain point, the mediator said that the project brief could be somewhat incomplete or open to interpretation, but you accepted the assignment as a contractor, so you then should be able to juridically prove that your design proposal is within the boundaries of the project brief and that is always difficult. We understood and said: 'That's true.' " (Contractor: Director). He adds: "The whole issue was not that black and white, otherwise it would have been easy to write it all out and prove who was wrong. That was in the middle. But otherwise you would not start a mediation procedure." (Contractor: Director)

Internal moderator: Parties' positional play (c-)

The contractor's director mentions that all parties are reluctant during the mediation process, in order be financially better off: "After entering mediation, everyone knows: if I acknowledge towards the other party, I know what it is going to cost. That always plays part. Therefore, all parties are careful to acknowledge towards the opposition." (Contractor: Director)

The contractor's director lays down part of the positional play that was played: "We then said: Sketch you ideal situation, then we will work out that design. However, that would have resulted in a discussion about money, because then we would have argued: This is not what we offered, so you have to pay the additional work. They knew that. This made it difficult to come to agreement." (Contractor: Director)

Internal moderator: Parties' representatives' good communication (o+)

Although the trust levels were low, the parties' directors opened a constructive dialogue based on good communication. The mediator experiences the atmosphere of the early mediation meetings as pleasant and comfortable. (Mediator)

"The communication between the project director from the other party and me, I've always experienced as good." (Contractor: Project director)

"If the communication on the directors' level had not been good, we probably would have made juridical steps from the beginning. Mediation would probably not have started." (Client: Project director)

Internal moderator: Parties safeguarding relationship (o+)

Both parties state their interest in retaining the business relationship for future collaborations:

"In the end it is a small market. There are not a lot of contractors in the Netherlands or Europe in this field of expertise, so you will always come across each other. [...] Therefore, it was in our mutual interest to come to an agreement". (Client: Project director).

"In the end, we have been able to retain the business relationship." (Contractor: Director)

"We always said to each other: No matter what happens, we will part in a good manner, retaining our relationship as much as possible. We are major players on this market and we will always come across one another." (Contractor: Director)

Internal moderator: Client's lacking technical project knowledge (o-)

The contractor's director doubts if the client has the technical knowledge to understand the project in technical detail: "My colleague can explain the project in full technical detail. I'm

wondering if the interviewees from the client can do the same, because I don't think they have that expertise in house. That is also one of the problems I think." (Contractor: Project Director) He adds: "The people of the client didn't have the technical project know-how. At a certain point, the technical assessor had to stay in hospital. The client argued that all project conversations should be ceased. We said: What do you mean, we want to continue the project. This hindered the mediation process". (Contractor: Project Director)

Internal moderator: Mediator's little substantive project knowledge (o-)

The contractor's project director explains that the mediator did : "The mediator knew little about the technical contents of the project, the mediator (Contractor: Project Director). The contractor's director adds: "The mediator was mainly experienced and knowledgeable in the process of the project, but not in the substantive technicalities of the design."

(Client, Project director)
(Client, Director)

External moderator: Bad executives' relationship & collaboration (o-)

From before the mediation process started, the parties' executives did not work together well anymore: "During direct negotiations, the executive teams from both parties did not have faith in the collaboration. Then the management concluded: It would be very strange if we cannot reach an agreement in this case, so let's try mediation". (Client: Project director)

The client's director shares how the executives l: "I was the one who proposed mediation and told my executives: Let's give them another chance, let's explain to them one more time what we want. Every time an adjusted design was disapproved, it raised the levels of distrust in the executive teams." (Client, Project director)

The client's project director adds: "During the mediation process, we proposed that our engineers and the technical assessor would enter a room together to collaboratively work on the technical design. They were not open to that. This did not help in the process." (Contractor: Project director) He adds: "The collaboration problems were only present between the project executives". (Client: Project director)

The contractor's director adds: "The trust levels between the project teams were gone." (Contractor: Director)

The project team of the contractor did not want to work out the design in the mediation process anymore, because of the constant critics from the technical assessor. "My project team said: 'Let him do it himself if he knows so well how it's done.' " (Contractor: Project director)

The contractor's project director "Ultimately, we came to the conclusion that the trust levels between the executive teams have become so spoiled, that we decide to quit the collaboration and mediation." (Contractor: Project director)

External moderator: Working with governmental organisation (o-)

The contactor's director mentions the complications of negotiating with a semi-governmental organisation: "Since the client was a semi-public organisation, the project was financed with public money. Because this is always a ceiling budget, it is hard for governmental organisations to sell to their superiors that the project will exceed the budget. Therefore, the negotiation position of government bodies in a mediation procedure or any negotiation procedure is difficult. This has negative effect on the mediation process." (Contractor: Director)

External moderator: Lawyers' influence (c-)

In this case, the contractor's director mentions that lawyers have a negative influence on the negotiation process. "Lawyers make the issue worse in the negotiation phase. The fighting and formalisation of the negotiation leads to further escalation of the dispute." (Contractor: Director)

External moderator: Conflict of interest (o-)

The client hired an expert in the field of tram electrification systems, to write the brief of the project but was also allocated to assess the contractor's technical design. The contractor mentions that therefore he found it hard to move towards the contractor, because then "he would admit to having written a project brief with missing elements or detail." (Contractor: Project director) This is a conflict of interest.

The contractor's director recognises this conflict of interest: "If the technical assessor would say: The contractor is partly right, it would mean that he confirmed that he wrote a project brief that was open to interpretation, at least partly. This made it clear for us: In this way, will never figure it out together" (Contractor: Director)

Mediation outcome

Outcome of the technical design mediation process: No agreement was reached on the design, so both parties decided to cancel the project and part the collaboration. This was found by the parties to be unfortunate: "From both sides, the intentions to resolve the issues were good, and we both experienced the contract break as a loss". (Contractor: Project director)

Following this conclusion, the parties proposed and entered the mediation process towards a financial settlement.

The financial mediation procedure was about the remaining fines and costs of delay. During multiple mediations in this second try, the parties negotiated about the division of costs. Unfortunately, this also did not lead to mutual agreement. Ultimately, the mediator proposed a non-binding proposition for the financial agreement. This was based on what it predicted to be the outcome of a following trial, and on its expertise as a lawyer in construction. Unfortunately, the parties did not find mutual agreement from this proposition either.

The mediation process was found to be too long by the contractor's director: "The process has endured for way too long. I think mediations can only be successful if settlement is reached quickly." (Contractor: Director) He adds: "In retrospect, I think we should have stopped the process after half a year; then the outcome would have been the same. And that is a shame. That is my lesson from this mediation: The process must be swift and clear, and you must remind people of earlier made agreements." (Contractor: Director)

Despite the lengthy process, both parties agreed that the mediation process contributed to finally reach a financial agreement: "If we had not conducted the mediation, we would not have remained to be on speaking terms, and we would not have been able to find a financial settlement in the end. Then, the dispute would have escalated into arbitration or litigation." (Contractor: Director)

After mediation outcome

After the failed mediations, neither of the parties took juridical steps towards arbitration or litigation. "I think we both thought: We've talked so much about the issues. I think everyone had counted their blessings and knew that the juridical positions were not that clear and both parties knew they had made some errors." (Contractor: Project director)

The client's director adds: "After the financial mediation was declared unsuccessful, the contractor's director and I were both ready to start a legal trial, but we decided to meet one more time to discuss the issues, and we finally reached financial settlement. This was only possible because of our good interpersonal relationship." (Director, Client)

After the mediations were declare to have failed, "both parties needed time to process the project setbacks. The parties needed time to calm down and emotionally sober up. After some time, the project directors joined the table one last time to negotiate about the financial settlement." (Contractor: Director)

The contractor's director mentions that the final financial negotiations were about horse trading: "After the failed mediation procedures, the client's director and I always

remained to be on speaking terms. In the end this resulted in a final financial bartering. This negotiation was on basis of the financial situations as sketched by both project teams, not on basis of the non-binding financial agreement that was proposed by the mediator. Finally, we met somewhere in the middle of these two financial situation sketches." (Contractor: Director) The contractor's project director adds: "Finally, we have negotiated a settlement: At a certain moment, the client had not paid part of the bills that we had presented them. In the end, we settled that we would be paid part of those invoices. This resulted in a considerably loss-making project. But then the client had to retender the project." (Contractor: Project director)

Both parties contacted the mediator to thank for the collaboration in the mediation process, while they found it to have contributed a lot to their final solution. "The mediation process and mediator definitely contributed to the process that led to the final financial settlement." (Director, Client)

The contractor mentions they will not be participating to the client's tenders for a while: "In the end we shook hands, and the client assured us we could participate in future tenders as any other market party. We responded: Don't count on our participation for a while". (Contractor: Project director)

However, the client's project does not want to exclude the contractor from participating their tenders in the future: "I don't think this is a reason to exclude the contractor from winning a tender before it has started" (Client: Project director)

4.3. Case study 3: Construction of semi-public cultural building

In 2014, a Dutch municipality made plans for the construction of a cultural building for four end users in educational and cultural sectors whose current buildings were deprived. The four cultural end users are an institute for music education, a dance theatre, a classical orchestra and a foundation for dance.

General characteristics

- Contract type: Integrated / UAV-GC
- Start tender procedure: 2014. The project was awarded to the contactor in 2015.
- Start mediation: January 2018 – June 2018
- Duration mediation: around 6 months
- Number of mediation consultations: Weekly sessions
- Project phase during mediation: End of design & construction
- Mediation was successful:
- Public client: Municipality, that allocated a professional project management business to execute the client role for them.
- Individuals gathering around the mediation table:
    - Client: Project director (delegated client)
    - Client: Director of the municipality
    - Contractor: Director
    - Contractor: Regional director
    - Mediator 1 (background in project management)
    - Mediator 2 (background in contracting), the same mediator as in case 4.

Context & storyline

A work by architect Rem Koolhaas was demolished for this project. Because of protests by him, Rem Koolhaas became the tender writer of the architectural design for this project. An established Dutch architect was awarded the project's design in 2015. During a period of 4 years, the design was developed from nothing to a final design.

Political issues also played a role in the project: A party in the municipal council voted against the plans for the project, which resulted in a second opinion for the costs estimation by bbn advisory. The results showed a financial gap of €100 million, after which the municipal council and coalition resigned. This was in 2013. (Contractor: Project director)

Within half a year of adjustments to the current final design, a brief was made on basis of this design and the project was tendered. After half a year, the project was awarded to the contractor with a bid sum of almost €180 million.

The leader of the formerly mentioned party in the city council became the new municipal alderman of culture with this project in his portfolio. He said to the municipality: This is an integrated contract form, so all responsibility lies with the contractor. We will not spend a single extra euro for this project. People from other parties in the council thought: You made sure our coalition failed, wait and see what will happen. (Contractor: Director)

The contractor's bid was budgeted with very small financial margin. "The project budget was written with little financial margin, from the client side, there was very small budget for unforeseen costs." (Mediator 1)

The end users, the earlier mentioned 4 cultural organisations, were promised in the contract to be able to give their consent to the technical building design characteristics. Mediator 1 mentions that this was not clearly communicated: "These agreements were not clear. The four cultural institutions could impose their wishes and demands up until DO and VO design phases, which the project team had to accept. This fuelled interpretation differences." (Mediator 1) Mediator 2 confirms this: "During the design phase of the project, the municipality did not have enough grip on the four end users, who demanded a lot of extra technical requirements while the design developed. This was one of the major problems leading to disagreements in this project." (Mediator 2) The contractor's project director explains this further: "Where in normal UAV-GC contracts, only the client has to give his consent to the design, we had to ask for the consent of the four end users first. This was built in the contract." (Contractor: Project director)

The second major problem had to do with the existing parking garage upon which the building was to be constructed. This garage happened to be constructed in the 70's by the same contractor that was awarded the project. Without the parties being aware of it, the soil under the garage had sunken a substantial amount, creating space where a water stream had developed itself. Therefore, no construction vehicles could drive on the garage floor.

Another problem in this case was a problem regarding the building aesthetics committee. Mediator 1 explains: "The contractor would be responsible for changing the façade design to the wishes of the building aesthetics committee. The architect was part of the contractor, and the advice from the building aesthetics committee was negative at first. Being the contractor, you could also argue that the municipality and elder men counter this advice." But because the building was a politically loaded object, the municipality stated that the advice of the building aesthetics committee would be blindly followed. The contractor's project director explains that this inflicted problems about the fourth façade which they

wanted to have without detailed columns: "By this agreement, the municipality gave the building aesthetics committee a powerful position. They could say no to the undetailed fourth façade until it was changed. We told the municipality: We're not going to make a detailed fourth façade, because it's not part of our contractual obligations." (Contractor: Project director)

The municipal alderman made agreements were with the municipal council about the project remaining in budget, and assured it that because of the integrated contract form all project related tasks were part of the contractor's obligations.

Development and escalation of the dispute

There was uncertainty about the exact deviations and obligations in the project brief and contract. At a moment, the contractor halted the collaboration. They said: We don't continue until we reach agreement about a few points. That happened two times. The contractor's project director adds: "There was a lot of room for interpretation regarding the project's requirements. Because there had not been conducted a good validation and no assessment had been done about how the requirements related to each other." (Contractor's project director)

The four cultural institutions could impose their wishes and demands up until the DO and VO phase of the design, which the project team had to accept. This fuelled interpretation differences: What was and was not part of the project brief?" (Mediator 1) The contractor's project director confirms this: "With a blurry project brief, there is of course room for discussion. The four institutions will argue: 'It says it here in the project brief: our demands fits within this requirement.' And we would then argue: 'The design flexibility lies with us' or 'This is not within the boundaries of the requirement' and then we would give it back to the municipality." (Contractor: Project director)

The client's project director mentions that they experienced that the by the contractor delivered VO design was short of a lot of project requirements as defined in the brief. "The client reacted with these remarks, which the contractor experienced as instructions to change the design outside the project scope, so only wanted to implement those as additional work. That was the source of the initial discussions about money." (Client: Project director)

An advisory board was allocated to guide the project, from the Dutch Arbitrary Board 'RvA'. Both the client and contractor disliked its slow and juridical process of this advisory board. On a certain point, the client and the contractor agreed upon searching for another way to

resolve the list of issues that were present. To help resolve the issue, Mediator 1 was approached by the client (municipality), and Mediator 2 was approached by the contractor.

In addition to the mediating team, the mediators allocated a secretary to record all statements, conversations and other events during the mediation process. "First and foremost, we allocated a secretary, to report all meetings and keep record of what will be said. We did this because the municipality always let's their house attorney double check everything. In addition, it helps not to have to focus on reporting the meetings, but being able to focus on the issues." (Mediator 1).

Although the two mediators were proposed by either one of the parties, they made clear that they "are not acting on behalf of the parties as representatives and would always be honest, whether their opinion was in favour or against one of the parties." (Mediator 2) In addition, the mediators pointed out that whenever they were in disagreement they would 'give back' the project related issues to the parties and stop the mediation process. Only when they would find common ground about the issues, they would continue to guide the parties in the mediation process.

The mediators

The mediation process is conducted by two mediators, who are very experienced in the field of alternative dispute resolution and mediation. They know each other well in the field of their work.

Mediator 1 has a background in project management, and is known by the client for resolving disputes in other large projects. Therefore the client proposes him to help and resolve the project issues. The client's project director explains: "The municipality had good experiences with resolving issues in construction projects in collaboration with Mediator 1. Therefore they put him forward as one of the mediators." (Client: Project director)

Mediator 2 has a background in contracting and is proposed by the contractor on the basis of good previous experiences as well. This mediator has a lot of experience in the construction sector where he worked in various contracting businesses before becoming an ADR practitioner and construction mediator. This mediator also mediates case 4.

The mediators collaboratively mediate the project issues between the client and contractor. Both these mediators remain objective, but give their opinions during mediation sessions to both parties on basis of their experience with construction projects. They call this 'active mediation'.

The mediation process & contributing factors

During the first mediation meeting, the mediators both laid out their objective role in the process. Mediator 1 argues "It is nice that you pay our bills, but that is the only relationship between me and the client, and Mediator 2 with the contractor. I'm not an extension of the client, I'm also no spokesman. If I think they come up with a senseless story, I will tell them, whether they pay for my hours or not." (Mediator 2)

The mediators made both parties list the project related issues, which they then categorised in order to be able to start with resolving the easier problems. Mediator 1 elaborates: "We proposed the parties to start with the easier-to-solve problems, because the process will then gain momentum in the mediation process." He adds: "By resolving easier problems in an early stage of the process, the parties gain trust in us as mediators. This helps in resolving harder issues further down the line." (Mediator 1)

Mediator 2 does not agree with this: "I want to have clarity of the assignment, I want to know what issues relate to each other, and I want to know which issues are to be solved first in the context of the planning of the project. [...] That is the order that I use, not the contents of the issue, because I don't know that in that moment."

Mediator 2 explains that formulating the question about the issues is critical to the process: "After categorising the project issues, a number of issue dossiers remained for which we formulated the right question regarding the problems on which both parties had to agree. This because if you don't have clarity about the question, you simply won't receive acceptation of the answer." (Mediator 2)

The mediation process consisted of both plenary sessions and individual sessions with the parties. During the plenary sessions, both parties, the mediators and the secretary were present. The individual meetings were sessions where one mediator discussed the issues with the party by which it was proposed as mediator.

During the mediations, the mediators acted as self-proclaimed "shuttle diplomats": shuttling from individual meetings with their commissioning party (Mediator 1 with the client and Mediator 2 with the contractor), to plenary meetings to discuss the issues with all parties present, to meetings with each other to discuss the issues and write a guiding advice, and back again to individual meetings with their commissioning party to reflect, etc. Mediator 2 explains: "Along the way, I worked just like a diplomat that represents a country: negotiating with the people in the country where he is stationed, and going back to his own government telling them: 'Yeah well, the culture in this country is different from our

country, so you must not project your democratic history and views on this country." (Mediator 2)

After a few sessions with the use of the 'revision method', the parties engaged in plenary sessions. During these revision interviews, the mediators experienced that the project director of the client became more silent and the contractor's director started talking more and more. They didn't like this interpersonal dynamic, so they stopped the plenary interviews and started conducting individual meetings. Mediator 2 explains: "When someone talks a lot, it doesn't mean he is right. We told the parties: You have to trust us, we are not going to continue with these common meetings, because your deviating personal structures are in the way of finding the objective truth." (Mediator 2) The following individual interviews were all reported precisely.

Based on the records of these interviews, the mediators wrote a guiding advice, which they sent -including argumentation- towards the client's project director and the contractor's director for them to reflect on, with the message: "In the case of factual errors, or if we missed important parts that you handed in, you have space to react within one week and then we will take a look if there is reason to revise the guiding advice." (Mediator 2) If this was the case, the guiding advice was adjusted and then presented to both parties. If the parties agreed, one of eleven issues was resolved after which the parties moved on to the next one.

Per issue dossier, the mediators had to assure the acceptation of both parties. Mediator 2 elaborates: "As you can imagine, where the parties points were appreciated to be right, it ended in not much of a hassle, where if the parties points were appreciated to be wrong, it could lead to major discussions." (Mediator 2)

After guiding advices were written and agreed upon by the parties for all issue dossiers, the mediators presented the parties with the package of advices. All guiding advices resulted in a sum of 28-32 million euros that had to be paid by the municipality.

"Then we had two sessions with all parties: the project director for the client, the director of the municipality, the contractor's director, the contractor's regional director, the secretary, Mediator 1 and I, in which they finally made an agreement on 31 million, including some substantive process agreements." (Mediator 2)

The director of the municipality had no power to make this deal, because these issues have to be agreed upon by the municipal council. The municipal council agreed on the deal, and the project was continued and finished by the collaboration of the client and the contractor.

Mediator's interventions: Showing objectivity (c+)

During the first mediation meeting, the mediators explain to the parties they will share their objective opinion, no matter if it is in favour of the party who pays them. Mediator 1 argues: "It is nice that you pay our bills, but that is the only relationship between me and the client, and Mediator 2 with the contractor. I'm not an extension of the client, I'm also no spokesman. If I think they come up with a senseless story, I will tell them, whether they pay for my hours or not." (Mediator 1)

During the first mediation meetings, the mediators pointed out the goal of the mediation procedure: "Our interests was to bring the project to a success, and not the profit optimalisation for either party 1 or party 2." (Mediator 1)

From the beginning or the process, the mediators ensured the parties of their collaborative and objective roles by sharing their unanimous opinions or resigning from the project: "Whatever happens: or we give the project back to the parties, or we speak with one voice." (Mediator 1)

Mediator's interventions: Using a caucus (c+)

"Sometimes, the parties needed to split up for a moment to blow off steam, or to take walk around the block. Sometimes, you then start to talk one-to-one with a party. Then I explain: 'I shared my opinion in the meeting because of this and this reason, not to embarrass you, but to regain the parties to open up and become on speaking terms.' This helped the parties to calm down and understand my point of view better." (Mediator 1)

Mediator's interventions: Additional interventions (o+)

The mediators also often used the 'revision method'. Mediator 2 states: "The revision method is a non-juridical way to openly receive input from the parties." Mediator 1 explains: "We told the parties: Please write that down what you want from the other party on a maximum of two sheets of paper. Then we will exchange these documents." (Mediator 1) Mediator 1 argues that this helps in the process because it avoids escalating discussions about specific topics. Mediator 2 adds: "Second, because parties are asked to write an agreement proposal in their revision, you can compare these from both parties which makes it easier to write a guiding advice." (Mediator 2)

Sometimes, costs for additional work are not paid by the client because part of that sum is debatable. Then the mediator splits this sum: "[…] we divide the post into a debatable and non-debatable part. That doesn't change anything in the case, but it works very well for the interpersonal relations at the work. We also used this in this case." (Mediator 1)

During the meetings, the mediators also give "homework" to the parties. Mediator 1 argues: "You also give homework to the parties to work on: Figure out this-and-this, write an argumentation on this-and this, etc." (Mediator 1).

Another tactic that was used by the mediators is a role-playing game wherein both parties have to tell the story from the viewpoint of the other party. "This gives the parties more insight and respect for the position of the other which helps the process." (Mediator 1)

Mediator 1 mentions another tactic to try and enhance the parties' dialogue: "What is very important, is to have the project directors from both sides to be on speaking terms. This can be done by going to a good restaurant and eat something together. Drink a good glass of wine and talk about anything except the case. That also happened in this case, we sent the parties to go out to have diner." (Mediator 1)

<u>Mediator's interventions: Steering parties with open questions (o+)</u>
In order to make the parties self-reflect, the mediators ask the parties steering questions to understand the opposite's viewpoint. For example, mediator 2 asked the project director: "Listen, project director: Was it known beforehand, that in one of the halls a pop-concert should be able to take place, while in the other room a classical concert is played where people need to hear the triangle? If these technical requirement for the halls were not known, the contractor couldn't have taken them to account in the design, could he? That is how you tell this to the parties." (Mediator 2)

<u>Mediator's interventions: Steering parties by giving opinion (o+)</u>
On a few dossiers, the mediators shared their clear opinions. The client's project director explains: "Sometimes, Mediator 2 could say without hesitation: What you bring to the table now is complete nonsense. Think about it again." (Client: Project director) The client's project director explains that his mainly helped, because the parties' statements were hereby treated equally, and both parties had to revise groundless statements.

Mediator 1 mentions that he uses his personal opinion to emotionally sober up the parties. "On the one hand, it is to sober up the parties from emotions. On the other hand, you try to create a protected atmosphere. Sometimes you tell the parties: what we're going to discuss

in the coming 15 minutes, will be off the record. So secretary, please lay down your pen." (Mediator 1).

During the sessions, the mediators met with one of the parties to share their opinions with them. Mediator 2 describes: "On these and these points, I don't think you will get your right, because of this and this. For example I said: You are only pointing fingers towards the other party but you did something wrong yourself." That led to major discussions, from which the mediator concluded either: "All well and good, but that will not change my opinion" or "All right, you've got a point there. I didn't hear that before or I haven't recognise that enough or I misread that point. I will take this back and discuss it with Mediator 1" (Mediator 2), after which the advice was adjusted.

Towards the client's project director and contractor director, when they did not agree with the guiding advice, the mediators said: "We don't care if you disagree with our opinion. You hired us to have an opinion about these issues, and this is what we think. That's it." (Mediator 2)

The contractor's project director adds: "Mediator 2 took the mandate from the perspective of the municipality very well. He said: this is my opinion, and you allocated me to resolve these issues. If you do not agree with me, you can try and solve it yourselves. This stance was missing with the project director." (Contractor: Project director).

Internal moderator: Parties' trust in mediator and process (c+)

Mediator 1 explains that in order to gain trust in the process, the mediators should have experience: "In these kinds of projects and processes, you need intermediaries that have earned their stripes in the construction sector. Only that will be accepted by the disputing parties, because we don't always use contractual juridical language during the meetings." (Mediator 1).

Mediator 1 argues that the parties' trust in the process increases if small successes are achieved in the process. "It is also important to celebrate these small successes, which can be done in numerous ways. Normally we are creative: grab a drink or eat a pastry together. This way you make sure everyone is proud of the results, to create more trust in the process. This also contributed to this case." (Mediator 1)

The contractor's project director mentions he "did not experience the mediation process as a route towards a better collaboration, but more as a fight." (Contractor: Project director)

The mediators took a proactive stance in steering the partis to work towards a resolution per issue dossier in the mediation procedure. The client's project director elaborates: "The mediators advised us to look for creative solutions: Sometimes you are right in one dossier, but you can get your right more easily in another dossier, which can be easier to explain to your superiors. So the mediators were really looking for solutions, not only looking at the facts. That helped in the process." (Client: Project director)

Internal moderator: Parties' intentions to resolve issues (c+)

At the start of the project, both parties had no intentions of meeting in the middle. "Both took their stances and wanted to profit as much as possible. If that went the other way, the mission had failed, so there was no room to negotiate."

"Normally, I settle discussions pretty quickly by having a few good meetings in which the parties show respect for each other's interests and roles. But with these parties around the table and these competing interests, that was a bridge too far in this project." (Client: Project director)

Internal moderator: Parties' positional play (c-)

"What you also saw in this case, is that one of the parties starts to take a very juridical and contractual stance, while that has not been the atmosphere of meetings up until that moment." (Mediator 1) Mediator 1 explains how they delt with such a situation: "We then told that party, that after a number of meetings with an open atmosphere, the other party may expect you not to take such a strict juridical stance. You should resolve current issues in the same manner as previous ones." (Mediator 1)

The contractor's director and the client's project director played their roles and tried to gain the most benefits for their party. "Those were the roles they played." (Mediator 2)

The client's project director states that all parties strategically played their roles in the process: "All parties committed positional play, without exception." (Client: Project director)

The client's project director adds: "I always approached the issues from the perspective of the client. I never took a stance that could lead to showing too much respect for the position of the opposing party." (Client: Project director)

Internal moderator: Parties' representatives' good communication (o+)

Mediator 1 states the importance of mutual respect between the project directors: "If the project directors don't respect each other, I can stop the process immediately. That doesn't

work." He adds: "It is very important to the success of a mediation process that a good atmosphere between the parties is created. We put in a lot of effort to reach and retain that." (Mediator 1)

The mediator states the project directors' mutual respect: "The client's project director and the contractor's director respected each other." (Mediator 1)

The client's project director adds: "I could work quite well with the contractor's project director." (Client: Project director)

Internal moderator: Parties' representatives having no mandate to settle (o-)

Mediator 1 states that the power to make negotiation deals is important to the mediation process: "Also very important, is that the opposing parties have the same mandate and therefore have the power to make deals with the other party." (Mediator 1)

In this case however, the parties' representatives that were present during the mediation sessions did not have such a mandate: "The real mandate to make concessions was with the director of the municipality and the regional director of the contractor, not with the project director from both sides." (Mediator 2) He adds: "The main directors of both parties, the director of the municipality and the regional director of the contractor had the real intention to come to an agreement, the project director for the client and the director of the contractor did not. At least, that is how they played their roles: it was not their mandate to do concessions. We knew that." (Mediator 2)

The client's project director confirms this: "The hard part in the mediation process, was that we both [project directors] did not have a mandate to make decisions about financial issues. The client's project director had to go back to his company's board of directors, and I had to go back to the municipal council of course. So the negotiations were always along the lines of: under reservation of what our superiors think of it." (Client: Project director)

External moderator: Working with governmental organisation (o-)

Politics played a large role in the mediation process. Mediator 1 elaborates: "The impact of the governmental politics on the procedure were negative to a maximum extent. Because the project was so politically charged, the municipal council said to us: I want to know every additional work post of over 10.000 or 50.000 euros. This way, I cannot do my job." (Mediator 1)

The contractor's project director sees a distrust between people at governmental bodies and the consultants they hire: "What I see in governmental bodies, is that there always plays a

sort of suspicion between the civil servants and the consultants they hire." (Contractor: Project director)

The project director that sat around the mediation table, did not take position. He was allocated as project director for the municipality to fix the project. But what you saw: if the municipality found that the interim outcome of the mediation was not proportionate, then they tried to force us into a tight position." (Contractor: Project director) He adds: "I felt like I was sitting around the table directly with politics. I didn't think: I don't trust him, but he therefore didn't stimulate the process of reaching agreement. I didn't feel like I had someone I could work with towards a resolution." (Contractor: Project director)

<u>External moderator: Lawyer's influence (c-)</u>
At first, the work is delt with on the construction site. Then a lawyer or in house lawyer joins the conversation and starts to write a formal juridical letter in name of the project director towards the other party. Mediator 1 argues: "Then such a lawyer starts to write a totally different letter, in which he invokes Article so-and-so. That may be true, but that was not the atmosphere up until that moment. That impacts the process negatively." (Mediator 1)

In the beginning of the procedure, the lawyers "acted as lawyers: if you have dispute, enlarge it. And they only try to gain the full financial claim for their client." (Mediator 1)

The client's project director adds: "The lawyers did not make the process easier, as you often see happening. [...] During the mediation process, the lawyers were kept outside the door, to avoid further formalisation and hardening of the discussions. This helped the process." (Client: Project director)

<u>Action: Parties bartering / Horse-trading (o+)</u>
Based on the guiding advice, the parties had to negotiate about each issue dossier themselves to reach settlement. Mediator 2 states to the parties: "This is a guiding advice, so now it's time for you to work and negotiate towards settlement." (Mediator 2)

Mediation outcome
The parties came to an agreement after a few mediation sessions.

The contractor's project director mentions they were satisfied with the settlement that came out of the mediation process. "Because otherwise, you would have to use arbitration to settle all issues, that would have cost a lot of money." (Contractor: Project director) In

addition, he argues: "Also a lot of time has been spared. Because with a relatively small effort, we were able to resolve a few very big disputes in a reasonable way, and quite quickly."

The client's project director adds that arbitration would not have made a big difference to the outcome: "If we hadn't done mediation, it might have resulted in litigation, but we were reluctant about that, because they would have used the same files as the arbitrary board had used so the chance on a totally different outcome was low." (Client: Project director)

Furthermore, he also mentions that he found the outcome sum to be somewhat high for the client, and he settled because he saw no other option to reach agreement: "I thought the final amount that we had to pay was a little on the high side, because in my opinion the contractor had made some clear errors that should not have been at the expense of the municipality. But I did not see another option but to settle, and because the municipality would have paid for these expenses in the end anyway." (Client: Project director)

Mediator 1 explains the most important success factor of the mediation: "The success of the mediation lies in the trust that both parties had in the mediators: not only from one party to the mediator they employed themselves, but actually towards the mediator that was employed by the opposing party." (Mediator 1)

4.4. Case study 4: Renovation and fit-out of hospital towers

A Dutch hospital was looking for a collaboration to redevelop six of its hospital towers, which entailed renovation and interior fit-out and façade renovations.

General characteristics

- Contract type: Integrated / UAV-GC
- Project was awarded to contractor: January 2019
- On-going project, scheduled to be finished in 2025
- Start mediation: October 2019
- Duration mediation: Not yet known, while it is an ongoing project. The mediator is appointed to guide the parties through the process for how long they want to be guided in the process.
- Frequency of consultations: Initially weekly sessions, currently quarterly sessions
- Project phase during mediation: Design & construction
- In August 2020 the construction of the work started
- Mediation is successful, settlement is reached for all disputes up until now (ongoing project)
- Individuals gathering around the mediation table:
    - Client: Project director (delegated client)
    - Contractor: Project director
    - Mediator (background in contracting), the same mediator as in case 3.

Context & storyline

The project's objective is the renovation of six hospital bed towers. The works have to be executed while the hospital remains in operation: "This project is especially challenging, because the business operations of the hospital continued." (Client: Project director) The project was tendered on basis of a UAV-GC contract, with a set ceiling budget. The client's project director elaborates: "The project entailed the total redevelopment of the hospital towers, including changing the concepts for changing the space layout of different departments, their logistics and the renovation of the tower's facades." (Client: Project director)

After the project was awarded to the contractor, a period of realignment started. During this period, the contractor and client engage in meetings where they discuss the contents of the project requirements and the deviation of obligations.

The project contains of the design and execution of the renovation. The construction phase is quite long, from 2019-2025. The contractor's director explains: "The long phasing of the

project is easily explainable, because you want to work level by level to ensure that the hospital can remain in operation." (Contractor: Project director) Because the work has to be executed in an up and running hospital, the contractor has to meet very specific requirements in the context of nuisance and specific rules of working in the hospital.

The client is the hospital, who hired a project management company to provide them a project director to manage the project from the client's side.

Before the project had started, the parties' lawyers argued that the context of this project made it easy for disagreements to arise and disputes to develop. Both client and contractor were aware of this. Therefore, they discussed the contents of the contract preliminarily in order to identify possible interpretation differences.

Development and escalation of the dispute

One of the first disputes arises from the question what flexibility the contractor has in making the design. The tender required a DO or DO- design. "The client already had quite a specific image of what they wanted for the design, while we viewed the project requirements and saw room in the design to bring some new things to the table. The client thought that was not really possible, while they already knew how they wanted the patient rooms to look like." (Contractor: Project director) The contractor's director further explains: "That's how the problems started: How many design freedom do you have as a contractor, concerning the very specific requirements and wishes of the client?" The client's project director confirms this: "A lot of the issues rooted in the deviating interpretations of the design assignment: the contractor was convinced to have design flexibility because of the contract form, while the hospital was quite strict: 'You can come up with this design solution, but this is not the way we're doing things at the hospital. Whatever you design, it must be conform what we're used to at the hospital' [...] This resulted in quite a bit of friction between the parties". (Client: Project director)

The parties read the project requirements in the brief differently: "We thought: as we read the project brief, we make a design it like this and this. Then the client reacted: No, but you have to read carefully, because it says here and here that you have to do it differently. We responded: All right we read that differently." (Contractor, Project director)

The contractor's director elaborates on the "self-proclaimed Cure concept: We wanted to bring to the table smart solutions to be able to build quicker and more steadily. Not a lot of those ideas were preserved, because of the specific wishes of the client." (Contractor: Project director) He adds: "When we handed a design to the client, they reacted: 'This is not what we want'. Then we reacted to that: 'All right, but then you have to file a

request to amend, because our design is within the boundaries of the project requirements'. This led to major discussions." (Contractor: Project director) "This also starts to work against the project planning, and then you have to make up: do we trust each other enough to continue, because the clock is ticking." (Contractor, Project director)

Then the time pressure starts to play role, and parties are taking a more formal stance in the project: "First let's reach agreement about the request to amend." (Contractor, Project director)

The parties were not able agreement about these issues with direct negotiations themselves. After ¾ years, the parties demanded help of a third party to resolve their escalated issues. The contract mentioned the option to allocate a mediator to resolve possible disputes, which the parties decided to try. Both parties exchanged a list of names of possible Mediators, and both were familiar with this specific Mediator, which is the reason why this one was chosen. The mediator explains: "After giving a presentation the directors of both parties, I was assigned to the job." (Mediator)

The mediator

The mediator is the same individual as Mediator 2 in case study 3. See 'Case study 3 – The mediators' on page 52 for background information.

The mediation process & contributing factors

The mediator first asked the parties what services they demand of him. He proposed two options: mediating the issues as an alternative to litigation, or to develop the case files in a way that they can be used in a legal trial, might the mediation process be unsuccessful. The parties chose for the first alternative.

The mediator elaborates: "First, I told the parties: 'You can approach the process in an active or a passive way. Passive means that you can call for me whenever you demand my services; active means I will continuously join the process.' That became the latter, because if you choose for the first option, the parties will always call for me when it's too late." (Mediator)

The contractor's director explains that the executive teams need to make some steps to enhance collaboration: "Considering the collaboration between the client and us, we still have to make some considerable steps towards good collaboration. But that is more about interpersonal relations and how you treat each other. That is on human scale, more on the executive side of our organisations." (Contractor, Project director)

The contractor adds: "In the executive project team of the client, I see quite some distrust towards us. You have to prove yourself before trust is gained. [...] They take quite a critical stance." (Contractor, Project director)
"At our side we sometimes forget to be working in a hospital that is in operation, like: 'It will be okay, then we make a little more nuisance, that comes with construction.' So my side of the story is that we sometimes realise too little that we are working inside a hospital in operation." (Contractor, Project director)

"There was some animosity between the contractor's construction project leader and the client's construction project leader." (Mediator) They both received a personal coach to help to resolve their interpersonal difficulties, and an external third party was hired to resolve the interpersonal issues between them. The mediator describes: "The individuals said to each other: 'Why are you reacting so unpleasant to me? I don't mind you criticizing my work, but I dislike the way in which you criticize.' That worked well for the collaboration." (Mediator)

The client's project director agrees: "What also helped, was the allocation of personal coaches for some of our team's executives. After collaborating individuals of both sides had a few sessions with the neutral third personal coach, the collaboration improved." (Client: Project director)

The contractor's project director adds that the quality of their work helped for the client to regain trust: "You saw that there was a lot of fear at the client's side about the quality of the design and the to be delivered work. When the first phase was delivered, the client liked the quality of the work which increased their trust in us." (Contractor: Project director)

The mediator finds the initial project director from the side of the client to be hard to be negotiated with. Therefore, he advices the hospital to replace this individual with someone who can more easily make choices towards a deal.

After this replacement, the mediation procedure started to work more efficiently, towards the point where the parties started collaborating again. The contractor's director explains: "...partly because the mediator mediated some issues, partly because the changing of the guard at the client. Then we came into the flow of starting production again." (Contractor: Project director) The mediator states that the client's new project director is a better decision maker, so he remains to be representing the client. The client's project director explains: "In May 2020, I was asked to start working as the client's project director on this case, because a critical situation had been reached between the contractor and the client."

The project planning was under large pressure, and the mediator was allocated to be the supervisor of the construction meetings. "I became the supervisor of the construction meetings, which was quite peculiar of course. But that was to guide the process to get the approval of the design in time." (Mediator)

Then there were a lot of small disputes which were requests to amend: if those had to lead to adjusting the contract price or not. The mediator uses the 'revision method' to resolve these issues. The mediator asks the parties to write a revision per issue. After receiving the revisions, the mediator asks some questions to the parties to which the parties respond. Based on those answers, the mediator writes a guiding advice. Then the parties start negotiating, which leads to reaching settlement about all points. The client's project director explains the negotiation process: "Most of the times, we took a number of guiding advices together, and we said to each other: 'There is still some room for discussion.' And then it became a price negotiation between the contractor's director and me. After reaching agreement, we made a recording of it which was then worked out in a request to amend, to make sure the outcome was documented properly." (Client: Project director)

The mediator mentions: "At some point, the contractor said: 'The assignment that we have here, and the meetings that we must have with the representatives of the hospital, including the representatives of the end user, are so comprehensive; [...] this we could have never foreseen. Therefore, our staff costs are more than double than what was budgeted.' " (Mediator) The mediator hears both parties about this issue, on which he advices: "1) The legal ground of this proposal by the contractor is zero; 2) I am involved for 2/3 years in this project with you, I understand the claim, and I also think there is a base for this claim in practice. So I think the client should take a benevolent stance and look sympathetically at the claim." (Mediator)

Guided by the mediator, the parties organise a process to view the financial and substantial qualities of the claim, answering questions like "Should the contractor have foreseen this?; What are the related costs? etc." (Mediator)

Per described issue, the parties have to explain to each other their argumentation, in order to try and resolve the issue without the mediator. The mediator would only step in if this did not lead to mutual agreement. On basis of his opinion about the parties' statements, he would write a guiding advice.

Based on the guiding advices, the parties reached settlement on all issues. This resulted in a outcome where the contractor was financially compensated.

Mediator's interventions: Steering parties by giving opinion (o+)

The mediator also gave his opinion. The contractor's director explains: "The mediator mainly gave his opinion on basis of juridical assessment, like: 'If this is the way it's put in the project brief, then we may expect that in the design. It may be unpractical or illogical, but because it's written down it's part of your obligations.' That helped in seeing the client's perspective and therefore in the negotiation process." (Contractor, Project director)

The mediator confronted the client with the opposite, saying: "If you had wanted that in the design, you should have described it clearly in the project brief, while it's now quite a vague description." (Contractor, Project director)

The client's project director explains that it helps the mediation process if a neutral third gives their opinion about an continuing dispute: "What helped in the process: The mediator would say to us: 'Directors, you are both well aware of the fact that neither of you is 100 percent right. This is wat I think of the issue, use it and resolve the issue together' " (Client: Project director)

Mediator's interventions: Additional interventions (o+)

Because the contractor's director and the mediator found it hard to negotiate with the clients' initial project director, he ultimately was replaced. The mediator explains: "[…] I discovered quite soon that the dispute mainly originated in the absence of decision making at the hospital's side. During the process, we determined that this had to do with the nature of the person that represented the hospital. This man was just no decision maker." (Mediator) The mediator explained this to the hospital's board of directors, and gave the advice to replace this individual, which they followed. "Because of my objective role, I could give this advice. […] I gave this advice because my role was to resolve and prevent disputes as much as possible." (Mediator) After this intervention, the mediation procedure starts to run more smoothly, the "…partly because the mediator mediated some issues, partly because the changing of the guard at the client. Then we came into the flow of starting production again." (Contractor: Project director)

Sometimes, the mediator made the parties write down how much they thought to be right about a certain issue, in percentages. The client's project director explains: "Sometimes, we both wrote down 80%. Then the mediator argued: 'You don't agree about this, but you both recognise that you're not 100% right.' which gave input for a discussion. Sometimes, we wrote down 40% and they wrote down 60%, so then the conclusion was: this is just right." (Client: Project director)

The client's project director adds: "These requests to amend were about all sorts of small technical issues: from quality of the backing wood behind plasterboard, to the floor

finishing. The mediator told us: 'Listen to each other's explanations'. These sessions really helped to self-reflect and to realise if we were asking for something reasonable or not." (Client: Project director) He also adds: "Sometimes I feel like I am wrong about this issue, but I also have to be able to explain the negotiation outcome to the client's board of directors. Self-reflection from the mediator helps with that."

Internal moderator: Parties' intentions to resolve issues (c+)

The contractor's director explains that despite his subjective viewpoint, it is important to the process to be able to acknowledge the opponent's opinion to be right: "I represent the interests of the contractor, so I will always try to read the issues more towards the contractor's interest, but you also must be fair sometimes and say: 'If you explain it like that, and mean it in this way, then I actually understand that you are right, and then I must set aside my own opinion.' " (Contractor, Project director)

The contractor's director mentions that regaining trust in the opposite party is an important factor: "In order for mediation to work, somewhere along the line the parties have to move towards each other and regain trust. Trust and professionality are the most important factors." (Contractor, Project director)

The client's project director explains to have trust in the contractor reasonableness and intention to resolve issues that it has made errors in: "The contractor has always showed that they don't walk away from the problem. If there is a discussion about the quality of works towards delivery and the work is really not proper, they adjust it." (Client: Project director)

Internal moderator: Parties realising uncertain juridical position (c+)

Sometimes the parties did not agree with the guiding advice that was written by the mediator, but they still accepted it. The client's project director explains why: "Sometimes you just agreed in the interest of the project; Sometimes on basis of the amount of the sum: The alternative is stepping towards a judge: 'Am I doing that for a sum of 50.000 euros where I will probably make 80.000 euros juridical process costs?' It's not worth it to start litigating. Therefore I chose to settle." (Client: Project director)

Internal moderator: Parties' positional play (c-)

The settlement for the extra staff hours at the contractors side was reached, because the contractor had a powerful position. The mediator explains: "The contractor thought: if I don't receive extra payment, and the client does not move towards us, then I will terminate the contract. Then I have to pay damages of course, but those costs will be way less than the income loss of the hospital because of delays." (Mediator)

The contractor's director mentions that he tries to approaches the negotiations from his perspective: "I represent the interests of the contractor, so I will always try to read the issues more towards the contractor's interest, but you also must be fair sometimes and say: if you explain it like that, and mean it in this way, then I actually understand that you are right, and then I must set aside my own opinion and accept the settlement outcome to be more along the lines of the client." (Contractor, Project director)

The client's project director explains that he sometimes just tried to get his right: "Sometimes it was just a matter of trying: 'We'll just try and if they don't see it or can't prove we're wrong, then it's being added to the design and we'll just continue.' " (Client: Project director)

<u>Internal moderator: Parties' representatives good communication (o+)</u>
The mediator explains that the contractor's and client's representatives are collaborating well and understand each other's roles: "These men are very professional, both of them. They also have respect for each other: as an individual, from the position that they have and the way they play their roles." (Mediator)

Currently in the project, the role of the client's and contractor's directors is more about aligning the project leader's interpretations, which they do together in good communication. The client's project director explains: "If the project leaders think they have come to an agreement about something, we question them further: 'Do you really understand each other?' Regularly it's then still like: 'Oh, is that what you meant?' We respond: 'Write that down or discuss it further.' This to sharpen expectations." (Client: Project director)

<u>Internal moderator: Parties' representatives having no mandate to settle (o-)</u>
The contractor's director states the importance of the parties' representatives to be able to have the power to settle: "In a mediation procedure, it is very important to have the parties around the table that have a mandate to make decisions." (Contractor, Project director)

"The initial client's project director did not have the mandate and the personality to work towards a settlement." (Contractor, Project director)

<u>Internal moderator: Parties' cultural differences (o-)</u>
The contractor's project director explains the rigid cultural politics of the hospital: "The hospital's politics are like: this is how we do it and how we have done it for years." (Contractor: Project director)

The contractor's director explains the positions in the project of the contractor and the client: "The critical, precise and maybe a little suspicious stance of the contractor's project team and our almost friendly stance like: 'it will be all right' and 'don't worry so much' was one of the sources of the continuing disputes." (Contractor, Project director)

Action: Parties bartering / Horse-trading (o+)

The client's project director explains that bartering played an important role in the negotiation process: "Most of the times, we took a number of guiding advices together, and we said to each other: 'There is still some room for discussion.' And then it became a price negotiation between the contractor's director and me, which resulted in settlement." (Client: Project director)

Mediation outcome

The mediation procedures in this case have resulted in the settlement of all previous disputes. Currently, the mediator has taken a more passive role, and consults with the parties four times a year; every quarter, to make sure the project is running smoothly and to resolve any risen issues that the project directors were not able to resolve themselves.

At the moment in the project, the mediator has partly distanced himself from the project. The contractor's director elaborates: "Nowadays, the mediator visits the project once a month. Smaller disputes that sometimes occur, the client's director and I are able to resolve together. We don't need the mediator for that anymore." (Contractor: Project director)

The current meetings are quarterly and are conducted via online video call. Beforehand, the client's project director and contractor's director send an update about how the project is going. The mediator explains: "Then we have a meeting via online video call, to stay on top of things instead of the parties calling me when the damage has been done." (Mediator)

5. Results

In this part, the research results are elaborated. Firstly, a case comparison is conducted on the found influencing factors. Herein, the found contributing factors to the cases' mediation processes will be shared and analysed on coherence using cross-case analysis. Furthermore, the mediation process will be explained and visually constructed as it has been found to take place in the case studies. Lastly, the constructed mediation process and the found contributing factors are combined to construct an enhanced theoretical framework.

5.1. Case comparison on influencing factors

A qualitative case comparison (QCA) is conducted as is described by Rihoux & Lobe (2009), who explain that QCA can be used to constrict the case descriptions that are of maximal complexity towards a point of maximal simplification. In this research, the elaborate case descriptions are reduced to an overview of the found influencing factors in Table 4 and Table 5 which contain both closed and open coding.

Rihoux & Lobe (2009) elaborate that after this simplification, complexity is regained by the researcher's interpretations. Hence, the list in Table 4 and Table 5 is interpreted by cross-case analysis based on the outcome of the mediation process per case: either successful or unsuccessful. This interpretation entails all factors that seem to be relevant or can be related to the success or failure of the mediation process.

Data: Closed coding

In Table 4, the contributing factors are presented as they were found in the literature and in mediation practice in the case studies. These closed data factors are pinpointed per case study. Positively influencing factors are marked in green, and negatively influencing factors are marked in red.

The following factors from academic literature were not found in the case studies, and will be removed from the theoretical framework:

- Mediator: Forcing parties to settle (c-)
- Parties: Distrust in mediator and process (c-)

Data: Open coding

Table 5 shows the contributing factors that were found in the case studies that are new to existing academic literature. The factors of this open data are pinpointed to each case study as well. Positively influencing factors are marked in green, negatively influencing factors are marked in red.

The found factors are allocated to four overarching code groups, see Table 4 and Table 5:

- *Mediator's interventions:* These are the tools and tricks the mediator uses to guide the mediation process.
- *Internal moderators:* These are the factors that have impact on the process that play part in the mediation meetings.
- *External moderators:* These are the factors that have impact on the process that play external to the mediation sessions.
- *Action:* An action that influences the mediation process.

Table 4. The found closed coding in the four case studies. Own figure.

CODE GROUP	CODE	Case 1	Case 2	Case 3	Case 4
Mediator's interventions	Showing objectivity (c+)	✓	✓	✓	
Mediator's interventions	Using a caucus (c+)	✓	✓	✓	
Internal moderator	Parties' trust in mediator and process (c+)	✓	✓	✓	
Internal moderator	Parties' intentions to resolve issues (c+)	✓	✓	✓	✓
Internal moderator	Parties realising uncertain juridical position (c+)	✓	✓		✓
Internal moderator	Parties' positional play (c-)		✓	✓	✓
External moderator	Lawyers' influence (c-)		✓	✓	
		Successful	Unsuccessful	Successful	Successful

Table 5. The found open coding in the four case studies. Own figure.

CODE GROUP	CODE	Case 1	Case 2	Case 3	Case 4
Mediator's interventions	Additional interventions (o+)	✓	✓	✓	✓
Mediator's interventions	Steering parties with open questions (o+)	✓		✓	
Mediator's interventions	Steering parties by giving opinion (o+)			✓	✓
Action	Parties bartering or 'horse-trading' (o+)	✓		✓	✓
Internal moderator	Parties' representatives' good communication (o+)	✓	✓	✓	✓
Internal moderator	Parties safeguarding relationship (o+)		✓		
Internal moderator	Client's lacking technical project knowledge (o-)	✓	✓		
Internal moderator	Parties' representatives having no mandate to settle (o-)			✓	✓
Internal moderator	Parties' cultural differences (o-)				✓
Internal moderator	Mediator's little substantive project knowledge (o-)		✓		
External moderator	Bad executives' relationship & collaboration (o-)		✓		
External moderator	Conflicting interests (o-)		✓		
External moderator	Working with governmental organisation (o-)		✓	✓	
		Successful	Unsuccessful	Successful	Successful

Cross-case analysis

Based on Table 4 and Table 5, a cross-case analysis is conducted. As explained before, the cases are compared on the outcome of the mediation process: successful in the case of reaching settlement, and unsuccessful in the case of not reaching settlement.

Before diving into comparison and detail, it is important to mention that less positively - or negatively contributing factors have been found in case 4 than in the other cases. Specifically three positively contributing factors that were found in the other three cases, were unable to be obtained from the interview transcripts from case 4. Because the mediation process of case 4 is successful, this is quite peculiar. Therefore, these three positively contributing factors are viewed as possible essential factors, which will later be discussed in the validation in part 7 with a panel of experienced mediators.

As explained before, the found influencing factors have been allocated to four code groups: Internal moderators, External moderators, Mediator's interventions and Action. From the cross-case analysis, the 18 found influencing factors within these code groups have been allocated to two groups: 1) Possible essential factors that positively influence the process and indicate to be essential to mediation success and; 2) Influencing factors that are of influence to the process, either positively or negatively. This results in the following distribution:

1) Possible essential factors
    a. Internal moderators
    b. Mediator's interventions
    c. Action
2) Influencing factors (moderators)
    a. Internal moderators
    b. External moderators

The 18 factors within these groups and sub-groups are elaborated below.

Possible essential factors: Internal moderators

A number of positively influencing internal moderators have been found in all cases, although sometimes with one exception. Hence, these could be essential to the success of the mediation process.

1. *Parties' intentions to resolve the issues.*

In all cases, the parties were found to have the intention to resolve the issues which was of positive influence to the process. This also seems like an important factor, because mediation is about negotiating to an agreement. If one of the parties or both parties have no intention of resolving the issues, it would be hard to move towards the opposite party and reach settlement. Therefore, this could be essential to bring the mediation to a success.

2. *The parties' representatives good communication.*

Parties' representatives good communication has been found to be of positive influence to the process in all cases as well. The mediators from the cases and the mediators that have been interviewed in exploratory interviews mention that mediation is about communication, because the parties reach settlement through discussions and reflections. Therefore, good communication between the parties' representatives could be an essential factor to successful mediation as well.

3. *Parties' trust in mediator and process.*

In all cases but case 4, the parties were found to have trust in the mediator and the mediation process. With absent trust in the mediator and the process, the mediation process and negotiations are likely to be complicated and difficult. Therefore, this also seems to be an essential factor to successful mediation.

Possible essential factors: Mediator's interventions

4. *Showing objectivity.*

In all cases but case 4, the mediator showed his objectivity which positively contributed to the mediation process. While his objectivity is one of the key aspects of the mediator that is mentioned in literature and by mediators themselves, showing to the parties could be an essential intervention to successful mediation.

5. *Additional interventions.*

In all cases, the mediator was found to be using additional interventions to standard mediation guidelines to aid the mediation process and to bring the parties closer to each other in reaching settlement. This is in line with literature that emphasises the flexibility of mediation processes, and the possibility for the mediator to use a broad range of interventions that are within the boundaries of mediation rules'. A few of the found additional interventions include: the 'revision method', a role-playing game to understand other the party's viewpoint, letting the parties write down how much they are correct in percentage and parking difficult issues for later. Therefore, the use of these additional interventions could be essential for the success of mediation.

6. *Using a caucus.*

In all cases but case 4, the mediator uses caucuses which are individual consultation with the parties separately. This is an intervention that is mentioned in literature and by mediators themselves to be used standardly in the process. Therefore, this could be essential to successful mediation.

7. *Steering the parties passively and actively.*

In all cases, the mediator steers the parties in a certain train of thought or resolution direction. This is done in passive ways by asking open questions, or is done in active ways by directly giving opinion. These came from a certain field of expertise from the mediator. For example, knowledge in construction law or experience with construction projects in general. Therefore, this could be essential to successful mediation.

8. *Mediator's little substantive knowledge of the contents of the project.*

In case 2 that was unsuccessful, the mediator did not have technical understanding of the substantive contents of the project. This also follows factor 8, because in the other cases the mediator used his expertise to steer the parties into a certain direction. It would be possible that the mediator's substantive knowledge of the project is essential to guide the process well.

Possible essential factors: Action

9. *Parties bartering or 'horse-trading'*

In all cases but case 2 that was unsuccessful, the parties mention to have used bartering or horse-trading to reach settlement. Because negotiations usually result in meeting in the middle, bartering is likely to be an important factor. This could therefore be essential to mediation success as well.

Influencing factors: Internal moderators

10. *Parties realising uncertain juridical position.*

In all cases but case 3, the parties realise that their Best Alternative To a Negotiated Agreement (BATNA) is quite unpredictable because their juridical position in the case is not certain; neither clearly winning or clearly losing. Sometimes the mediator made them realise these juridical positions by asking open questions about it. This positively influenced the mediation process, because it increased the parties' willingness to compromise in the negotiations. This could be a positively influencing factor in general.

11. *Parties' positional play.*

In all cases but case 1, at least one of the parties tried to get the most out of the case conducting positional play. This negatively influenced the mediation process, because it complicated the way to reaching settlement. Therefore, this could generally be of negative influence to the process.

12. *Parties striving for safeguarding the relationship for future collaboration.*

The mediation in case 2 was unsuccessful. Interestingly, this was the only case where the parties wanted to safeguard the relationships for possible future collaborations. The parties shared that their market is small, and they will come across each other in the future no matter what happens. In addition, this mediation was a lingering process that lasted 1,5 years before the parties concluded that settlement was not going to be reached. Therefore, it could be that the parties became biased in reaching settlement because they wanted to preserve the relationship which resulted in a long lasting process that was not able to be successful anyway. This could be generally the case.

13. *Parties' executives' bad personal relationships.*

In case 2 that was unsuccessful, the parties and mediator shared that the personal relationships between the executive teams of both parties were damaged. This was mentioned to be of negative influence to the mediation process, and could be of negative influence to the process in general.

14. *The client's lacking technical project knowledge.*

In cases 1 and 2, the contractor's representative and/or the mediator mention that the client was lacking substantive technical knowledge of the project. Because this made it hard to substantively discuss specific project topics, it became harder to negotiate to an agreement. This also could generally be the case in mediation processes in construction.

15. *Parties' representatives lacking mandate to settle.*

In all cases but case 1, at least one of the parties' representatives did not have full mandate to settle. This made the negotiation process harder, hence it was harder to come to an agreement. This could generally be the case in mediations.

Influencing factors: External moderators

16. *Agreements within the client's governmental organisation.*

In cases 2 and 3, the client is a (semi) governmental organisation. The contractors mention that the negotiations are difficult, because certain agreements have been made within the client's organisation which results in their representative's little flexibility in the negotiation process. This phenomenon could generally be the case in mediation processes when the client is a governmental party.

17. *Conflict of interest.*

Case 2 is the only one that was unsuccessful. Herein, the client's new designs were assessed by the same individual that the client hired to write the project brief. The parties mention that this individual was therefore reluctant in approving creative design solutions, because

this would indicate possible flaws in - or incompleteness of the project brief. This complicated the negotiations towards agreement about a fitting design. This kind of conflicting interest could be of negative influence on mediation processes in general.

18. *Influence of parties' lawyers.*

In case 2 and case 3, parties' lawyers were playing in the background of the mediation process. This was found to be of negative influence to the mediation process, because this resulted in the parties taking a legal stance that made the negotiations harder. Hence, the influence of parties' lawyers could be of negative influence to the mediation process in general.

5.2. The mediation process in practice

The mediation processes of all cases deviated from each other in detail, but the main structure was found to be comparable.

The three stages of the mediation as presented by Gould et al. (2010) also have been found to be the construction of the mediation processes in the four inquired cases. From further analysing the mediation processes in the cases, a more detailed flowchart is made of these three phases. The following has been found to be practice in each phase:

1. Pre-mediation phase: In this phase, introductions are made, the process is explained to the parties and in some cases shaped. Subsequently, the parties' issues are listed and their interests are inventoried, which results in the project's dispute list and map of interests. Sometimes, the mediator uses a caucus for this to individually consult the parties about their view on the disputes. The input for this pre-mediation phase are the project characteristics and - disputes. During this preliminary stage, the mediator shows its objectivity to the parties.
2. Negotiation phase: In this middle phase, the mediator tries to change the parties' stance from disagreement to understanding the other party's viewpoint in order to make them willing to settle. This phase repeats itself, because single disputes from the dispute list are resolved subsequently, going through the cycle of the negotiation phase each time. During this negotiation, the found positive and negative moderating factors play role.
3. Post-mediation phase: In the post-mediation phase, the mediation process is concluded. When successful and agreement is reached on all issues, a formal settlement will be written which the parties sign. When unsuccessful, no settlement is written and the parties look for other ways to resolve their disputes.

From these findings, a visualisation is made which can be seen in Figure 8.

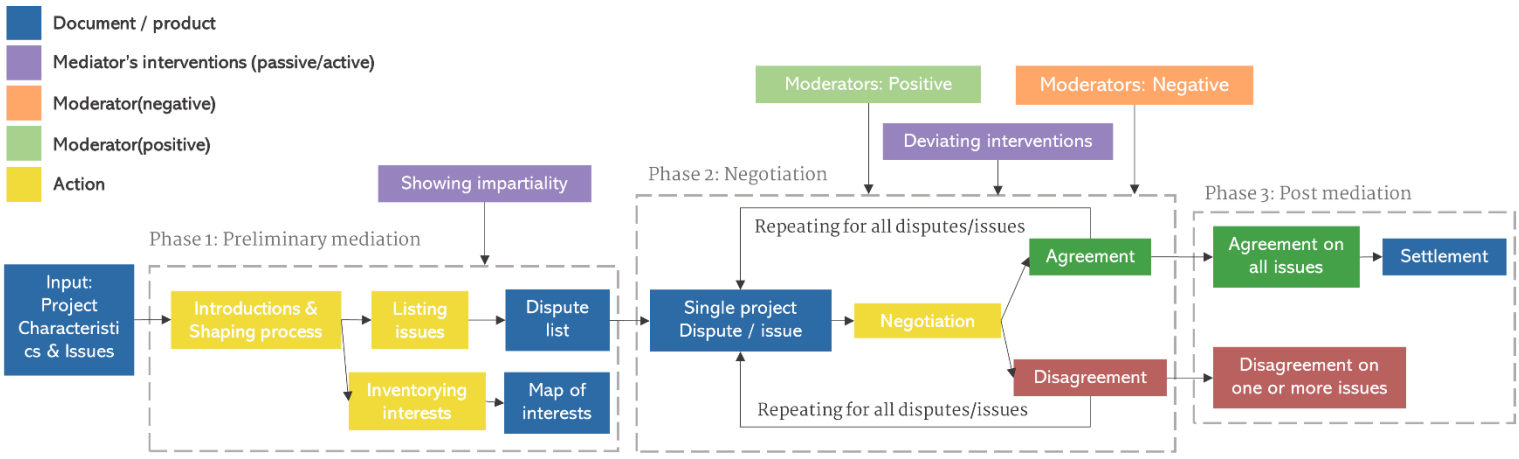

Figure 8. The mediation process in practice. Own figure.

However, the most noticeable difference between the cases is the way in which the mediators conduct the mediation process. In cases 1 and 2, the mediator follows strict mediation rules of the Dutch mediation institution MFN. During the mediation process, he only deviates from these rules by asking open questions. This passive approach to the process is in line with classic mediation rules and standards.

Contrarily, the mediators in cases 3 and 4 deviate from the rules and standards of classical mediation and conduct a more direct approach to the process where they confront the disputing their opinions. As is derived from the case studies, this active approach entails a slightly different process.

So two different types of mediation have been found. The approach to mediation in case studies 1 and 2 is called 'passive mediation', and the approach to the process in case studies 3 and 4 is called 'active mediation'. This brings the deviation of case studies as is shown in Figure 9.

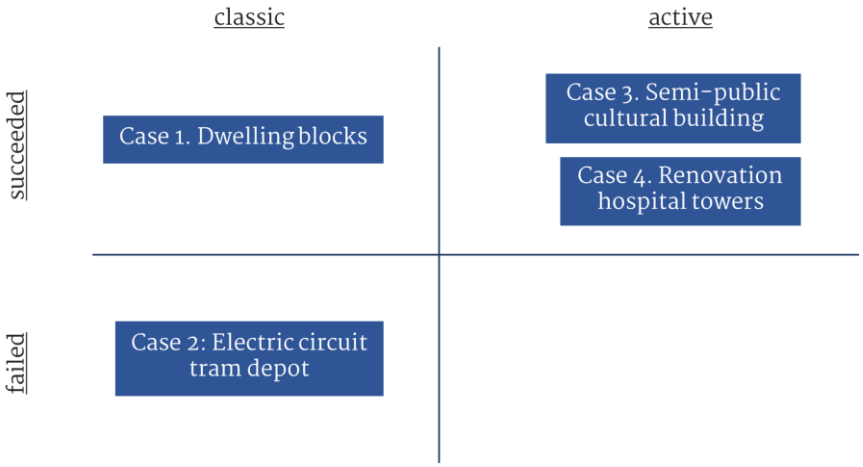

Figure 9. The four inquired cases deviated in a matrix: classic vs active mediation and failed vs succeeded. Own figure.

As can be seen in the cases, the preliminary phase is very similar in both passive and active mediation, while it entails the same parts: introductions, explaining or shaping the process and listing the issues. The same goes for the post-mediation phase, where the parties reach settlement or not, no matter the type of mediation. This deviates in the negotiation phase.

In the negotiation phase of passive mediation, the mediator uses interventions to make the parties understand each other's viewpoints better, in order to change their stance and make them willing to settle.

In the negotiation phase of active mediation, the mediator gives his opinion to disrupt the parties which often starts a discussion. Important to notice, is that the active mediator also uses passive interventions like asking open questions to make the parties understand each other better.

The differences in the negotiation phase of passive and active mediation will be elaborated below.

The negotiation phase of passive mediation

After a single dispute is chosen from the list, the disputing parties are given the opportunity to elaborate their argumentation about this issue in a statement. After these statements, the mediator uses passive interventions to make the parties view the issue from the other's position. The following passive mediator's interventions were found in case studies 1 and 2:

- Asking open questions to sketch the opposite's view (passive)
- 'Parking' issues that are hard to settle (passive)
- Let executives join the mediation sessions, to elaborate the issues from their perspective (passive)
- Focussing on finding a technical solution first, and leaving financials for later (passive)
- Use of the 'revision method' (passive)

Using these interventions, the mediator tries to have the parties experience and then understand each other's positions, which can lead to the parties' increasing willingness to settle. After this, the parties start bartering about the single dispute, either resulting in settlement or disagreement. After agreement, the negotiation phase starts over and the parties start the negotiation about the next issue on the dispute list. After disagreement, the unresolved dispute is 'parked' and negotiation phase also starts over, continuing with the next dispute on the list.

The negotiation phase of active mediation

As is the case in passive mediation, the disputing parties are given the opportunity to elaborate their argumentation about this issue in a statement.

The following passive and active mediator's interventions were found in case studies 3 and 4:

- Use of the 'revision method' (passive)
- Dividing posts into easy-to-solve and hard-to-solve parts (passive)
- Conducting a role-playing-game, where both parties have to explain the position and argumentation of the other party to each other (passive)
- Letting the project directors have diner together, without talking about the dispute (passive)
- Having the project directors write down how much they thought to be right in percentages (passive)
- Giving advice to replace one of the project directors (active)
- Giving direct opinion (active)
- Writing a guiding advice (active)

Using the passive interventions, the active mediator tries to accomplish the same as passive mediator: to have the parties understand the other's viewpoint and to increase the willingness to settle. In these cases (3 and 4) however, the active mediators always give their opinion about an issue.

Using the active intervention of giving opinion, often a discussion arises from the affected party. The mediator then engages in the discussion and gives arguments for his opinion. This either results in the parties calming down and understanding the opposite's viewpoint or it ends in the mediator adjusting his opinion if he has missed something. Both situations result the parties' increased willingness to settle.

Subsequently, the parties start bartering about the issue in the same manner as passive mediation, which results in either in settlement or disagreement. Both after which the negotiation process is repeated, to try and resolve the next issue.

These deviating negotiation processes are visualised in the enhanced theoretical framework in Figure 10, in paragraph 5.3.

5.3. Adjusted theoretical framework

Combining the developed mediation process framework and the found process influencing factors, a new framework has been constructed. This can be seen in Figure 10. Due to its bad readability, it is also included as Appendix 2 in a bigger size.

Some of the found specific factors can be placed on specific spots in the enhanced framework like the input value, the different mediator's interventions and the action of bartering. For some of the found internal and external moderators, it remains unclear how and when they influence the mediation process. It could be that they are constantly active. Therefore, they are placed outside of phase 2, as influencers of the negotiation phase. See Figure 10.

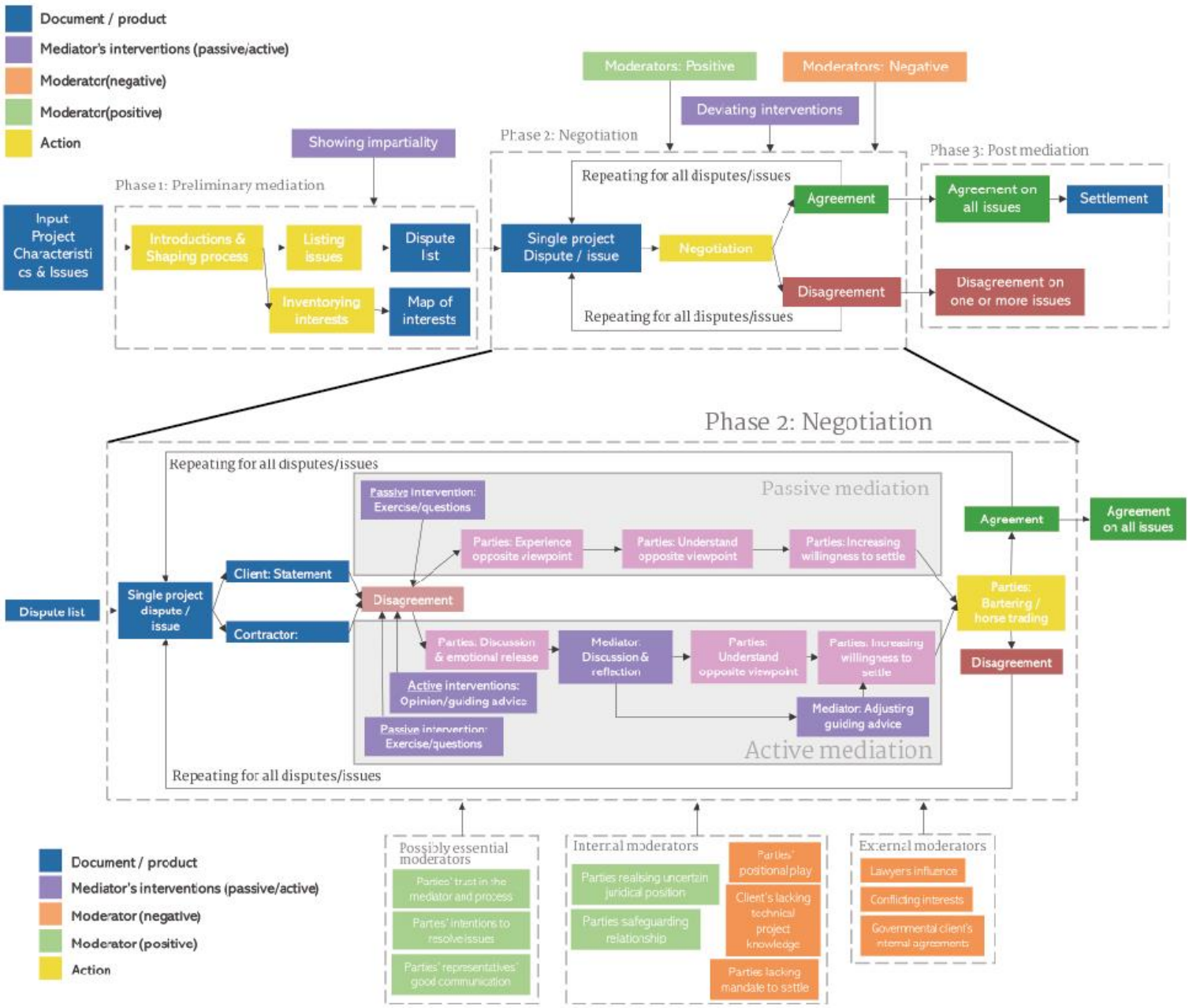

Figure 10. Enhanced theoretical framework, combining the deviating mediation processes and the found influencing factors. Own figure.

6. Limitations and recommendations

Limitations and recommendations have been found in different stages of the four construction project cases where disputes developed. The recommendations are elaborated and allocated to earlier mentioned phases of disputing projects. First, some general limitations and recommendations are elaborated, followed by limitations and recommendations during the different disputing phases: The mediation process (scope of this research), the preliminary phase, choosing for mediation and choosing for the mediator.

6.1. General

- This research focuses on mediation procedures in construction disputes only. In other fields, other factors may influence the mediation procedure.
- Three of the four inquired mediation cases resulted in a settlement. The one that did not reach settlement about the contractual obligations, did eventually result in a financial settlement. So no inquired case study escalated into an arbitrary procedure or lawsuit. This may be the case in other examples, and other factors may have been of influence in those mediation cases, which could be inquired in future research.
- One of the research outcomes is the enhanced theoretical framework, representing the structure of the mediation process and influencing factors. However, this is based on only four case studies. More mediation cases could be studied in future research to get a better and more complete understanding of the procedure and related factors to the mediation process.
- The mediators in the case studies state that the mediation process is quite flexible, and the mediator -in accordance with the disputing parties- can choose what instruments to bring to the table. This is in line with Gould et al. (2010), who underline the mediator's flexibility in the process. Because only four cases have been inquired, it is probable that that only a few of these mediation instruments have been used and thus found. who Future research could conduct more case studies to gain a fuller understanding of the different mediation instruments that mediators use.
- In case 4, less influencing factors were found than in the other cases, especially for three positively influencing factors that have been found in all three other cases. It remains unclear why these factors have not been found in this case.

6.2. The mediation process (scope of this research)

- In the literature review is concluded that the contract type of the project may be of influence on the mediation process. This is not found in the cases. However, the collaboration in all cases was based on a standard Dutch integrated contract form: UAV-GC. Future research could compare mediation cases that were based on

integrated contracts with cases that were based on traditional contract forms, to gain insights in if the contract type is of influence to the mediation process.

- This research focuses on mapping the mediation process and factors that affect its primary goal: reaching settlement; and if it fails: not reaching settlement. In the cases however, the parties sometimes shared an additional goal: to collaboratively finish the project. Because the cases show damaged relations between both sides' executive teams, the collaboration between these teams has to be regained in order to finish the project. The cases show some interventions that were tried to accomplish this: the parties often allocate team coaches to improve the collaboration between these executives. This is in line with Moore (2014), who states that one of the pros of mediation is the possibility for the parties to regain trust and therefore retain the relationship for future collaboration. Future research could focus on how the mediation process adds to the re-establishment of the disputing parties' collaboration and what factors influence this.
- Quite specific negative and positive moderating factors have been found in all cases. Some of them have been recognised as possible essential factors, while for others it remains unclear whether they are case specific or generally play part in mediation processes. Future research could further investigate this by inquiring about these specific factors.
- In the case studies, it is difficult to see how the found moderators influence the mediation process and its outcome. Future research could dive further into how these relate to each other and the process.
- In all cases, no party seems to have a clear better juridical position than the other. Therefore, it seems like mediation is a good choice when the juridical positions of parties are at least debatable. This is line with Cheung (2010) who states that a reason not to choose for mediation is if a party believes that he can win this case. Future research could dive into this.
- Two mediation forms have been found in the case studies: passive and active mediation. Because the processes are deviating from each other, it could be that one is more effective than the other, or one could be more effective in a certain case than in another case. This could be inquired in future research.

6.3. Preliminary phase: disagreement and negotiations

- The projects in the case studies were all based on integrated contract forms, in these cases the Dutch standard UAV-GC contract. It could be that some of the problems that arise can be related to the contract. Future research could investigate this.
- In all cases, the parties had deviating interpretations of the project brief, which leads to issues and the dispute to escalate. In addition, the projects of all cases were on basis of integrated contract forms, which entails more design freedom for the contractor. Future research could focus on possible relationships between the

integrated contract form, deviation of obligations alignment and the disputes that possibly arise in a project.

6.4. Choosing for mediation

- In the case studies, mediation is proposed by at least one of the two disputing parties as an alternative to juridical procedures. Some parties mention it to be better in terms of money and time costs. However, Cheung (2010) states that this not always the case and points out that if the mediation costs majorly exceed the project budget, this is a reason not to choose for mediation. If this is the case, and for what types of cases this applies could be inquired in future research.

6.5. Choosing the mediator

- In all cases, the mediator or mediators were known by one of the two stakeholders or by an involved lawyer. They were proposed by these parties on basis of good previous experiences. Why this is the case and where this choice is mainly based on, could be inquired in future research.
- Two different approaches to the mediation process were found in the four cases, which are called passive and active mediation. All disputing parties use the same word for the process: mediation. However, the process of cases 1 and 2 is found to be deviating from cases 3 and 4. This is mainly based on the mediator's mediation style. It is unclear if the parties were aware of these differences in the process beforehand, and took that into account when selecting the mediator. Future research could investigate whether this is the case.

7. Validation

Because the grounded theory approach of this research, the choice has been made to make the validation to be an active part of the research. Hence, the research results are validated before drawing conclusions, to make the conclusions sharper and to add a layer of depth to them. The validation is conducted with a panel consisting of three experts in the field of mediation who professionally practice mediation in the Dutch construction sector. The discussion with this panel is conducted on basis of statements, which have been derived from the research results. These statements are presented to the panel for them to react on, ask questions about and give their opinion on. First, some background information is given about the three mediation experts, followed by the individual statements and most important thick descriptions during the discussions .

Expert panel distribution

Expert 1: Arent van Wassenaer

An experienced mediator in the construction sector, with over 35 years of construction law and mediation experience. He has a background in studying law whereafter he became a construction lawyer. After years of working at large lawyer offices, he started mediating being sole proprietor. He is member of Presolve, a Dutch ADR expertise centre that strives for construction without disputes.

Expert 2: Huub Sprangers

This mediator has a background in architecture and urbanism. Starting in 1998, he was one of the early mediators in the Netherlands and the founder of the Dutch Mediator Foundation. During that time, he quickly became chairman of the Association for Mediators in Construction. From 1999 he has conducted more than 100 mediations in the construction sector, in which field he is still active as a mediator today. Furthermore, he is one of the founders of Presolve.

Expert 3: Malcolm Aalstein

This mediator works at the municipality of Amsterdam as consultant in the market & purchase department, where he is involved in bigger infrastructural projects to establish everything that's concerned with market and purchases. This goes from strategics to the structuring of organisations, where he safeguards the quality of collaboration between the municipality and collaborating contractors. He is a registered MFN mediator with significant mediation experience in the construction sector, which he conducts on the side of his main job. He is a member of Presolve as well.

Essential factors: What is at play between the disputing parties

1. *To make the mediation successful, both parties must have the intention to resolve the problems.*

Expert 1: "This statement is right. But it can also be: to have the intention to contribute to the process to resolve the problems. Because the parties don't know how they are going to resolve the problems when then enter mediation." "Once I had a mediation that was unsuccessful, because one of the parties only participated the mediation to show goodwill to the judge during the following lawsuit."
Expert 2: "I would add: or the parties could have the necessity to resolve the problems, because that is sometimes the case. It is easier when they have the intention to resolve the issues, but sometimes you have to work with the necessity: when they are bound to each other."
Expert 3: "Urgency is an important factor here. Most of the parties view going to the mediator as going to the dentist, especially in the preliminary phase, so then the necessity helps."

2. *Both parties have to trust the mediator and the mediation process in order to be able to bring the mediation to a success.*

Expert 1: "That is right. They must have trust in the mediator, because otherwise the mediator will not be commissioned. And also the mediation process, with the nuance: at least to start the mediation process, because there is a lot more to successfully starting the process."
Expert 2: "I agree with the first statement about the mediator. I put the mediation process between brackets, because it is about the mediator who has to see what the parties come up with, on which he bases how to structures the process at all. So that can vary. So in my opinion it is about the mediator and his or her approach."
Expert 3: "I would say that the first was is a very important one. Sometimes they feel like they are putting the fate of their case in your hands, which is an inaccurate thought because if you mediate well, the parties themselves decide the fate of their case. Trust in the mediation process is something that has to grow during the process, which is created by the mediator by being clear, by predictable, by being competent, by giving the parties a preview of what will come."

3. *The parties have to be willing to negotiate or horse-trade about the separate issues to bring the mediation to a success.*

Expert 1: "It depends on what you mean with 'the separate issues'. Sometimes there is only one issue, sometimes they are claims about more or less work. The mediations that I have

conducted where there were different issues (which can be very deviating), it really helped to analysing the separate issues, because then resolving the whole becomes easier."
Expert 2: "I would say: they have to be willing to negotiate about all problems involved. That is one of the first things I mention, because there are the issues on which they agree that they are an issue, and there are some issues on which they disagree that it is an issue at all. Then I say: in this area there is no veto power. Everything will be discussed."
Expert 3: "In the preliminary phase, I always say: please give a summary of the assignment, what is the issue? And then I always ask: What is the impact of the issue on the project, and what is the impact on the team? Then I receive answers on which I can tell from body language and sound of voice if there is something beneath the tip of the iceberg."

4. *The parties' representatives must communicate well with each other in order to bring mediation to a success.*

Expert 1: "What do you mean with good communication? At the start of mediation, I always explain to the parties that the only instrument to make the mediation successful is language. Everything they say, or don't say, or body language are expressions that could positively or negatively influence the mediation. [...] So please think about what you say to the other party. So with the parties' good communication, I mean: to express things that contribute to moving forward in the process. So no sarcastic comments, or personal stings of insult."
Expert 2: "I don't agree. You are often approached as a mediator because the communication is not in order. One of the most important things you have to do as a mediator is to establish the communication between parties about the most important issues. [...] The parties are often talking but not communicating."
Expert 3: "Communication is a key point in mediation. Parties underestimate easily what communication can imply. [...] For example, a party can argue: 'I really thought it through again and in all reasonableness, can't you see that my offer is the best?' Then the party implies that the counterparty lacks reasonableness."

Essential factors: Mediator's interventions

5. *The mediator must show objectivity to the parties to bring the mediation to a success.*

Expert 1: "Show his objectivity.. at least the mediator has to express his objectivity. That is right. He must not take sides. It is better to formulate it contrarily: There are ways in which you indicate you are not objective. From those he should stay far away. If "
Expert 2: "Objectivity also has its limitations. I can be subjective in the eyes of either party on certain moments in the process. [...] Formerly, the mediator had to prove that there was no direct or indirect relation to one of the parties because then he would be partial.

Eventually, that view has diminished. Then you are left with neutrality. [...] Apart from that I am fine with this statement."
Expert 3: "The word objectivity I find a bit problematic. This is always in the eye of the beholder. [...] I would say: the mediator needs to show neutrality or impartiality, that is essential for a successful mediation process.

6. *The mediator must use extra interventions (besides standard mediation guidelines) to make the process successful.*

Expert 1: "I would say: the mediator cán use extra interventions, but does not have to. It is good if the mediator has extra interventions at hand: those can improve the process. [...] These interventions can be used creatively: sometimes you use an intervention based on experience, sometimes use a new concept that you come up with on the spot, spontaneously."
Expert 2: "Yes. I don't recall when I ever did a mediation strictly by the book and you guide the process passively, being more the facilitator of the negotiation and the mirror but not more than that. I always use extra interventions. What kinds I use that depends on the issue. [...] In this statement I read: the mediator does not only have a facilitating role, but also an evaluating one. And I agree."
Expert 3: "I would say yes, I agree."

7. *The mediator must use individual consultations with the parties (caucuses), to bring the mediation to a success.*

Expert 1: "Yes, that statement is right: caucuses are essential for a successful progress of mediation. Maybe I should explain what these caucuses can be used for: they can be used for reflection, doing homework, the development of propositions, to reconsider something that happened in the mediation, it can deviate. [...] For example, when a party thinks you're not objective and thinks that you are helping the other party, a caucus can be used to explain to the parties that this is not the case, to make it right."
Expert 2: "Absolutely. [...] In mediations in construction the use of caucus is a must, because you can reflect your opinion directly to the parties and bring them into line. [...] It is very risky to do that during plenary sessions."
Expert 3: "Yes, I agree."

8. *In mediating construction disputes, the mediator should steer the parties: in an active or a passive way, to bring the mediation to a success.*

Expert 1: "Definitely, that is right. When it comes to mediations in construction, the use of active mediation where the parties are steered is convenient."

Expert 2: "I agree with this statement, and I am less reluctant on this matter than Expert 3. It is elegant to steer parties more passively than actively, but if the parties don't take a passive approach, you will have to intervene in less subtle ways. Then it becomes more pronounced. You can say: What do you think of this train of thought? Up until saying: I want you to think about the following solution: …"
Expert 3: "It depends on the phase. If you are not yet to the point where you are giving a mediator proposal or an advise, then you will not steer on substantive matters. However, there are ways in which you can make suggestions to the parties. […] What the mediator definitely does, is steering the parties on the perception of substantive matters, so to reframe their statements or perceptions. But taking the parties by the hand and leading them to the solution, you don't do that."

9. *To be able to steer the parties well, the mediator needs to have insight in the substantive contents of the project. This is a requirement to bring the mediation to a success.*

Expert 1: "To some extent. At least, you must have understanding of the project organisation, and of the relationships. You must understand what the project's challenges are, but not very specific substantive knowledge, I think. I sometimes use my juridical knowledge however, to give the parties insight in their juridical positions if a lawsuit will happen. That is called a BATNA […] Often, those positions are not very clear, which means that the outcome can be in favour of any party. I use a caucus for this as well."
Expert 2: "Absolutely. […] You should be able to follow the substantive matters of what the parties are talking about. That does not mean you have to know something about the thickness of a coating for example, but you have to be able to follow such a discussion."
Expert 3: "Yes. If you look at construction mediation or commercial mediations, and what the parties require, I state the following: You cannot be a good construction mediator if you don't know the sector, and cannot ask substantive questions, or if you cannot reflect on basis of a substantive level or put some ideas in the parties' heads."

Internal moderators

10. *Realising their uncertain juridical position is of positive influence to the mediation process.*

Expert 1: "I agree with this. The BATNA (Best Alternative to a Negotiated Agreement) is a standard item in the mediation method I conduct (Harvard)."
Expert 2: "Yes, it makes the mediation process easier if the juridical position of both parties is not so clear. But if it is clear, I try to bring in the lawyers. I currently have a case where the lawyers of both parties are not willing to meet together, because they are both convinced of their juridically winning position. That makes the mediation process difficult in this case."

Expert 3: "What does not help, is if one party or both parties are convinced that they would win the lawsuit when it would come to litigation. Then one of the parties does not feel the need to contribute to the mediation process."

11. *Parties' positional play negatively influences the mediation process.*

Expert 1: "That is a possibility, but it does not have to be of bad influence to the process. Someone can take an unreasonable position that makes it impossible to reach settlement. But sometimes, it can be clear as a party to draw the line and say: 'This is my position and I don't cross this line. That is in my interest.' [...] That can provide clarity, and can therefore be of positive influence to the process."
Expert 2: "You actually need positional play in the process, because it is a negotiation. In negotiations, the parties always try to get the most out of it. Sometimes, the parties are feeling like they achieved the best possible outcome, despite not getting the maximum out of it. So I think it is more about the feeling that they achieved the best possible outcome. But there are parties that do not give in a single inch. When I experience that, I intervene sometimes."
Expert 3: "I recognise this. Parties always take off from certain positions, but at the same time I think it is the eminent role of the mediator to guide the conversation from being about the parties' positions to being about the parties' interests."

12. *Parties safeguarding the relationship for future collaboration results in an optimism bias to make the mediation successful. This is of negative influence on the process.*

Expert 1: "Striving for the safeguarding of the relationship for future projects is an interest. I find this mainly to be of positive influence on the process, but in some cases your statement could be right. [...] Sometimes there is no question of future relationships, so this does not have to play part."
Expert 2: "In the construction sector, you always come across each other. [...] Willingness to safeguard the relationship normally is of positive influence to the process, because it provides the process with a positive flow."
Expert 3: "The parties wanting to collaborate or being forced to collaborate in the future is a great motivator to contribute to the mediation, so is of positive influence to the process."

13. *Bad personal relationships between the parties' executive teams complicates the mediation process.*

Expert 1: "This could be so. If this is the case, the mediator should invest in venting off steam. That could play part here: a lot of emotions. That then has to be clarified. But I think this is very case specific."

Expert 2: "I agree. Bad personal relationships between executives makes the mediation process harder. [...] However, they need to be participating in the mediation process. It is about the personal relationships between the people that participate in the mediation."
Expert 3: "I agree. This mainly negatively affects the ease of execution of the outcome of the mediation, because the executive team could feel not being heard or disqualified in the resolution."

14. *The client's lacking technical project knowledge is of negative influence to the mediation process.*

Expert 1: "I can imagine that this could be the case. However, I never experienced it myself during a mediation process. But again, I can imagine this to be of influence: if there is a knowledge imbalance, the parties communicate with each other from two deviating worlds which makes the process more difficult."
Expert 2: "Nearly always, the contractor knows more about the substantive technical details of the project than the client. That could be of negative influence on the mediation process, because the client could continuously be in doubt: 'The contractor makes certain statements, but are those actually true?' Then, I sometimes propose to the parties to appoint an external technical consultant to take a look at the case and share a binding or guiding advice about it."
Expert 3: "I cannot argue about this, because I only work with professional clients that have their own engineering firms and consultants behind them."

15. *The parties' representatives' lacking mandate is of negative influence on the mediation process.*

Expert 1: "Indeed, if there is insufficient mandate it makes the process more difficult. A mandate to attend to the mediation and to be able to make deals within certain boundaries, that mandate must apply. If it preliminarily becomes clear that every made decision has to be approved on another level, that makes the process more difficult."
Expert 2: "Yes, because it is a negotiation. How are you able to negotiate when you don't know how the opposition can move? The mediation process becomes easier if the parties have a full mandate, or if there is clarity about the mandate of both parties; that can also be the case."
Expert 3: "I agree. This is killing to the process."

External moderators

16. *External agreements of governmental bodies influences the mediation process negatively.*

Expert 1: "I think this statement is about stakeholders. Those stakeholders can be governmental, but don't have to be. I would not say that the communication obligations of these gove rnmental bodies influence the process negatively per se. I would say: influence the mediation process. It can complicate the process, but it is a factor that you have to take into account. It can make the process more complex, but therefore it is important to map the parties' interests clearly."
Expert 2: "If you are working with a (semi) governmental organisation, you should take in account that they have to obey certain rules. [...] You have to inform the parties preliminarily about their negotiating position, because otherwise this can be misused. For example, if a market party doesn't know that the opposite party is governmental, he can be surprised."
Expert 3: "A delegate from a governmental body is accountable to multiple individuals. Therefore, he usually experiences to have less operating space in the negotiation than the delegate of a market party. This complicates the mediation process."

17. *External conflict of interest is of negative influence to the mediation process.*

Expert 1: "I don't think it has to be like that. It never came across in one of my mediations, so I cannot tell. So I think this is case specific as well."
Expert 2: "This is indeed something you have to take into account, but I really have to go over my mediation cases and think about if this ever applied, so I don't think I have a lot of experience with this in practice. [...] This could be case specific."
Expert 3: "I think that stakeholders' deviating or conflicting interests are always of negative influence to negotiations, so the essence of this could be universal. For example, a sub-contractor will not easily admit to the client that his design is insufficient because his interest is not to look bad in front of his principal, the main contractor."

18. *Parties' external lawyers are of negative influence to the mediation process.*

Expert 1: "Lawyers cán have a very negative influence, especially when they say things like: 'This is not in favour of my client' or subsequently write a letter wherein they express their discontent about things that have happened during the mediation. [...] In a specific case, the lawyers from both sides were arguing why their client was right. That was the occasion when we said: 'We don't need these lawyers anymore.' But it can be different as well: There also are lawyers that understand mediation very well and guide their client through mediation as a coach. Concluding: they can have a positive, negative or no influence on the process."
Expert 2: "Personally, I usually like to involve the lawyers in the mediation process because it comforts the parties and it eliminates a party in the background that could negatively influence the negotiation feedback. Lawyers of the parties can have a negative or a positive influence on the process, which is their choice. To positively influence the process, the

lawyer must understand the goal of a mediation and understand the interest of his client to reach settlement."
Expert 3: "Lawyers can be of positive and of negative influence to the process, but they are parties you have to take into account like other parties that act in the background of the mediation process."

Additional feedback
Expert 1: "Before the negotiations start, I say to the parties: 'If you are being very honest, how is this situation really?' Then I say: 'It can't be that amount, can it?' Then they react: 'No, you are right, etcetera.' That is happening before the negotiation itself. So that explains why during a lawsuit, the parties are moving away from each other in their reasoning and argumentation, and with mediation the parties the mediator tries to move the parties as close to each other as possible. [...] This can be done because the process is confidential, which is 100% a condition for the success of mediation."

Expert 2 about the settlement: "What is very important, is that the parties have the feeling that they have thought about the settlement themselves. Everything the parties agree upon which they have the feeling about that they thought of themselves, is of positive influence to the process."

Feedback to the diagram of the mediation process (Figure 10, pp. 81 & Appendix 2, pp. 106)
Expert 1: "First and foremost, I miss the concept of venting off steam. [...] It is extremely important to do this, because emotions always play part in mediation. I know some cases where the mediator initially neglected this, and it eventually happened during a next session, which took them a full day. In my experience this is an essential part. I always do this, and emotions always come up. [..] That you did not find this in the cases, could be because the involved mediators use this less often."

Expert 2: "In the post-mediation phase, I would add partial agreement. I have concluded mediations with the question: Is there something where you agree about? That issue is then recorded, as well as the issues they have disagreement about. This results in partial agreement. [...] Then, at least one issue is resolved after which the process continues. This can help with continuing mediation when parties are thinking about entering litigation."

Expert 3: "In your diagram of the mediation process in practice, I miss some parts. In phase 1, I ask the parties about the project's goals and scope, whereafter I ask them what the status of the project and what the issue is about and how that came to be. Then I inventory what issues they want to discuss and what they find important, which is the dispute list and

inventorying interests as you describe which are conducted simultaneously. In phase 2 (the negotiation), I conduct a brainstorm session with the parties about resolution directions. Hereafter, the negotiations start. During the post-mediation or your phase 3, it is also possible to reach a partial agreement. The remaining issues can be settled via arbitration or litigation, but also by a written guiding or binding advice by the mediator."

Expert 3: "In addition, I see in the enlarged diagram of phase 2 that you distinguish 'active' and 'passive' mediator's interventions. I think these are the two extremes: asking open questions being passive and giving direct opinion being active. In reality, the mediator can choose from a big number of interventions that can range from being totally passive to being totally active and everything in between.

8. Conclusions

This research entails a grounded theory approach to gain a better understanding of mediation procedures in construction projects. Four case studies have been inquired to get a better understanding of these processes in practice, and how influencing factors impact the mediation process. Firstly, the sub-questions are answered, whereafter the main question is answered.

Sub question 1: Which factors influence the mediation process in the construction industry? And;

Sub question 2: How do these factors influence the mediation process?

A substantial amount of contributing factors to the mediation process have been found in the case studies, which were partly known from existing literature and partly are new factors from the case studies. Some positive factors seem to be essential to mediation success, and others seem to be of either negative or positive influence to the process. The resulting conclusions are elaborated under to the following groups:

Essential factors to successful mediation (+)

1) Internal moderators
    1. It seems that the parties' intentions or their necessity to resolve the issues is essential for successful mediation.
    2. It seems strongly that the parties trust in the mediator is essential to successful mediation. It could be that trust in the process is essential to successful mediation.
    3. It could be essential to the mediation process that the parties' representatives are communicating well during mediation.
2) Mediator's interventions
    4. It could be essential to mediation success for the mediator to show his objectivity to the parties.
    5. It seems strongly that it is essential for the mediator to use one or more caucuses in the mediation process, in order to reach settlement.
    6. It seems like the mediator is required to use additional interventions that are beyond general mediation practice, in order to bring the mediation to success. Sometimes, the mediator comes up with new interventions on the spot.
    7. It seems strongly that the mediator needs to steer parties in a certain direction, either passively or actively, to bring the mediation to a success.
    8. It seems that the mediation requires substantive project knowledge to be able to understand the parties' discussions, in order to bring the mediation to a success.

3) Action
    9. It could be essential to the success of mediation that the parties must be willing to negotiate or barter about the issues.

Influencing factors to the mediation process (+ and -)

1) Internal moderators
    10. The parties realising their uncertain juridical position strongly seems to be of positive influence to the mediation process.
    11. The parties' positional play does not seem to necessarily influence the process negatively, but is something that is generally present in the process. Hence, this is something that should be taken into account.
    12. Parties' willingness to safeguard the relationships for future collaboration generally seems to positively influence the mediation process.
    13. The executive teams' damaged personal relationships can negatively influence the mediation process.
    14. It seems strongly that the parties' representatives' lacking mandate to settle is of negative influence to the mediation process.
    15. The client's lacking substantial project knowledge could be of negative influence to the mediation process.
2) External moderators
    16. It seems like mediation processes with a governmental client can be more challenging because of internal agreements within the governmental body. This is something that should be taken into account during the process.
    17. Parties' lawyers can have a negative influence on the mediation, but could possibly also have a positive influence.
    18. Conflict of interest in the project could have a negative influence to the mediation process, but that is not very clear.

Sub question 3: How does the course of the mediation process enfold? And; Sub question 4: How can the initial structured theoretical framework be enhanced, extended and specified to be more in line with the mediation processes in practice?

The following can be concluded about the mediation process from the case studies:

- The mediation process seems to entail more detail and contributing factors than what was formerly inquired and issued.
- The mediator seems to use interventions to guide the parties towards a better understanding of the opposite viewpoint, which seems to increase the parties willingness to settle, in order to reach settlement.

- Two different forms of mediation have been found: passive mediation where the mediator follows classic mediation rules and active mediation where the mediator deviates from strict rules and shares its direct opinion or writes guiding advices.

From the case studies, the initial theoretical framework is enhanced. Herein, found influencing factors in the cases have been added and a distinction has been made between passive - and active mediation processes. The final product can be seen in Appendix 2 on page 106.

Main question: How do influencing factors affect the mediation processes in the construction sector?

A substantial number of influencing factors to the mediation process have been identified in the cases. From these, a few seem to be essential in order to successfully conclude mediation in construction. These include some internal moderators, some of the mediator's interventions and the action of bartering. These are all of positive influence to the process. In addition, other internal – and external moderators have been found that seem to be either of positive or negative influence to the process. From the opinions of the validation panel, some of these influencing factors have been valued more than others. How these influencing factors exactly influence the process, when specific factors influence the process and how they relate to each other generally remains to be unknown.

Future research

Because this research is exploratory and based on grounded theory approach, a lot of future research has to be conducted to gain a close-to-reality understanding of the mediation process and the how influencing factors play role in these processes. This research's recommendations could be a solid base for future researchers to develop academic knowledge in the field of construction mediations more.

In addition, both the mediation process and the influencing factors could and should be researched further, to gain better and fuller understanding of these processes and how the factors play role in them.

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10. Glossary and acronyms

ADR methods	Alternative Dispute Resolution methods. Distinguished from juridical procedures.
Arbitration	Juridical procedure to settle a dispute where an objective arbitrary board provides the final verdict.
BATNA	Best Alternative To a Negotiated Agreement. The mediator explains this to the parties to elaborate their juridical position if it would come to arbitration or litigation.
DRB	Dispute Review Board. A preliminarily chosen board that to prevent and resolve disputes during the project life cycle.
EMVI value	Value for best economical application in a tender
Litigation	Dispute resolution method. Parties fight for their right in court. Also known as a lawsuit.
Mediation	Dispute resolution method. An objective third called the mediator guides the disputing parties in negotiations towards a settlement.
Active -	Form of mediation where the mediator shares his opinion on the dispute towards one of the two parties
Classic -	Form of mediation where the mediator does not share his opinion on the dispute towards one of the two parties.
MEAT	Most Economical Advantageous Tender. An assessment method to select the best economic value tender subscription.
NMI	Dutch Mediation Institute.
Presolve	Dutch expertise centre for ADR methods with main goal: dispute free construction.
RvA	Arbitration Board for the Building Industry. Dutch institution for arbitration procedures for construction disputes.

Appendix 1: Interview protocol

Rotterdam, 10 maart 2022.

Geachte heer/mevrouw,

U wordt uitgenodigd om deel te nemen aan een afstudeeronderzoek op academisch masterniveau genaamd *'Alternative Dispute Resolution methods in Dutch construction. A qualitative research on the success factors of mediation processes'*. Dit onderzoek wordt uitgevoerd door Otto Krans van de TU Delft, onder begeleiding van mentoren Evelien Bruggeman en Jelle Koolwijk.

Het doel van dit onderzoek is het op de kaart zetten van alternatieve geschiloplossingen in de bouw, en het beter begrijpen van bemiddelings - en mediation procedures zodat deze in de toekomst gerichter ingezet kunnen worden. Ook zal mijn onderzoek hopelijk een start zijn van meer aandacht voor dit onderwerp in de Nederlandse academische wereld. Het diepte-interview zal ongeveer 60 minuten in beslag nemen. De data zal gebruikt worden voor het reconstrueren van de context van het specifieke geschil, en om de belangrijkste succes – en probleemfactoren van de bemiddeling of mediation in kaart te brengen. U wordt gevraagd om zo open mogelijk op de gestelde vragen antwoord te geven.

Zoals bij elke online activiteit is het risico van een databreuk aanwezig. Wij doen ons best om uw antwoorden vertrouwelijk te houden. We minimaliseren de risico's door de verzamelde data te anonimiseren door projectnamen, persoonsnamen en bedrijfsnamen weg te halen. Deze data zal gedurende het onderzoek worden bewaard in een beveiligde online database waar alleen de onderzoeker toegang toe heeft. Het onderzoek inclusief geanonimiseerde data zal na afloop openbaar worden gepubliceerd. Eventueel zal het onderzoek inclusief geanonimiseerde data worden gedeeld met externe wetenschappelijke instituties voor publicatie.

De case-specifieke documenten die met ons worden gedeeld zullen vertrouwelijk worden behandeld en alleen gebruikt worden voor het wetenschappelijk onderzoek op de tussen de participant en onderzoeker overeengekomen wijze. Deze documenten zullen ook niet met anderen worden gedeeld.

Uw deelname aan dit onderzoek is volledig vrijwillig, en u kunt zich elk moment terugtrekken zonder reden op te geven. U bent vrij om vragen niet te beantwoorden. Indien gewenst kan de verkregen data na het onderzoek worden verwijderd.

Als u verdere vragen heeft over dit onderzoek, kunt u contact opnemen met de onderzoeker: Otto Krans. Ook kunt u contact opnemen met een van de begeleidende mentoren: Evelien Bruggeman, e.m.bruggeman@tudelft.nl en Jelle Koolwijk, j.s.j.koolwijk@tudelft.nl.

Als u wilt deelnemen aan dit onderzoek als participant voor een diepte-interview, wilt u dan de onderstaande verklaring invullen en ondertekenen? Alvast dank.

Met vriendelijke groet,
Otto Krans

In te vullen door de participant & onderzoeker

Ik verklaar op een voor mij duidelijke wijze te zijn ingelicht over de aard, methode, doel en belasting van het hierboven beschreven onderzoek.

Mijn vragen zijn naar tevredenheid beantwoord.

Ik begrijp dat het geluids- en/of beeldmateriaal (of de bewerking daarvan) en de overige verzamelde gegevens uitsluitend voor analyse en wetenschappelijke presentatie en publicaties zal worden gebruikt.

Ik behoud me daarbij het recht voor om op elk moment zonder opgaaf van redenen mijn deelname aan dit onderzoek te beëindigen.

Ik heb dit formulier gelezen of het formulier is mij voorgelezen en ik stem in met deelname aan het onderzoek als participant voor een diepte-interview.

- ☐ **Graag ontvang ik aan het eind van het onderzoek een kopie van het onderzoek. Om deze reden verleen ik toestemming om mijn naam- en adresgegevens tot het eind van het onderzoek te bewaren.**

Plaats:

Datum:

_ _
Volledige naam participant, in blokletters

_ _
Handtekening participant

'Ik heb toelichting gegeven op het onderzoek. Ik verklaar mij bereid verdere vragen over het onderzoek naar mijn beste vermogen te beantwoorden.'

Otto Krans

_ _

Handtekening onderzoeker

Appendix 2: Enhanced theoretical framework